world survey of education

III

secondary education

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WORLD SURVEY OF EDUCATION

III

Secondary education



UNESCO



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PREFACE

This third *World Survey of Education* has been produced in conformity with a resolution (1.22) adopted by the General Conference of Unesco at its tenth session (Paris, November-December 1958), authorizing the Director-General to maintain an Education Clearing House for the exchange of information related to the educational needs of Member States.

The purpose and plan of the book, and its relationship to past and future volumes in the series, are treated in the Introduction. It will therefore suffice at this point to call attention to the fact that nearly all the 200 national studies which make up the greater part of the publication were supplied by educational authorities in the Member States of Unesco. The contribution of the Unesco Secretariat has consisted in planning and co-ordinating the various aspects of the work, and in providing the supplementary material needed for a publication that is world-wide in scope and directed to an international audience. Care has been taken to indicate the authorship or source of the different sections of the book, and when they were prepared. By glancing at these credit lines the reader will realize the extent to which the production of this volume has depended on planned international collaboration, and on the industry, research and goodwill of a great number of people all over the globe.

One innovation needs to be pointed out. In response to a demand expressed by many readers of the earlier volumes of the *World Survey of Education*, the preliminary section, in which the Secretariat attempts a world view and a summing-up of the current trends and problems of education, has been considerably expanded. Whereas in the past such international chapters have been almost wholly concerned with the quantitative aspects of educational change, the present volume deals also at some length with developments in the organization and content of education. To prepare studies on the latter, the Director-General called on the services of Mr. George W. Parkyn, Director of the New Zealand Council for Educational Research. Mr. Parkyn's analysis appears as Chapters IV to VII, which should be read as a work of individual scholarship based on the official material of this *World Survey of Education* but not reflecting any official point of view.

Finally it should be emphasized that the information contained in this volume was received from the respective national or administering authorities before 31 May 1960. Accordingly the names, status and frontiers of the countries and territories shown are those which existed at that date. In some of the statistical tables it has been necessary to provide a purely geographical basis for the accompanying information. The designations employed and the presentation of the material do not imply the expression of any opinion whatsoever on the part of the Secretariat concerning the legal status of any country or territory or of its authorities, or concerning the delimitation of the frontiers of any country or territory.

STATISTICAL TABLES

The following symbols are common to all tables:

Data not available	. . .
Magnitude nil (or negligible)	—
Category not applicable	.
Provisional or estimated figure	*

Financial data are given in national currencies. The conversion rate in terms of U.S. dollars, valid for the years to which the tables refer, will be found in the general statistical information at the end of each national text.

DIAGRAMS AND GLOSSARIES

School articulation diagrams, showing the relation of general and vocational secondary schools in a country to the national educational system as a whole, are fairly homogeneous throughout the book. The main elements are:



a class of one year's duration

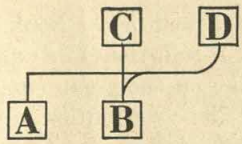


unbroken ruled line for passage of pupils from one class to next higher class

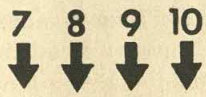


symbol in line to indicate examination

The connexion between different school types is shown by a vertical line or by an horizontal line curving into vertical (thus: pupils from A can go to D but not to C; pupils from B can go to C or D).



An age scale appears at the top of each diagram, showing the approximate age of pupils enrolled in the appropriate class of each type of establishment.



Glossaries are provided, with a few exceptions, for the diagrams; they define the national terms according to principles referred to in the Introduction. The exceptions are diagrams in which the terms are given in English and for which no specific information has been available to qualify the generally accepted meanings of these terms. Similarly, even where an English language diagram is accompanied by a glossary, terms which may be considered as self-explanatory have been omitted.

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INTRODUCTION

The purpose of this introduction is to make the book more serviceable to the reader by explaining in some detail what it is about, what were the goals that the Unesco Secretariat set out to attain, and what methods were employed to try and attain them. Indeed, something more than an apt title is needed to introduce the present volume. A World Survey of Education to which some two hundred different national authorities are invited to contribute, may well take the form of an encyclopaedia of 200 articles, unrelated to one another except by the very broad topic of 'Education', and still be a useful publication. In each volume of Unesco's *World Survey of Education* the compilers endeavour to go much further towards a unified and systematic presentation of the material, so as to facilitate the comparative study of educational organization and practices, and the derivation of generalizations which can serve as yardsticks or guide lines for all who are concerned with the expansion and improvement of educational services.

Let it be said, here and now, that any such comparisons or generalizations must be made and interpreted with extreme caution; and it would seem that no amount of systematic presentation or use of verbalistic or numerical conventions can sort the vast complexity of 200 school systems into neat little comparable packages. Yet a start has been made towards providing some kind of structure within which educational systems can be compared, and it can fairly be claimed, from reactions to the two preceding volumes in this series, that the results achieved, however modest, have encouraged Unesco to persevere along these lines, which are described below. Since in its general plan this third *World Survey of Education* very closely resembles its predecessors, readers of the earlier volumes may find little novelty in what follows. However, it would seem desirable to restate the principles and methodology of the book, not only so that this volume may be complete in itself but also because the plan, principles and methods have necessarily been adapted to the particular theme of secondary education.

In this present volume, then, an effort has been made to produce a work of reference which is both self-contained and part of a series. The long-term plan is to issue a full account of the educational systems of the world at three-yearly intervals. The first *World Survey of Education*, which was published in 1955, contained descriptive and statistical material on all aspects of the 'national school systems', from kindergarten to university including also informal adult education. Volume II was devoted more particularly to the primary schools of the world, but contained sufficient additional data to indicate the general context in which the primary school was situated. This third volume, following the pattern of Volume II, presents within the context of the educational system as a whole a somewhat detailed analysis of 'secondary education', a term which is here interpreted as covering all types of education—general, technical, vocational, teacher training or other—provided for young people between the ages of approximately 12 and 18.

To continue the series, a fourth volume will be issued in three years' time, to deal in similar detail with higher education. The cycle will then be completed and it will be necessary to decide whether it would be more useful to repeat the original pattern of four volumes—general, primary, secondary, higher—or whether some other formula is preferable.

While this approach gives a central theme to each volume, the method of treatment is broadly the same in each case. The idea of serial progress is contained in several elements which recur (and will recur) from volume to volume, duly brought up to date. The most obvious example is that of the summary table of school statistics, for all levels of education; the present volume contains the same tabulation as was used in the two previous volumes, but with more recent statistics. Similarly, accounts of the over-all organization of the school system are required in order to provide a background for the particular level of education treated in the volume; in the present case the diagram of school organization is the same as that used previously, but revised and corrected. Thus, as the series develops it should provide a continuous record of the movement of education. In other words, one may hope that the successive volumes of the *World Survey of Education* will occupy a useful place in the educational library, close to the companion series *International Yearbook of Education* (published jointly by the International Bureau of Education and Unesco); and that the arrival of a fresh volume will not give the impression that the previous volume has been superseded. *The World Survey of Education* will provide context and perspective for the events recorded in the annual reports of national authorities.

AIMS

The third *World Survey of Education* pursues a double aim: to give a world view of secondary education (as defined above) and to give a more detailed view of all types of schooling or instruction at this level in each country and territory of the world.

The former purpose is one which is closely related to Unesco's role as an international agency concerned with education. The Universal Declaration of Human Rights, adopted unanimously by the General Assembly of the United Nations at its third session on 10 December 1948, states in Article 26(1): 'Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit'. Believing that the special needs of children justified a separate declaration, the United Nations General Assembly, on 20 November 1959, unanimously adopted and proclaimed a Declaration of the Rights of the Child, Principle 7 of which, after reiterating the right of every child to free elementary education, goes on to state: 'He shall be given an education which shall promote his general culture, and enable him, on a basis of equal opportunity, to develop his abilities, his individual judgement, and his sense of moral and social responsibility, and to become a useful member of society . . .'. But in the world of today half the children do not even receive the free elementary schooling which is declared to be the least of their educational rights, many of those who attend primary school have no opportunity for further education, and only a slender minority, on the world scale, reach university or institutions of advanced technical and professional training. Even in those countries whose children are able to pursue their studies to the full extent of their capacities and interests, the constant concern with reform of the school system, with revision of curricula, syllabuses and methods, with improvement of guidance services, etc., shows that the expansion and improvement of education are world issues whose importance is universally recognized. Confronted with so many problems the international and national agencies in the field of education have often found it extremely difficult to decide which will have prior claim on the limited resources in money and manpower. During the first decade after the second world war the major educational aims in the underdeveloped regions were the provision of basic primary schooling and the liquidation of adult illiteracy. More recently, the experience of the newly independent states has strengthened the view that, while there can be no relaxation of effort in other sectors, the development of secondary education must be given utmost priority. It is realized that secondary education is not only needed by those who will go on to university and become the nation's doctors, lawyers, engineers and higher administrators, but is also a minimum qualification for the equally indispensable but far more numerous group of the population who will fill the intermediate ranks in commerce, industry and administration and will teach in the primary schools.

Apart from the intentions and achievements of national authorities, one of the significant trends of the years since 1946 has been the expansion of international programmes of educational assistance. Within the United Nations framework the regular programme of Unesco and the Expanded Programme of Technical Assistance have contributed increasingly to the improvement of secondary education. More recently, the United Nations Special Fund has made available international aid for vocational and technical education and, to some extent, for the preparation of secondary school teachers.

While it is obvious that the extension of secondary schooling is essentially a matter of raising funds and spending them on the erection and furnishing of school buildings, the training of teachers and administrators, and the provision of textbooks and other learning and teaching materials, yet it is also clear that all this activity must be planned, and policies and regulations laid down. This is where the *World Survey of Education* has its own modest contribution to make. It represents the processes of fact-finding and generalization applied to the world as a whole, in order that international councils and the makers of national educational policies may be the better informed. How long should be the course of general education taken by all pupils before differentiation into specialized curricula? Should differentiated courses be provided in separate institutions or the same comprehensive type of school? If there is to be selection for secondary entrance, how can this be done justly and in the best interests of the pupil and the country? These are three examples of the many problems which are being faced by educators all over the world and not just those in the underdeveloped regions. This third *World Survey of Education* places before the policy makers the experience of other educational authorities and the present trends and practices.

The second aim of the book is to give a fairly detailed account of secondary schooling in every part of the world. In its simplest expression, this is a work set out for easy reference, giving as accurate and up-to-date information as possible on the chief aspects of secondary school systems. Anyone concerned professionally with secondary schools—as teacher, administrator or student—should find here something of use, relevant to his own experience, introducing him to the educators and educational experience of other countries. The teacher going abroad for study or vacation needs a short account of the school systems he may meet. The administrator working on a problem wants to see how his colleagues in countries with comparable problems are setting about solving them, and the student may find that the *World Survey of Education* enables him to use comparative methods by providing data for a wider than national framework.

It is somewhat artificial to distinguish in this way between 'international' and 'national' purposes. The two are interdependent: for only by compiling a full and accurate body of reference material—in this volume the several national chapters—is it possible to generalize about conditions in the world as a whole; and whatever the reasons that first cause a user to consult the book, the result, one may hope, will be a better and more sympathetic understanding of other school systems, and thus a better international understanding among the many educators this book is meant to serve.

PRINCIPLES OF THE WORK

The basic principles underlying the compilation of the third *World Survey of Education* were the same as those used in preparing the two previous volumes. They may be restated as follows:

1. The 'national school system' should be adopted as the unit for description; it will include a varying range of institutions and activities according to the historical and cultural traditions of each state and territory.
2. The survey, by definition, should be geographically comprehensive, so that every part of the world with a distinct school system is represented.
3. Political considerations should be taken into account in defining the territorial limits of individual educational systems.
4. Each national section should be self-contained and should explain the present pattern of secondary schooling within the framework of the educational system as a whole.
5. Each section should be kept brief—there is an essential minimum of information which is needed for an understanding of the school system.
6. Data should be accurate and recent.
7. Both descriptive and statistical material should be given in a uniform pattern to facilitate comparison.
8. Presentation should be planned for a multi-national public, for the 'foreign student'; this reinforces the need for standardization and for attention to terminology and graphic devices.

The decision to use the national school system as the unit for description in a volume on secondary education led to difficult terminological problems. As already mentioned, secondary education was defined for the purpose of this volume as the second stage of formal schooling, covering approximately the period of adolescence, and including all types of education provided at this level—general, technical, vocational (including apprenticeship training), teacher training (where entry is based on completion of primary or lower secondary studies), art and music education, etc. It was also meant to include evening and part-time courses of secondary standard, and informal education of the folk high school type for young people in this age-group. In applying the term 'secondary education' as so defined to the varying usages, in different languages, of some 200 school systems, three kinds of terminological problems are met. The first arises in cases where national usage distinguishes a primary from a secondary ladder so that 'upper primary schools' exist with differentiated curricula for children 12–16, alongside preparatory classes which form part of a 'secondary school'. Here, as far as possible, the present volume describes what corresponds to the primary level as 'primary' and the subsequent stage as 'secondary', at the risk of violating national usage. A related issue is found in countries with primary-intermediate-secondary school plans; in these cases, for various reasons—age of pupils, nature of the curriculum, etc.—the intermediate schools have been included in one or the other of the two broad classes. The second problem arises from the unitary or *école unique* systems, where a single all-age school is referred to nationally as a secondary school, and primary education is seen merely as the initial stage of the total process. In such cases the definition adopted for the present volume refers to the upper stage, although the actual division will vary from one country to another: e.g., some countries with 10- or 11-year schools have provided information on all grades above the fourth; others with similar unified ladders refer only to the top three grades. In this respect there may even be disparity between the descriptive and statistical reporting for the same country. The third problem concerns vocational and technical schools. Historically, vocational training for apprentices and technicians was nearly always provided in institutions which were administratively and organizationally distinct from the 'secondary' schools, which led to university, and from the upper primary or primary continuation or complementary schools, which gave general secondary education of a terminal nature. There are still many countries in which vocational and technical education comes wholly or partly under Ministries other than the Ministry of Education. But even in those which have long since brought all formal schooling under the Ministry of Education, and have transformed all public schools at secondary level into multilateral or comprehensive high schools, the traditional terminological distinction between secondary and technical may still persist, even although it no longer corresponds to anything more than an emphasis or bias in the optional subjects or courses offered. A much more serious difficulty, however, arises from the fact that many vocational or technical schools are at post-secondary level, in the sense that they are for pupils beyond the normal secondary leaving age or even require completion of general or vocational secondary studies as a condition for entry, but at the same time are obviously below university level. Here again there has been some variation in the reporting by Member States, although in general all vocational and technical education between the level of the primary school leaving certificate and the university schools of engineering technology, commerce, agriculture, etc., has been categorized as 'secondary'.

With the present world trend towards the postponement of vocational selection to a later and later stage in the educational process, it may well be necessary, before embarking on a second cycle of the *World Survey of Education*, to re-examine the concepts of 'primary', 'general secondary' and 'vocational secondary'; on the other hand, educationists will still have to provide for the differentiation of abilities, aptitudes, skills and interests which manifests itself so markedly in early adolescence, and will still have to provide for the diversified economic and social needs in skilled manpower.

GENERAL VIEW OF THE 'WORLD SURVEY OF EDUCATION'

The volume opens with several international studies. These are followed by some 200 national chapters which account for all political and territorial units with distinct school systems. An innovation in this third *World Survey of Education* is that the index is placed in the middle of the book instead of at the end; in view of the unwieldy size of the publication and the frequency with which the

index is likely to be consulted, this change should enable the book to be handled more easily.

The international material in this volume has been prepared by the Unesco Secretariat, with the help of Mr. George Parkyn, as pointed out in the Preface. It is based largely on the contents of the national chapters, but where other Unesco studies or national sources have been used, these are noted in passing.

As the contents table shows, the national entries are arranged alphabetically by sovereign country, the status of the world on 31 May 1960 being used as a guide. It follows that many recent political changes, mainly those which have taken place in Africa, will not be reflected, but this is unavoidable in view of the fact that the material was prepared in 1959–60 by the former administering authorities or at an earlier stage of political evolution than that which will have been reached by the time this book is issued. Non-self-governing territories and autonomous territories which did not have full international sovereignty by May 1960 are grouped after the States responsible for all or part of their administration; as far as possible an alphabetical order is followed, but sometimes (as with the United Kingdom) an additional geographical classification is introduced. In some cases, too, a broader synthesis has been adopted, as with the chapter on the Portuguese Overseas Provinces, where only the statistics of the eight territories are differentiated.

This arrangement is open to criticism. There may be value in placing Macao under the letter M instead of after Portugal. However, the present system seemed to be the best compromise between the need for easy reference and the conflicting need for avoiding repetition and achieving brevity.

The method used in preparing national material, and the relevant dates, are shown in the credit line at the end of each text. The sources for the statistical tables, which were prepared separately, are given in the brief statement which precedes them. For the texts a seven-page 'chapter guide' was drawn up by the Secretariat, indicating the main headings and sub-headings, supplying a check-list of topics which the authorities might wish to discuss under each of these headings, and offering some suggestions as to how the topics should be treated. This chapter guide was sent to all Unesco National Commissions. Where the latter undertook an original study this is denoted by the use of the formula 'Text prepared by . . .'; where the chapter submitted was rather a revision by national authorities of a text drafted by the Secretariat, the formula is 'Text revised by . . .'; and in the few cases where little or no contribution was received from the national authorities, and for countries which are not Member States of the United Nations Organization or any of its Specialized Agencies, the Unesco Secretariat is quoted as the originator, the texts following whatever official sources could be obtained.

When the chapter guides were sent out to National Commissions they were accompanied by copies of the school organization diagrams and glossaries published in *World Survey of Education: II—Primary Education*, the authorities being asked to return these with any changes or corrections that they wished to make.

For statistical tables a separate procedure was followed. An extensive blank questionnaire (ST/Q/37) was sent to all Member States of Unesco; the replies provided data for the main tables, but other tables were based on replies to previous more specialized Unesco questionnaires. In all cases tables were compiled by the Secretariat and checked wherever possible with published official statistics. To improve the standardization of material, the school-year 1957/58 has been used as a cut-off point. For a number of countries more recent data are available; but since the *World Survey of Education* has to cover all countries and since it will be published every three years, this arbitrary fixing of dates may be accepted as reasonable. One may note that for many of the large federal states official reports on education show a two to three year time-lag. In a survey presenting comparable data for all the school systems of the world, a time-lag of three to four years may not be considered excessive. The summary text preceding the tables was drawn up by the Secretariat.

INTERNATIONAL CHAPTERS

The 'international section' has been greatly expanded in comparison with generalized material published in the two previous volumes. It begins with three chapters analysing quantitative aspects of educational change. Chapter I, entitled 'World Survey of Education 1953–57', presents aggregate figures for the school systems of the world and tries to measure changes over the period in question. This study forms a sequal to the similar one in *World Survey of Education: II*, dealing with the years 1950–54. Chapter II is concerned with the relationship of the school-going population to the total population in the same age-group. This type of inquiry was begun in Chapter II of the last edition, which contained diagrams showing the 'demographic-educational structure' of 10 countries. As yet only a few countries are able to provide the data for diagrams of this type but their number is growing. The present volume contains diagrams for 13 school systems representing a much wider geographical and socio-economic spread than did those published in 1958. The third chapter is a world survey of secondary enrolment trends since 1930, and is therefore of special significance for the study of the central theme of the book.

Chapters IV to VII describe the qualitative changes in the organization and content of secondary education. Chapter IV is a general study, in historical perspective, of the major contemporary trends in education: the widening of opportunity, the unifying of primary and secondary schooling and the search for a balanced curriculum. In Chapters V, VI and VII each of these three trends is taken separately and examined in some detail.

Chapter VIII is a selected bibliography of journals on secondary education. As journals are not normally entered in the national chapter bibliographies, this international section is an indispensable part of the volume.

NATIONAL CHAPTERS: DESCRIPTIVE ELEMENTS

When the chapter guide, referred to above, was being drafted, decisions had to be made as to what each national account should contain, in order that the present pattern

of secondary schooling should be described adequately and sufficient information given on the educational system as a whole for the reader to see how secondary education fitted into the general structure. The main headings arrived at were as follows:

The educational system. An introductory section describing general arrangements for the provision of education at all levels—constitutional or other basic legal instruments governing the school system, the ethnic, linguistic, social, religious and other factors affecting the provision of education, the role of public and private authorities and finally the whole educational ladder, either shown diagrammatically or described in a brief paragraph.

The development of secondary education. Moving from generalities to the central theme of the volume, this section traces the main historical events, particularly since 1900, which have characterized the emergence of secondary education, in the broad sense of the term. The national chapters here vary a great deal in range and scope and in some it has been found necessary to retain separate sections for general and vocational education. The legal basis of secondary education, if distinct from the general legislation, is treated next, sometimes in association with the historical section. Then comes information on the administration of secondary education covering in turn: how plans and policies are laid down; how control passes from the central education authority to the headmasters of secondary schools; supervision and inspection; finance; buildings and equipment; school welfare services.

Types of secondary education. Another important section, in which secondary education is described from the standpoint of the pupil and teacher rather than from that of the Ministry of Education. It begins with a general review of the various possibilities open to the primary school leaver, what help he can get in choosing a post-primary course, and what prospects are offered to those who complete their secondary studies. It also gives information on the organization of the school year.

The section then deals in turn with each of the principal types of secondary education: general secondary, vocational and technical, teacher training (where it exists at this level), etc., describing aims, length of course, curricula, methods, examinations, teachers for each type. It also includes information on out-of-class activities and their important role in the building of character, personality and a sense of responsibility.

Trends and problems. A summing up of the main lines of development.

Bibliography. An effort to provide the reader with relevant, recent (mainly since 1955) sources. As country bibliographies do not repeat the basic sources of statistical information given in the first *World Survey of Education*, the reader is referred to the latter work to supplement any titles that may be quoted among the sources of the statistical data in the present volume. In structure, bibliographies contain three elements: basic works relating to secondary education (laws and regulations, reports, etc.); further reading in the language of the country; and further reading in foreign languages (here the secondary education criterion is applied somewhat loosely). As mentioned earlier, the country bibliographies are complemented by a list of journals (Chapter VIII).

DIAGRAMS AND GLOSSARIES

The school organization diagrams are a recurring element in all volumes of the *World Survey of Education* and provide an interesting pictorial record of the effects of school reform on the educational ladder. The procedure by which they are kept up to date has already been mentioned. Another important feature of these diagrams is that most of them give the names of the schools in the national or official language, thus affording the reader a means of seeking from national sources further information on schools which may have been referred to in the text only by a translated version of their title. These original terms are accompanied by a glossary of English explanations.

This national glossary represents an attempt to arrive at an adequate defining vocabulary in English. The general terms have to be reduced to a minimum; they must be susceptible of definition in unambiguous words; and while not rooted in the usage of particular countries they must be clearly understandable by all English readers. The tentative list used is as follows:

Pre-primary school. An institution for the education of young children below the age of formal schooling, emphasis being placed on social and physical development rather than intellectual training. The term as used throughout this book excludes institutions developed to care for, but not educate, the children of working parents.

Primary school. An institution providing for the first stage of formal education, beginning approximately between the ages of 5 and 7 and ending approximately with adolescence.

Secondary school. A school providing for the second stage of formal education, covering approximately the period of adolescence (12 to 18 years), and catering to a greater degree than the primary school for the diverse interests, capacities and aptitudes of the pupils with a view to preparing them to take their place in adult society.

General secondary school. A secondary school where curriculum is basically a combination of academic subjects: languages and literature, mathematics, pure science, history, geography, art and music, taught for the sake of the intellectual and cultural development of the pupils and not as vocational training.

Vocational secondary school. A secondary school with a curriculum including both subjects intending to fit pupils for an occupation or career and subjects of a general cultural value; the course or courses usually lead to further vocational training at a higher level.

Vocational training school. A school whose function is to teach occupational skills and only such other subjects as bear on the understanding and mastery of these skills; the course or courses are usually terminal.

Teacher training school. An institution at secondary school level for training primary school teachers and offering a course comprising both general and professional education, leading to certification.

Teacher training college. An institution training primary or secondary teachers with a course based on upper secondary studies and offering mainly professional but also some general education, leading to certification.

Institute of education. A degree-granting college for research and advanced training in education.

College. An institution giving specialized education at post-secondary level.

University. A degree-granting institution of higher education, following on from upper secondary studies, and providing for advanced study and research in a number of branches of learning, organized in faculties, institutes or colleges.

STATISTICAL TABLES

Two statistical tables recur in all volumes of the *World Survey of Education* and are an important element of continuity in the series. These are the summary table of school statistics and the table on educational finance. The summary table gives a comprehensive view of schools, teachers and pupils for each level of education and type of school. The table in the present volume covers a five-year period, from 1953 to 1957 inclusive, so that it is possible to examine changes within a country and also to make comparisons between countries for a given year. The table on educational finance has been expanded, compared with financial data given in previous editions, the standard pattern comprising three sub-tables showing respectively the various sources of educational income, the distribution by purpose (administration, instruction, etc.) and the amount of public money expended annually on the various levels and types of education.

The statistical section is completed by two tables specifically referring to secondary education. The trend table shows, in its complete form, the development of general, vocational and teacher education at secondary level since 1930, the known or estimated population of secondary school age at five-yearly intervals, and the corresponding ratio of enrolments to the general population in this age-group. The resulting figure, called as a matter of convenience the secondary enrolment ratio, is an interesting indication of change within a given country but should be used only with extreme caution, indeed hardly ever, to make international comparisons. National practices vary considerably in the reporting of secondary enrolments, a complicating factor being the divergent national views as to what is meant by 'secondary'. The second table relating specially to secondary education gives examination results for the main certificates awarded on completion of the stages and types of secondary education. Here again the table is more valuable as a national indicator than as a basis for international comparison. As a step towards the latter goal the Secretariat investigated the possibility of allotting each examination a code symbol showing the type and length of course, e.g. GLU/12 might have been used to indicate that the examination in question was for general secondary leavers, gave access to university, and required a minimum of 12 years' formal schooling. With more research it may be possible to devise a general system along these lines.

A remark may be made about discrepancies in figures. To take only one element reported on—enrolment in schools and universities—totals may fluctuate throughout the year, and in many countries this fluctuation is marked and may account for variations between figures reported by different sources. Some discrepancies between the text and tables (when derived from separate sources) are bound to occur in a volume of this size; similarly, differences may be noted between this volume and the previous ones, in which case however the data given in this volume are likely to be the later and therefore corrected figures.

STATISTICAL SUMMARIES

Following the practice begun in *World Survey of Education: II—Primary Education*, the statistical tables are accompanied by a short text summarizing the main trends and giving whatever additional information may be necessary to the full understanding of the data. In some cases a paragraph is used to replace what would have been a very short and incomplete table.

CONCLUSION

Much of the justification for publishing the *World Survey of Education* has been expressed in terms of practical utility. The book is conceived as a tool for action on the part of administrators and policy makers. But it is intended also for students of comparative education, whose work is growing in importance as international programmes in education, both bilateral and multilateral, tend to increase.

During the past five years comparative education has gained growing support, if one is to judge by the place it is coming to occupy in the curriculum of institutes of education and teachers' colleges. There has been a corresponding increase in the literature. Much of this can still be qualified as 'foreign education', that is, accounts of, or reflections on, the school systems of countries other than the author's. Such studies are necessary for comparative education but do not get to the heart of the matter—comparison. However, recent developments show that the question of the methodology of comparison is receiving more attention. This implies pressing into the service of international education the tried skills and experience of a wide range of social sciences. Educational psychologists have started on the problem of devising an international means for measuring the results of schooling; specialists in social psychology and child development are trying to set up studies of a cross-cultural character to discover essential similarities and differences among children of different cultures; and a growing number of economists are turning their attention to a study of the costs and the productivity of education. More examples could be given, but the point is clear that the term comparative education should now be extended to cover a broad area of work that goes far beyond the limits of the history and philosophy of education. If such an interpretation is given, comparative education may become an essential instrument for policy-making and for planning the development of education in the context of social and economic progress.

It should be noted that the *World Survey of Education* and the *International Yearbook of Education* contribute to this progressive development of comparative education. The massing of facts in a fairly comparable form makes available to the student much of his raw material. The existence of these reference works lessens the need for

time-consuming studies of foreign education. At the same time, the student of comparative education should be challenged by the very defects and the unsolved problems of the international compilations. How to improve comparability of data and how to effect valid comparisons between different school systems—a host of questions arise under these two headings.

CHAPTER I

WORLD SURVEY OF EDUCATION 1953—57

As in the preceding volumes of the World Survey of Education, *the opening chapter gives a summary and largely statistical account of the general movement of education during the period under review. One innovation here is the attempt to present summary tables not only for the world as a whole, but also broken down into the main geographical regions. Following the world survey proper, a regional survey is presented for tropical Africa—in part as an example, in part because of the current interest shown in African education by international circles.*

In the school year 1957/58, it is estimated that 341 million children and adolescents were enrolled in schools around the world, representing 12.4 per cent, or nearly one-eighth, of the estimated total world population at mid-year 1957. This proportion is merely a world average, and does not show the marked differences in the educational development of the various areas, some idea of which may be obtained by examining the figures in Table 1 (page 18). In the latter, data for the Union of Soviet Socialist Republics are given separately and are therefore not included in the figures for Europe and Asia.

For the continents and regions, the proportion of the total population enrolled in schools ranged from 23.5 per cent in Northern America to only 6.8 per cent in Middle and Southern Africa. The proportion for Oceania as a whole was 19.4 per cent; for the Americas, 18.3 per cent; U.S.S.R., about 16 per cent; Europe, 15.5 per cent; Asia, 10.3 per cent; Africa, 7.2 per cent.

When compared with figures for 1953/54, those for 1957/58 show a general advance. For the world as a whole, the school-going proportion of the total population increased from 11.6 per cent in 1953 to 12.4 per cent in 1957, the result of a 14.1 per cent increase in total enrolment (from 298 million in 1953 to 341 million in 1957), as against a 7 per cent increase in total population (2,575 million in 1953 to 2,756 million in 1957). The African continent, starting from a relatively low base, showed the highest rate of growth: enrolment increased by 47.9 per cent, from 11.3 million in 1953 to 16.8 million in 1957, and the proportion of the population in school from 5.3 per cent to 7.2 per cent. Oceania and the American continent registered increases of 22.8 and 21.6 per cent respectively in their total enrolment, so that their school-going population, expressed as a proportion of total population, rose from 17.4 per cent to 19.4 per cent and from 16.3 per cent to 18.3 per cent respectively. The development in Asia paralleled the world average, with a 14.9 per cent increase in total enrolment, resulting in an increase from 9.6 per cent to 10.3 per cent of their total population enrolled in schools. The continent of Europe showed a moderate increase of 8.8 per cent in total enrolment, raising the proportion of school-going population from 14.8 per cent to 15.5 per cent. The figures for the U.S.S.R. show a slight decrease, both in total enrolment and in the proportion of school-going population; this is due mainly to a substantial decrease in reported enrolment at the second level, which will be discussed further in the next section of this chapter.

Detailed figures on annual enrolment, by level of education and type of school, for each individual country during the period 1953–57 will be found in the country chapters of this volume.

ENROLMENT BY LEVEL OF EDUCATION

For the first time since the adoption by the General Conference of Unesco, in 1958, of the recommendation concerning the international standardization of educational statistics,[1] an attempt will be made to present a world summary of school enrolment by continents and regions and by level of education. For better comparability, this summary omits all figures relating to education preceding the first level (pre-primary education), as well as other types of education not classifiable by level (notably figures relating to special education, and of various types of adult education). Nevertheless, the presentation of enrolment data according to the three principal levels does involve certain arbitrary choices regarding the classification of different types of schools. For example higher primary, intermediate or middle schools have generally been included under the second level of education; vocational and teacher training schools are for the most part included under the second level, except for those technical schools and teacher training colleges requiring, as a condition of

1. See Unesco, *Records of the General Conference, Tenth Session, Paris, 1958: Resolutions*, pp. 93–6.

TABLE 1. Estimated school enrolment by level of education: world, continents and regions

Continent and region[1]	Estimated enrolment by level 1953/54 (000's)				Estimated total population mid-year 1953 (000's)	Total enrolment as percentage of total population	Estimated enrolment by level 1957/58 (000's)				Estimated total population mid-year 1957 (000's)	Total enrolment as percentage of total population
	First	Second	Third	Total			First	Second	Third	Total		
World total	**225 006**	**65 999**	**7 447**	**298 452**	**2 575 204**	**11.6**	**260 526**	**70 939**	**9 988**	**341 453**	**2 756 057**	**12.4**
Africa	10 105	1 142	91	11 338	214 048	5.3	15 209	1 429	128	16 766	232 569	7.2
Northern Africa	2 324	643	66	3 033	45 588	6.7	3 528	663	92	4 283	49 310	8.7
Middle and Southern Africa	7 781	499	25	8 305	168 460	4.9	11 681	766	36	12 483	183 259	6.8
America	44 634	9 686	2 675	56 995	348 781	16.3	53 208	12 519	3 590	69 317	379 634	18.3
Northern America	26 938	7 672	2 287	36 897	175 278	21.0	31 539	9 750	3 085	44 374	188 682	23.5
Middle America	6 227	439	121	6 787	54 959	12.3	7 670	605	156	8 431	61 150	13.8
South America	11 469	1 575	267	13 311	118 544	11.2	13 999	2 164	349	16 512	129 802	12.7
Asia (excl. U.S.S.R.)	112 541	21 107	1 724	135 372	1 405 417	9.6	126 866	26 211	2 460	155 537	1 511 608	10.3
South-West Asia	3 890	485	51	4 426	63 880	6.9	5 116	782	83	5 981	68 056	8.8
South-Central Asia	26 484	7 589	630	34 703	473 593	7.3	31 803	9 483	871	42 157	499 702	8.4
South-East Asia	15 883	1 470	229	17 582	165 794	10.6	18 488	2 171	321	20 980	177 508	11.8
East Asia	66 284	11 563	814	78 661	702 150	11.2	71 459	13 775	1 185	86 419	766 342	11.3
Europe (excl. U.S.S.R.)	43 823	13 976	1 341	59 140	400 928	14.8	46 076	16 639	1 642	64 357	413 985	15.5
Northern and Western Europe	14 887	5 371	413	20 671	135 302	15.3	16 605	6 983	555	24 143	138 807	17.4
Central Europe	14 956	5 658	489	21 103	130 078	16.2	14 369	6 171	593	21 133	134 807	15.7
Southern Europe	13 980	2 947	439	17 366	135 548	12.8	15 102	3 485	494	19 081	140 371	13.6
Oceania	1 797	469	54	2 320	13 330	17.4	2 168	612	69	2 849	14 661	19.4
Australia and New Zealand	1 530	436	54	2 020	10 863	18.6	1 816	584	68	2 468	11 873	20.8
Pacific Islands	267	33	0.5	300	2 467	12.2	352	28	0.6	381	2 788	13.7
U.S.S.R.	12 106	19 619	1 562	33 287	[2]192 700	17.3	16 999	13 529	2 099	32 627	[2]203 600	16.0

1. The world regions given in this table are constituted as follows:

Northern Africa: Spanish West Africa, Spanish possessions in North Africa, Morocco, Algeria, Tunisia, Libya, United Arab Republic (Region of Egypt).
Middle and Southern Africa: the remainder of Africa.
Northern America: Alaska, Canada, Greenland, St. Pierre and Miquelon, Bermuda, United States of America.
Middle America: the remainder of North America including the Caribbean.
South America: the entire continent.
South-West Asia: Turkey, Iran, Iraq, United Arab Republic (Region of Syria), Lebanon, Israel, Jordan, Cyprus, the Arabian Peninsula.
South Central Asia: Afghanistan, Pakistan, India, Nepal, Bhutan, Ceylon, Maldive Islands.
South-East Asia: Burma, Thailand, Indochina, Malayan Peninsula, Philippines, Indonesia and other islands south-east of the mainland.
East Asia; China, Japan and the remainder of Asia, except the Asian part of the Union of Soviet Socialist Republics.
Northern and Western Europe: Finland, Sweden, Norway, Denmark, Iceland, Ireland, United Kingdom, Netherlands, Belgium, Luxembourg, France, Monaco.
Central Europe: Germany, Switzerland, Liechtenstein, Austria, Poland, Czechoslovakia, Hungary.
Southern Europe: the remainder of Europe, except the European part of Turkey.
Australia and New Zealand: Australia, New Zealand.
Pacific Islands: the remainder of Oceania.
U.S.S.R. Union of Soviet Socialist Republics.

2. Unofficial estimate.

admission, the completion of education at the second level; under the third level are included all universities and other institutions of higher education, as well as technical, teacher training and other types of schools above the level of secondary education.

With the three levels of education so defined, and the above qualifications in mind, it is estimated that during the school year 1957/58 over 76 per cent of the total world enrolment was at the first level, nearly 21 per cent at the second level, and about 3 per cent at the third level. These proportions vary among the different continents and regions, as shown in Table 2 (page 19). Thus in Africa as a whole, enrolment at the first level accounted for over 90 per cent of the total enrolment, with less than 9 per cent at the second level, and less than 1 per cent at the third level. At the other extreme, figures for the U.S.S.R. show only 52 per cent of the total enrolment at the first level, nearly 42 per cent at the second level, and over 6 per cent at the third level.[1] The proportion of total enrolment represented by the first level of education was about 82 per cent for Asia, about 77 per cent for the Americas, 76 per cent for Oceania, and less than 72 per cent for Europe. Education

1. During the period to which these statistics refer the educational system in the U.S.S.R. provided for a 4-year primary school, a 7-year school, and a 10-year (in some cases 11-year) secondary school, besides various types of vocational schools and institutions of higher education. The proportions given here are based on counting only the first four grades of the 4-year, 7-year and 10-year (or 11-year) schools in the first level of education, and all the remaining grades of such schools in the second level of education, together with vocational schools. If the first seven grades were classified at the first level (as was done in *World Survey of Education*, II—*Primary Education*), then the respective proportions of enrolment by level for 1957 would be 74.3 per cent at the first level, 19.3 per cent at the second level, 6.4 per cent at the third level. Similarly, for 1953, the respective proportions would be 76.9, 18.5 and 4.7 per cent.

TABLE 2. Percentage of estimated school enrolment at each level of education: world, continents and regions

Continent and region[1]	Enrolment by level 1953/54			Enrolment by level 1957/58		
	First	Second	Third	First	Second	Third
World total	**75.4**	**22.1**	**2.5**	**76.3**	**20.8**	**2.9**
Africa	89.1	10.1	0.8	90.7	8.5	0.8
Northern Africa	76.6	21.2	2.2	82.4	15.5	2.1
Middle and Southern Africa	93.7	6.0	0.3	93.6	6.1	0.3
America	78.3	17.0	4.7	76.8	18.0	5.2
Northern America	73.0	20.8	6.2	71.1	22.0	6.9
Middle America	91.7	6.5	1.8	91.0	7.2	1.8
South America	86.2	11.8	2.0	84.8	13.1	2.1
Asia (excl. U.S.S.R.)	83.1	15.6	1.3	81.6	16.8	1.6
South-West Asia	87.9	11.0	1.1	85.5	13.1	1.4
South-Central Asia	76.3	21.9	1.8	75.4	22.5	2.1
South-East Asia	90.3	8.4	1.3	88.1	10.4	1.5
East Asia	84.3	14.7	1.0	82.7	15.9	1.4
Europe (excl. U.S.S.R.)	74.1	23.6	2.3	71.6	25.9	2.5
Northern and Western Europe	72.0	26.0	2.0	68.8	28.9	2.3
Central Europe	70.9	26.8	2.3	68.0	29.2	2.8
Southern Europe	80.5	17.0	2.5	79.1	18.3	2.6
Oceania	77.5	20.2	2.3	76.1	21.5	2.4
Australia and New Zealand	75.7	21.6	2.7	73.6	23.7	2.7
Pacific Islands	89.0	10.8	0.2	92.4	7.4	0.2
U.S.S.R.	36.4	58.9	4.7	52.1	41.5	6.4

1. For the composition of these regions, see footnote to Table 1.

at the second level enrolled 26 per cent of all pupils in Europe, 22 per cent in Oceania, 18 per cent in the Americas, and 17 per cent in Asia. Education at the third level accounted for over 5 per cent of the total enrolment in the Americas, about 2.5 per cent in Europe and in Oceania, and less than 2 per cent for Asia.

Table 2 also shows the changes in the distribution of total enrolment by level which occurred between 1953 and 1957. For the world as a whole, the proportion of total enrolment at the first level increased from 75.4 per cent to 76.3 per cent during this period. This is due to the fact, as shown in Table 1, that total enrolment at the first level had increased at a more rapid rate (15.8 per cent) than total enrolment at the second level (7.5 per cent). Similarly, enrolment at the third level increased by 34 per cent between 1953 and 1957, hence accounting for 2.9 per cent of total enrolment in 1957 as compared with 2.5 per cent at the beginning of the period.

It may be noted that for the continent of Africa as a whole, where total enrolment increased by nearly 48 per cent between 1953 and 1957, the growth of enrolment at the first level alone was more than 50 per cent. Therefore the proportion of first level enrolment to total enrolment grew from 89.1 per cent to 90.7 per cent. Similarly, in the Pacific Islands region of Oceania, where total enrolment increased by 27.0 per cent, the growth in first level enrolment was about 32 per cent.

Among the regions shown in Tables 1 and 2, relatively more rapid growth in education at the first level is noted for Northern Africa, the Pacific Islands, and the U.S.S.R. Relatively higher rates of increase at the third level of education are noted for the U.S.S.R., Northern America, and all the regions of Asia and Europe. As regards the second level of education, higher rates of increase are seen for every region except Northern Africa, the Pacific Islands, and the U.S.S.R.

The situation with regard to the U.S.S.R. needs a word of explanation. Between 1953 and 1957, total enrolment at the first level of education increased by nearly 5 million, while enrolment at the second level decreased by more than 6 million. Although there was an increase of over half a million in the enrolment at the third level, the resulting total enrolment at all levels in 1957 thus fell short of the total enrolment in 1953, so that when enrolment figures are related to the total estimated population for 1953 and 1957, there appears to be a net decrease from 17.3 per cent in 1953 to 16.0 per cent in 1957. This is explained by the fact that the effects of the second world war period, which had previously retarded the growth of primary education enrolment, have now reached the generation of children and youth ready to receive secondary education.[1]

ENROLMENT AT THE FIRST LEVEL OF EDUCATION

According to the Unesco recommendation already referred to, 'education at the first level' is that 'of which the main function is to provide basic instruction in the tools of learning'. At this level therefore are included various types of elementary schools, primary schools, basic schools, etc. providing for the instruction of children from the age of 5, 6 or 7 years until they reach the period of adolescence.

1. According to official figures published by the Central Statistical Board of the U.S.S.R., the total number of pupils enrolled in all primary, 7-year and secondary schools of general education reached an all-time high level of 34.5 million in 1940/41, dropped to a low level of 26.0 million in 1945/46, increased gradually up to 33.2 million in 1950/51, decreased again to 28.1 million in 1955/56, and rose again to 28.6 million in 1957/58 and 29.4 million in 1958/59. These figures do not include pupils of 'auxiliary schools', 'schools for over-age pupils' and 'schools for children with physical defects'. They also exclude 'technical and other special secondary educational establishments'. A distribution of pupil enrolment by grade levels shows the following fluctuations between 1940 and 1958:

Year	Number of pupils (000's), by grade		
	1–4	5–7	8–10 (11)
1940/41	21 375	10 767	2 368
1945/46	19 858	5 175	975
1950/51	19 671	12 031	1 496
1953/54	12 106	13 477	4 496
1955/56	13 579	9 268	5 253
1957/58	†17 000	†7 240	†4 350
1958/59	†17 700	†8 300	†3 400

† Rounded figures.

Source. U.S.S.R. Central Statistical Board. *Cultural Progress in the U.S.S.R.: Statistical Returns*, p. 128–9; *Narodnoe hozjajstvo SSSR v 1958 godu: statističeskij ežegodnik*, p. 814–15.

TABLE 3. Distribution of 116 countries, by continents and regions, and by primary enrolment ratios, average 1950–54, and around 1957

Continent and region[1]	Number of countries covered	Number of countries by primary enrolment ratio					
		Average 1950–54			Around 1957		
		60 and over	40–59	Less than 40	60 and over	40–59	Less than 40
Africa	30	3	3	24	3	7	20
Northern Africa	4	–	–	4	–	–	4
Middle and Southern Africa	26	3	3	20	3	7	16
America	32	15	10	7	21	6	5
Northern America	4	4	–	–	4	–	–
Middle America	15	7	4	4	10	2	3
South America	13	4	6	3	7	4	2
Asia	24	5	7	12	9	5	10
South West Asia	9	2	1	6	2	1	6
South Central Asia	2	1	–	1	1	–	1
South East Asia	8	1	2	5	2	3	3
East Asia	5	1	4	–	4	1	–
Europe	24	20	4	–	22	2	–
Northern and Western Europe	11	11	–	–	11	–	–
Central Europe	6	6	–	–	6	–	–
Southern Europe	7	3	4	–	5	2	–
Oceania	6	6	–	–	6	–	–
Australia and New Zealand	2	2	–	–	2	–	–
Pacific Islands	4	4	–	–	4	–	–
All countries	**116**	**49**	**24**	**43**	**61**	**20**	**35**

1. For the composition of these regions, see footnote to Table 1.

The length of schooling at this level may vary from 4 years to 8 or 9 years, although in some countries there exist incomplete primary schools which provide only 2 or 3 years' instruction. Enrolment at this level of education is obligatory in many countries, but entirely voluntary in others; some countries have passed legislation requiring compulsory school attendance but the law is nevertheless not enforced or not enforceable, owing to shortage of schools and teachers, or is modified by various exemptions tending to reduce the actual number of children enrolled.

The size of the total pupil enrolment at the first level of education depends partly on the size of the child population in the appropriate age range, and partly on the duration of schooling provided and on the length of time during which each child remains in school. Thus, for example, where there are a million children aged 5 to 14 years inclusive (range of 10 years), and the public and private authorities provide schools of six years' duration, if every child remains in school for the full six-year period, one may expect the total enrolment to be in the neighbourhood of 600,000, either counted at any given time or averaged over a period of time. If the majority of the children remain in school less than six years, then the total enrolment would be much less than 600,000. On the other hand, if all the children go to school, and some remain longer than six years, then the enrolment could exceed 600,000. Similarly, the total enrolment in a primary school system of eight years' duration may vary around 80 per cent of the total number of children aged 5–14 years inclusive.

For purposes of international comparison, the child population 5–14 years old has been taken as the base; when the total enrolment at the first level of education is divided by the number of children in this age-group and the result multiplied by 100, a percentage ratio is obtained which in the previous volume was called the 'primary enrolment ratio'.[1] Because of national and local differences in the school system (length of primary course, whether or not intermediate schools are counted as primary, etc.) and in the age composition of the population, the primary enrolment ratio will fall short of 100, come close to 100, or even exceed 100, according to circumstances. In fact, with six to eight years as the normal length of primary schooling in the majority of countries, we may consider a primary enrolment ratio of 60 or more as signifying a satisfactory stage of development at the first level of education. A ratio between 40 and 60 would indicate a transitional stage of development, while a ratio less than 40 would mean either that children are not attending school in sufficient numbers, or that they are not continuing long enough in their school attendance, or both.

With these words of explanation, we may now proceed to examine Table 3 above, which shows a distribution of 116 countries, for which comparable data are available, according to their primary enrolment ratios for the period

1. A detailed explanation of the methods of computing and using the primary enrolment ratio in measuring progress of primary education is contained in *World Survey of Education:* II—*Primary Education*, Chapter III.

1950–54 and around 1957. It may be noted that among these countries there was a general improvement in primary enrolment ratios. The number of countries with ratios of 60 and over increased from 49 to 61 over this period; the group with ratios between 40 and 60 counted four fewer countries in 1957 than in the earlier period, while only 35 out of 43 countries remained in the category with ratios less than 40.

The majority of countries in the 'less than 40' category are found in Africa—four in Northern Africa and sixteen in Middle and Southern Africa. Even here, four countries in Middle and Southern Africa had moved out of this category before 1957. In Asia, ten countries are still in this group—six in South-West Asia, one in South-Central Asia, and three in South-East Asia. In the last-named region, two countries moved to a higher category between 1950–54 and 1957. The other five countries in this category are found in Middle and South America, where the number of low enrolment countries has also been reduced by two since 1950–54.

In the middle category—with primary enrolment ratios '40–59'—the reduction of four countries is the result of five additions (four in Middle and South Africa; one in South-East Asia) and nine subtractions (two each in Middle America, South America and Southern Europe; three in East Asia). Finally, the category '60 and over' gained from the addition of twelve countries (three each in Middle America, South America and East Asia; two in Southern Europe; one in South-East Asia).

It should be recalled that in the above analysis no account is taken of the number of children enrolled in 'education preceding the first level' (nursery schools, kindergartens, etc.), nor of those enrolled in 'special education' (for physically and mentally handicapped children). The numbers involved in the latter are too small to have an effect on the primary enrolment ratio. The enrolment of nursery schools, kindergartens, etc., does not usually reach appreciable size until after the full development of primary education proper. For these reasons, their omission is considered not to have any significant effect on the computation of primary enrolment ratios for international comparisons.

However, there is one particular factor which has a distinct relationship to the size of the primary enrolment ratio, namely, the percentage of girls in the total primary school enrolment. A country cannot have a high enrolment ratio unless a fairly high proportion of girls are included in the total enrolment, and an increasing percentage of girls enrolled usually accompanies a rising enrolment ratio. A proportion of 46 per cent or more girls in primary school enrolment may be regarded as satisfactory. Table 4 below, covering 97 countries for the periods around 1953 and 1957, shows that the number of countries with a girls' enrolment of 46 per cent or more increased from 59 to 62. The improvement resulted from the promotion to this category of two countries where the primary enrolment ratio was 60 and over, and one country where it was between 40 and 60. The situation in countries with primary enrolment ratios less than 40 remained unchanged.

Of the 24 countries with primary enrolment ratios less than 40, and having less than 46 per cent girls in their primary school enrolment, 5 are found in Northern Africa, 12 in Middle and Southern Africa, 1 in Middle America and 6 in Asia.

TABLE 4. Distribution of 97 countries by primary enrolment ratio and percentage of girls in total primary school enrolment, around 1953 and 1957

Primary enrolment ratio	Number of countries by percentage of girls in primary school enrolment			
	Around 1953		Around 1957	
	46 per cent or more	Less than 46 per cent	46 per cent or more	Less than 46 per cent
60 and over	48	5	50	3
40–59	7	9	8	8
Less than 40	4	24	4	24
Total number of countries	59	38	62	35

TABLE 5. Distribution of 94 countries by primary enrolment ratio and pupil-teacher ratio in primary schools

Primary enrolment ratio	Number of countries by pupil-teacher ratio			
	Around 1953		Around 1957	
	Less than 34	34 or more	Less than 34	34 or more
60 and over	28	19	27	20
40–59	9	9	8	10
Less than 40	17	12	12	17
Total number of countries	54	40	47	47

Another factor associated with increased enrolment in primary schools is the number of teachers in service as related to the number of pupils enrolled. This measure is expressed as the average pupil-teacher ratio. There seems to be a tendency for more countries to have a higher pupil-teacher ratio in 1957 than before. Table 5 above shows the distribution of 94 countries by primary enrolment ratios and pupil-teacher ratios for the periods around 1953 and 1957. Whereas around 1953 the median pupil-teacher ratio for these countries was 32.5, it had increased to 34 by 1957, owing to the fact that seven countries (including five with primary enrolment ratios less than 40) had increased their average number of pupils per teacher. It must be borne in mind that a median pupil-teacher ratio of 34 for the 94 countries covered in this table signifies that half of these countries had pupil-teacher ratios of 34 or higher—in many instances much higher than 34. Even in those countries with a national average of less than 34 pupils per teacher, there would be many schools and localities where the actual size of classes was as high as 50, 60 or more.[1]

1. For example, in the Netherlands, 1957, the average class size in primary schools (excluding 'continued primary schools and sections') was found to be 35.4 pupils, but the frequency distribution of classes by size showed a group of 1,032 classes, enrolling 53,515 pupils, where the number of pupils per class was 50 or more. (Centraal Bureau voor de Statistiek, *Statistiek van het gewoon- en voortgezet gewoon lager onderwijs 1953–1957*, p. 38–9.)

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Nevertheless, in view of the fact that between 1953 and 1957, total world enrolment of pupils in primary schools had increased by 35.5 millions, it is evident that more than a million additional teachers were required merely to maintain an average pupil-teacher ratio of 34 or 35. Hence one of the urgent needs for those countries where primary education is being rapidly expanded is to find additional qualified teachers in sufficient numbers to prevent the growth of over-sized classes and to ensure the best conditions of class instruction.

ENROLMENT AT THE SECOND LEVEL OF EDUCATION

The 'second level of education', according to the Unesco recommendation, is understood to mean that which is 'based upon at least four years previous instruction at the first level, and providing general or specialized instruction, or both (e.g., at middle school, secondary school, high school, vocational school, teacher training school at this level)'. The data presented in this volume relate in particular to the development of education at this level in each country since about 1930, and in Chapter III will be found a full analysis and discussion of this development. Here we shall be concerned only with a brief review of the statistical data relating to the most recent period for which comparative data are available, namely the years 1955–57.

As a rough measure of the level of development in secondary education, it is possible to use the percentage ratio of total enrolment at the second level of education related to the size of population 15–19 years old inclusive.[1] This measure, which it is proposed to call the 'secondary enrolment ratio', is analogous to the 'primary enrolment ratio' introduced in the previous volume of the *World Survey of Education*.

The duration of secondary schooling may vary from three or four years to eight or nine years, depending on the length of primary schooling and on the way in which the different levels of education are articulated. For purposes of the present review, we may classify countries into three categories according to their secondary enrolment ratios: 50 and over, 25–49, and less than 25.

Table 6 below covers 77 countries for which comparative data are available for the periods 1950–54 and 1955–57. These countries are distributed by their primary enrolment ratios, duration of secondary schooling, and average secondary enrolment ratios for the years 1955–57. For comparison, the number of countries falling in each category of secondary enrolment ratios for the period of 1950–54 are shown in parentheses. It is noted that, whereas 43 of the 77 countries concerned had primary enrolment ratios of 60 and over, only 16 of them had average secondary enrolment ratios of 50 and over for the period 1955–57. Only 13 of these were in this category for the period 1950–54. Another group of 15 countries had secondary enrolment ratios of 25–49 in 1955–57 (14 countries in 1950–54). On the other hand, almost all countries with

1. The reader is reminded that the arbitrary choice of the age-group 15–19 years inclusive as the population base does not imply an exact correspondence of these ages with the actual ages of pupils receiving education at the second level. Hence, the 'secondary enrolment ratio' may fall short of 100, or even exceed 100, depending on circumstances.

TABLE 6. Distribution of 77 countries by primary enrolment ratio, duration of secondary schooling and secondary enrolment ratio, average for 1955–57

Primary enrolment ratio	Duration of secondary schooling	Number of countries by secondary enrolment ratio			
		50 and over	25–49	Less than 25	Total
60 and over	6 years or more	11	11	8	30
	Less than 6 years	4	3	6	13
40–59	6 years or more	1	1	5	7
	Less than 6 years	–	–	4	4
Less than 40	6 years or more	–	–	18	18
	Less than 6 years	–	–	5	5
Total number of countries	1955–57	16	15	46	77
	(1950–54)	(13)	(14)	(50)	(77)

primary enrolment ratios less than 60 had secondary enrolment ratios less than 25, although the total number of countries in this lowest category of secondary enrolment ratios decreased from 50 in 1950–54 to 46 in 1955–57. Obviously those countries with six years or more of secondary schooling had a better chance of finding themselves in the higher categories of secondary enrolment ratios. Thus, among the 16 countries with secondary enrolment ratios 50 and over, 12 had six years or more of secondary schooling; among the next group, with secondary enrolment ratios 25–49, there were 12 out of 15 countries which had six years or more of secondary schooling. However, in the lowest category of secondary enrolment ratios (less than 25), only two-thirds of the countries had six years or more of secondary schooling.

It may be noted that the 46 countries where the secondary enrolment ratio remained at less than 25 in the 1955–57 period are found widely distributed geographically as follows: four in Northern Africa, ten in Middle and Southern Africa, eight in Middle America, nine in South America, four in South-West Asia, one in South-Central Asia, five in South-East Asia, and five in Europe.

Table 7 below shows the distribution of 69 countries by their secondary enrolment ratios for 1955–57 and by the percentage of girls in their secondary school enrolment. The same general relationship will be noted between the percentage of girls enrolled and the level of the secondary

TABLE 7. Distribution of 69 countries, by secondary enrolment ratio and percentage of girls in secondary school enrolment, around 1955–57

Secondary enrolment ratio	Number of countries by percentage of girls in secondary school enrolment		
	46 per cent or more	Less than 46 per cent	Total number of countries
50 and over	13	3	16
25–49	7	6	13
Less than 25	9	31	40
Total number of countries	29	40	69

enrolment ratio as between the percentage of girls enrolled and the primary school enrolment ratio, as shown in Table 4. Thus, among the 16 countries with the highest secondary enrolment ratios all except 3 had 46 per cent or more girls enrolled in their secondary schools. On the other hand, among the 40 countries with secondary enrolment ratios less than 25, there were 31 where the proportion of girls in secondary school enrolment was less than 46 per cent. The middle group of 13 countries with secondary enrolment ratios between 25 and 49, are divided almost equally between the two categories as regards percentage of girls' enrolment in secondary schools.

The enrolment figures reviewed here comprise pupils in all types of schools at the second level of education. These types of schools may be grouped into three branches: general, vocational and teacher training. This classification is subject to two important qualifications. First, there are countries where general and vocational education are usually given in the same schools, though perhaps in different sections. There may be separate schools for certain types of vocational education, but the enrolment figures for such schools would represent only a small part of the amount of vocational education actually provided in the whole school system. Hence it would be misleading to treat these schools as if they constituted all vocational education provided at the second level. Again, in many countries, part or all of the teacher training is now provided at post-secondary institutions, enrolment at which must be counted in the third level of education and not the second.

Subject to these limitations, Table 8 below gives the average enrolment at the second level of education in 1955–57 for 23 selected countries, showing the percentage of pupils in each of the three branches: general secondary education, vocational education, and teacher training. It may be seen that the proportion of pupil enrolment in general education varies from 25 to 96 per cent, while vocational schools enrolled from 3 to 58 per cent, and teacher training schools from 1 to 28 per cent of the pupils. Some of these variations may still be due in part to different ways of classifying schools and pupils in the respective branches, but it is evident that the countries tend to have different degrees of emphasis as to the development of these three branches of education at the secondary level. For details regarding the various types of schools covered in the three branches, and their relative development over a number of years, the reader is referred to the country chapters of this volume and to a summary analysis given in Chapter III.

TABLE 8. Average enrolment at the second level of education, 1955–57, and percentage distribution of pupils by branch (23 selected countries)

Country	Average enrolment 1955–57 (000's)	Percentage of pupils in		
		General education	Vocational education	Teacher training
Africa				
Belgian Congo	44	29	43	28
Sudan	19	92	5	3
Tunisia	43	70	29	1
United Arab Republic (Region of Egypt)	489	85	9	6
America				
Argentina	483	25	53	22
Brazil	825	72	20	8
Chile	181	70	27	4
Ecuador	48	62	28	10
El Salvador	25	59	35	6
Guatemala	20	59	30	11
Haiti	10	63	35	2
Paraguay	15	43	50	8
Venezuela	75	68	23	10
Asia				
China (Taiwan)	244	70	27	3
Iraq	71	89	5	6
Viet-Nam, Rep. of	80	96	3	1
Europe				
Albania	13	32	51	17
France	1 148	72	27	2
Hungary	162	58	39	3
Poland	605	33	56	11
Portugal	145	56	42	2
Rumania	211	40	58	2
Spain	577	65	30	6

EXAMINATION RESULTS AND GRADUATES FROM SCHOOLS AT THE SECOND LEVEL

The number of pupils successfully passing final examinations or receiving graduation certificates depends not only on the number of pupils enrolled and the duration of their courses, but also on the educational policies and pedagogical practices of each country. If, for example, as in Japan or the United States of America, graduation from a general secondary school does not depend on a final examination, it is easy to see how the number of graduates can increase as rapidly as the total enrolment, subject to a time lag approximately equal to the duration of secondary school courses. On the other hand, if, as in France or Luxembourg for example, the award of a certificate is based on the successful passing of a final examination organized by the national educational authorities, the number of certificates awarded tends to be rather limited according to the predetermined policies in this matter on the part of the educational authorities. Such policies may be based upon considerations of academic 'standards', university entrance requirements, the needs of the country for skilled manpower, and other factors not determined by the size of total enrolment or the duration of schooling.

Nevertheless, an indication of the size of output of general secondary education, in relation to the size of a country's population, has a certain value for the administrator planning a national programme of education suited to the needs of the country. In particular, such data would be useful for the planning of education at the third level, as well as the placement of those graduates from the second level of education who are not able to pursue full-time education at the third level.

Table 9 (page 24) shows, for 34 countries, the average annual number of students passing the final examination or receiving diplomas or certificates at the end of their

TABLE 9. Final examination results in general secondary education in 34 countries, average 1953–57
(arranged in order of number of graduates per 100,000 population)

Country	Type of examination or diploma	Duration of studies leading to examination or diploma	Average annual number of students passing the final examination or receiving the diploma (1953–57)	Total population mid-year 1955 (000's)	Average annual number of graduates per 100,000 population
United States of America	High School Diploma	4 or 6	1 403 200	165 932	846
Japan	Upper Secondary School Certificate	6	731 948	89 000	822
Ryukyu Islands	Senior High School Diploma	6	3 858	801	482
China (Taiwan)	General High Schools Certificate	6	35 162	8 907	395
Jordan	Secondary School Certificate	5	2 607	1 437	181
Philippines	General Secondary Leaving Certificate	4	33 367	22 241	150
Korea, Republic of	Certificate of General High School Graduation	6	30 520	21 526	142
Hungary	General Secondary Schools Diploma	8	12 966	9 805	132
Finland	General Secondary Leaving Certificate	8	5 183	4 241	122
United Arab Republic (Region of Egypt)	General Secondary Education Certificate	6	25 297	23 113	109
Poland	General Secondary Leaving Certificate	4	29 114	27 287	107
Chile	General Secondary Leaving Certificate	6	6 915	6 761	102
France	*Baccalauréat*, 2nd part	7	43 425	43 297	100
Netherlands	General Secondary Leaving Certificate	5 or 6	10 658	10 751	99
Luxembourg	General Secondary Leaving Certificate	7 or 6	268	309	87
Yugoslavia	General Secondary Leaving Certificate	4	13 637	17 586	78
Denmark	*Studentereksamen*	7 or 5	3 243	4 439	73
Spain	*Bachillerato* (Upper)	7	19 452	28 976	67
Germany, Federal Republic of	*Abitur*	6, 7, 9	31 803	50 176	63
United Arab Republic (Region of Syria)	*Baccalauréat*	6	2 447	3 861	63
Austria	General Secondary Leaving Certificate	8	4 145	6 974	59
Iraq	Secondary School Certificate	5	3 547	6 152	58
Argentina	*Bachillerato*	5	10 913	19 122	57
Ecuador	*Baccalauréat*	6	2 090	3 691	57
Malaya, Federation of	Cambridge Oversea School Certificate	5	3 087	5 883	52
Portugal	General Secondary Leaving Certificate	7	2 646	8 765	30
Réunion	*Baccalauréat*, 2nd part	7	80	278	29
Brazil	Higher Secondary Leaving Certificate	7	16 608	58 456	28
Ghana	West African School Certificate	5	903	4 620	19
Thailand	Pre-University Certificate	6	3 451	20 302	17
Algeria	*Baccalauréat*, 2nd part	7	1 570	9 715	16
Haiti	*Baccalauréat*, 2nd part	7	272	3 305	8
Viet-Nam, Republic of	*Baccalauréat*, 2nd part	7	621	26 300	2
Cameroun	*Baccalauréat*, 2nd part	7	39	3 146	1

secondary education. The countries are selected for the availability of comparable data, and listed in the order of average annual number of graduates per 100,000 population. It may be noted that the duration of studies leading to the final examination or diploma varies among the countries from four to eight years, and the average annual number of graduates per 100,000 population ranges from over 800 in the case of the United States and Japan, to less than 10 in the case of Haiti, Viet-Nam and Cameroun. The median among these 34 countries was 70 graduates each year per 100,000 population. Considering that the total world enrolment at the third level of education, in 1957, was about 362 students per 100,000 population (see following section of this chapter), it may be asked whether, in many of the countries covered by Table 9, the present output of graduates is sufficient to keep the supply of students for higher education at a satisfactory level.

Statistics on the number of students successfully completing various types of vocational education at the secondary level are not amenable to international comparison, owing to the uneven coverage of data and the divergencies in national systems of vocational education. The interested reader will find some relevant figures in most of the country chapters of this volume.

The annual output of graduates from teacher training schools at the second level, mainly destined for primary school teaching, must be considered in connexion with the size of primary school enrolment and the number of primary school teachers in service. It should be remembered that teacher training is provided in some countries only at the second level of education, in others only at the third level, while in many it exists at both the second and third levels. Hence the number of graduates from second-level teacher training schools does not indicate the total output of teacher training institutions. On the other hand, it is

TABLE 10. Number of pupils and teachers in primary schools and number of graduates from teacher training schools at the second level of education in 24 countries, average 1953–57

(arranged in order of graduates per 10,000 pupils in primary schools)

Country	Pupils in primary schools	Primary school teachers	Graduates from teacher training schools	Graduates per 10,000 pupils in primary schools	Graduates per 1,000 teachers
Argentina	2 595 763	112 163	13 253	51	118
Panama	135 972	4 273	652	48	153
Brazil	4 928 997	166 181	18 730	38	113
Ghana	424 625	14 197	1 501	35	106
Iraq	354 897	11 133	1 138	32	102
Guatemala	212 285	8 236	648	31	79
Western Samoa	23 616	695	59	25	85
United Arab Republic (Region of Egypt)	1 784 264	50 472	3 853	22	76
Uruguay	276 134	8 545	572	21	67
Norway	442 236	16 057	835	19	52
China (Taiwan)	1 252 556	27 265	2 235	18	82
Spain	3 070 565	79 367	5 622	18	71
Yugoslavia	2 058 491	56 077	3 760	18	69
Luxembourg	29 202	1 120	49	17	44
Malaya, Federation of	804 212	25 101	1 257	16	50
Portugal	826 730	21 850	1 210	15	56
United Arab Republic (Region of Syria)	321 603	10 510	459	14	44
Ecuador	453 939	10 807	545	12	50
Finland	584 676	24 023	606	10	25
Austria	757 323	34 476	710	9	21
Sarawak	55 713	1 820	46	8	25
Malagasy Republic	291 794	4 402	174	6	40
Viet-Nam, Republic of	585 585	11 747	350	6	30
Mozambique	274 029	2 714	53	2	20

well known that many primary school teachers (even the majority of them in some countries) are recruited from other sources than graduates from teacher training schools. Thus the latter category does not represent the total supply of new teachers, whether qualified or unqualified, who are available for service in the primary schools.

Table 10 above presents, for 24 countries, available data on the average annual number of graduates from teacher training schools at the second level of education, related to the number of primary school pupils and teachers, all referring to the period 1953–57. The countries are listed in the order of number of graduates per 10,000 pupils in primary schools, which ranges from 51 in Argentina to 2 in Mozambique. The median for these 24 countries is 18 graduates per 10,000 primary school pupils. When compared with the number of primary school teachers in service, Panama shows the highest number of graduates (153) per 1,000 teachers; Mozambique (20) still occupies the lowest place. The median in this case is 62 graduates per 1,000 primary school teachers. Assuming an annual requirement of 10 per cent new teachers in order to meet the needs of increased pupil enrolment and replacement of teachers leaving the service, it may be estimated that the minimum number of new teachers required each year would be about 30 for each 10,000 pupils or 100 for each 1,000 teachers in service. As we have seen, the median numbers for the 24 countries covered by Table 10 are only 18 and 62 respectively. Only in five or six of these countries, do the teacher training schools at the second level of education seem to be producing enough graduates to meet such minimum requirements. Obviously the other countries must either have other sources of recruitment of new primary school teachers, or resort to less satisfactory solutions (such as increasing the size of classes or using the same teachers for two or even three daily shifts of pupils).

ENROLMENT AT THE THIRD LEVEL OF EDUCATION

As shown in Table 1, there were in 1957 an estimated world enrolment, at the third level of education, of nearly 10 million students, as compared with about 7.5 million in 1953. This represents a 34 per cent increase in four years—a rate of increase twice as high as that for the first level of education over the same period, and more than four times as high as the rate of increase in enrolment at the second level of education. Related to the total world population, there were about 362 students per 100,000 population in 1957, as compared with 289 students in 1953. Since the coverage of these statistics may not be equally complete for the two years in question, it is likely that the apparently remarkable growth in student enrolment may be partly explained by better coverage in the more recent year. Again, since the classification of schools by level, as recommended by Unesco, may not be applied in the same manner in all countries, the comparability of data, both over space and time, has certain limitations. Nevertheless, it seems safe to say that the expansion of higher education,

at a much more rapid rate than that of either primary or secondary education, is one of the outstanding features of educational development in the world during the period under review.

Unesco recommends the classification, as 'education at the third level', of that which requires, as a minimum condition of admission, the successful completion of education at the second level, or evidence of the attainment of an equivalent level of knowledge. Thus are included not only universities, but also teachers' colleges, higher professional schools, etc., which may not be of university level but which receive students only after they have completed their secondary education. In those countries (as the United States of America and Japan) where 'junior colleges' make up an important part of the higher education system, the number of students enrolled in these institutions may account for as much as one-eighth of the total enrolment at the third level of education. Again, in those countries (as the U.S.S.R.) where education by correspondence is well developed at this level, the number of correspondence students may constitute as much as one-third of the total enrolment.

Bearing in mind these and other elements of non-comparability between countries with different systems of higher education, it may be noted (from Table 1) that in 1957 more than 30 per cent of the world's students at the third level of education were found in the region of Northern America (Canada and the U.S.A.), and more than 20 per cent in the U.S.S.R. In other words, more than half of the world's students at this level (52 per cent) were found in these two regions. The whole of Asia had about 25 per cent of the world total; the whole of Europe (excluding U.S.S.R.) about 16 per cent; Middle and South America some 5 per cent; Africa and Oceania the remaining 2 per cent.

In relation to the size of total population, Northern America held first place with 1,635 students per 100,000 population, followed by the U.S.S.R. with 1,031 students per 100,000 population. Australia and New Zealand combined had a student enrolment of 573 per 100,000 population; next came Central Europe (440), Northern and Western Europe (400), Southern Europe (352), South America (269), Middle America (255), Northern Africa (187), South-East Asia (181), South Central Asia (174), East Asia (155), South-West Asia (122). Middle and Southern Africa, and the Pacific Islands of Oceania, enrolled barely 20 students per 100,000 population.

In considering the geographical distribution of students at the third level of education, one factor that must be borne in mind is that about 200,000 students, or nearly 2 per cent of the world's students at this level, are enrolled in institutions outside their home countries. For the host countries, the number of 'foreign students' may represent a substantial proportion of all students enrolled in their institutions of higher education. As shown in Table 11 (page 27), Austria for example was host to more than 8,000 foreign students in 1957, constituting no less than 32 per cent of its student enrolment in higher education, while Switzerland had 5,382 foreign students, more than 30 per cent of its total enrolment. Ireland had 19 per cent foreign students, and Syria 17 per cent, though the actual numbers were not so large. On the other hand, in those countries receiving the largest number of foreign students—U.S.A. (43,000), France (17,000), Federal Republic of Germany (13,000), U.S.S.R. (11,000)[1]—the proportion represented by these students among all students is not so high as in the other cases mentioned. The total number of foreign students enrolled in the 36 countries covered by this table increased from 88,000 in 1953 to 122,000 in 1957, representing a growth of 38.6 per cent. This is a higher rate of increase than the growth of total enrolment in higher education for the world as a whole over the same period.

Statistics are not generally available on the number of students from each country who are studying abroad. However, from a partial count of foreign students in 18 countries by country of origin,[2] it was found that, for example, there were in 1958 over 8,000 students from Greece studying in those 18 countries alone; over 6,000 students from China; over 5,000 students each from India, Iran and Korea; over 3,000 each from Hungary and the United Arab Republic; over 2,000 each from Morocco and Turkey; and over 1,000 each from Ceylon, Cuba, Indonesia, Iraq, Jordan, Malaya, Mexico, Philippines, Sudan, Thailand, Tunisia, Venezuela and Viet-Nam. How many additional students from these lands were studying in other than the 18 given countries is not known.[3] Thus it appears that, for those countries where national facilities for higher education are not adequately developed, it is imperative that their students should be able to attend the institutions of the more developed countries. This point is worth noting in connexion with the educational needs of the less developed areas of the world, a topic which will be examined in the latter part of this chapter.

The distribution of student enrolment at the third level of education by field of study, for 41 countries, covering about 55 per cent of all students in the world, is shown in Table 12 (page 28). The fields of study are grouped for convenience under 10 categories, which, except for 'law' and the category 'not specified', are defined as follows:

Humanities covers archaeology, history, languages, letters, library science, philosophy, psychology, theology, and similar subjects.

Education covers education, pedagogy, physical education.

Fine arts covers architecture, drawing, music, painting, sculpture, speech and dramatic arts, and similar subjects.

Social sciences covers banking, commerce, diplomacy, economics, ethnology, geography, home economics, international relations, journalism, political science, public administration, social welfare, sociology, statistics, and similar subjects.

Natural sciences covers astronomy, bacteriology, biochemistry, biology, botany, chemistry, entomology, geology, geophysics, mathematics, meteorology, mineralogy, physics, zoology, and similar subjects.

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1. The United Kingdom, with more than 11,000 full-time foreign students enrolled in its universities in 1958, and Argentina, with more than 9,000 foreign students enrolled in 1957, are omitted from this table for lack of comparable data.
2. See *Study Abroad*, Unesco, Paris, 1960, Volume XII, pp. 677, 716–21.
3. The 18 countries, selected on the basis of availability of data on foreign students by country of origin, includes most of the countries reporting 3,000 or more foreign students (exceptions: U.S.S.R., Argentina and the Holy See) as well as some of those reporting between 1,000 and 3,000 foreign students in 1957 or 1958.

TABLE 11. Foreign students enrolled at the third level of education in 36 countries, 1953 and 1957

Country of study	1953/54			1957/58		
	Total number of students enrolled	Foreign students enrolled	Foreign students as percentage of all students	Total number of students enrolled	Foreign students enrolled	Foreign students as percentage of all students
Alaska	304	4	1.3	2 770	7	0.3
Australia	28 838	865	3.0	36 903	1 733	4.7
Austria	18 015	3 015	16.7	25 082	8 017	32.0
Belgium[1]	21 999	1 127	5.1	29 651	1 764	5.9
Bulgaria[2]	29 664	336	1.1	32 560	429	1.3
Cambodia	212	9	4.2	511	112	21.9
Chile[3]	11 020	598	5.4	11 211	166	1.5
China (Taiwan)	11 943	10	0.1	25 619	70	0.3
Colombia	11 629	359	3.1	15 971	351	2.2
Dominican Republic	3 116	97	3.1	4 034	116	2.9
Ecuador	5 093	238	4.7	6 451	253	3.9
Finland	14 819	44	0.3	18 086	100	0.6
France[4]	151 115	15 817	10.5	180 634	17 176	9.5
Germany						
Federal Republic of Germany[5]	115 664	4 297	3.7	153 923	12 833	8.3
West Berlin[5]	11 055	182	1.6	20 076	1 083	0.5
Hawaii	4 619	62	1.3	7 665	115	1.5
Iceland	750	13	1.7	777	25	3.2
Ireland[5 6]	7 011	1 463	20.9	8 019	1 495	18.6
Italy	137 789	2 162	1.6	154 638	2 209	1.4
Japan	523 364	2 667	0.5	626 736	3 458	0.6
Malaya, Federation of[7]	954	17	1.8	2 707	284	10.5
Netherlands	27 987	1 382	4.9	32 565	1 364	4.2
New Zealand	[8] 13 028	*167	*1.3	[8] 13 486	359	2.7
Norway[5]	5 745	129	2.2	6 392	120	1.9
Pakistan	60 893	68	0.1	107 134	141	0.1
Panama	1 893	37	2.0	2 781	77	2.8
Panama Canal Zone	369	98	26.6	280	23	8.2
Poland	131 690	428	0.3	129 045	931	0.7
Portugal	14 563	140	1.0	19 691	94	0.5
Puerto Rico	14 095	105	0.7	20 243	53	0.3
Spain[9]	113 914	2 203	1.9	142 783	3 677	2.6
Switzerland	15 680	3 910	24.9	17 688	5 382	30.4
Trinidad and Tobago	85	73	85.9	86	72	83.7
Turkey	24 442	691	2.8	41 225	1 392	3.4
United Arab Republic (Region of Syria)	2 960	396	13.4	7 849	1 344	17.1
United States of America[10]	2 231 054	33 564	1.5	3 036 938	43 193	1.4
U.S.S.R.	1 572 700	10 729	0.7	2 110 860	11 266	0.5
Yugoslavia	57 937	291	0.5	83 302	513	0.6

1. Universities only.
2. Not including part-time courses.
3. University of Chile only. In 1953/54 students born outside the territory of Chile were counted as foreign students.
4. Public universities only, including Algiers University.
5. Not including teacher training.
6. Not including St. Patrick's College.
7. And Singapore. For 1953/54 refers to University of Malaya only. For 1957/58 includes Nanyang University, which admitted students for the first time in 1956. Students from Sarawak, North Borneo, Malaya and Singapore are counted as national students.
8. Not including teacher training institutions other than university faculties of education.
9. Including teacher training secondary level (37,279 students in 1957/1958).
10. Not including Alaska and Hawaii indicated separately above.

Engineering covers applied science, construction, geodesy, metallurgy, mining, surveying, technology, textiles, and similar subjects.

Medical science covers anatomy, dentistry, medicine, midwifery, nursing, optometry, osteopathy, pharmacy, physiotherapy, public health, and similar subjects.

Agriculture covers dairying, fisheries, forestry, horticulture, rural science, veterinary medicine, and similar subjects.

In these 41 countries combined, which however do not include some of the countries with large numbers of students (such as the U.S.A., United Kingdom, Italy, etc.), there seem to be relatively larger proportions of students in the fields of engineering (21 per cent), humanities (17 per cent), education (14 per cent), and social sciences (13 per cent). Medical science (10 per cent), natural sciences (9 per cent), law (7 per cent), agriculture (6 per cent), and fine arts (1.7 per cent) are fields with relatively smaller proportions of students.

TABLE 12. Student enrolment at the third level of education by field of study, in 41 countries, around 1957

Field of study	Student enrolment	Percentage distribution
All fields	**5 556 356**	**100.0**
Engineering	1 155 290	20.8
Humanities	923 353	16.6
Education	801 896	14.4
Social sciences	708 101	12.8
Medical science	552 786	9.9
Natural sciences	510 876	9.2
Law	378 439	6.8
Agriculture	347 588	6.3
Fine arts	95 630	1.7
Not specified	82 397	1.5

The actual distribution of students by field of study varies greatly from country to country, as shown for 32 countries in Table 13 below. While it is not possible from these data alone to draw general conclusions, we note that certain countries, such as India and Pakistan, tend to have large proportions of their student enrolment (50 per cent or more) in such fields of study as humanities, and relatively small percentages (less than 5 per cent) in such fields of study as engineering and agriculture. On the other hand, in Czechoslovakia, Poland, and the U.S.S.R., engineering accounted for one-third or more of all students, while humanities had only 6 per cent or less. Among other countries with well-developed education at the third level, if we compare only the two fields, humanities and engineering, the balance is still in favour of the former, as for example in France (humanities, 25 per cent; engineering, 6 per cent), or in New Zealand (humanities, 26 per cent;

TABLE 13. Enrolment of students at the third level of education, and distribution by field of study, in 32 countries, 1957

Country	Enrolment in all fields	Percentage distribution by field of study									
		Humanities	Education	Fine arts	Law	Social sciences	Natural sciences	Engineering	Medical science	Agriculture	Not specified
Argentina	155 631	4	4	5	27	17	4	9	28	2	–
Australia	65 937	17	21	4	3	7	9	13	24	3	–
Austria	25 082	24	–	10	16	9	4	19	15	3	–
Brazil	79 505	7	4	5	27	11	3	11	23	3	6
Bulgaria	32 560	7	2	4	1	15	6	28	18	19	–
Canada	84 498	38	7	1	3	8	7	17	10	3	5
Chile	16 896	1	29	6	15	10	–	12	15	5	7
China (Taiwan)	25 619	17	5	2	6	25	7	22	5	10	2
Colombia	15 971	5	4	11	21	6	5	15	30	4	–
Czechoslovakia	77 926	2	25	1	2	11	5	33	11	9	–
Denmark[1]	20 554	9	31	3	6	15	6	10	16	5	.
Ecuador	6 451	3	10	3	20	7	6	16	29	6	–
Finland	18 086	33	7	2	4	11	10	18	10	4	–
France	209 392	25	[2]1	[3]1	21	[4]	26	6	19	1	1
Germany, Fed. Rep. of	147 864	22	1	4	12	13	14	19	14	2	.
India	833 450	52	2	0.5	3	8	26	3	4	1	0.5
Iraq[1]	8 374	12	2	2	15	27	12	9	16	5	–
Japan	623 335	18	11	1	12	26	2	14	6	5	5
Mexico	103 485	1	46	5	5	5	4	7	8	2	18
Netherlands	32 565	19	[5] ...	[5] ...	8	18	13	18	20	4	–
New Zealand[1]	16 333	26	24	4	6	12	10	6	7	5	1
Norway	6 392	28	...	2	8	5	16	19	16	6	.
Pakistan	107 134	50	2	.	3	8	21	3	8	1	5
Poland	129 045	6	4	4	3	8	6	38	21	9	–
Portugal	19 691	24	1	5	12	7	15	11	19	2	3
Spain	107 183	7	–	29	18	4	15	4	20	3	–
Sweden	26 040	43	–	–	6	5	12	16	16	3	–
Switzerland	17 688	21	1	3	9	12	17	13	21	2	.
Turkey	41 225	5	5	1	27	26	6	12	10	7	1
United Arab Republic											
Region of Egypt	89 342	24	8	2	18	22	3	8	9	6	–
Region of Syria	7 892	32	3	–	43	2	9	2	9	–	–
U.S.S.R.	2 110 866	4	26	–	2	9	4	36	8	11	1
Yugoslavia	83 302	17	10	5	13	15	5	16	12	7	–

1. For 1958.
2. Not including Ecole Normale Supérieure d'Enseignement Technique.
3. Data relate to three institutions only.
4. Included with law.
5. Education and fine arts included in the other fields of study.

engineering, 6 per cent). Only in a few countries have these two fields received nearly equal attention as for example, in the Federal Republic of Germany (humanities, 22 per cent; engineering, 19 per cent), or in the Netherlands (humanities, 19 per cent; engineering, 18 per cent).

It is not possible to generalize on the relative proportions of women students in the different fields of study, since statistics on enrolment by sex and by field of study are not available for many of the largest countries such as the U.S.S.R., U.S.A., India and Japan. According to a partial count covering available information from 33 countries, the proportion of women students in the different fields of study ranges from 32 per cent in fine arts and 29 per cent in humanities to 3 per cent in agriculture and 1.4 per cent in engineering. There were about 23 per cent women students in medical science, 18 per cent in social sciences, 15 per cent each in natural sciences and in law, and 12 per cent in education. The proportion of women students in all fields of study, for these 33 countries, was 13 per cent.

GRADUATES FROM INSTITUTIONS OF HIGHER EDUCATION

It is estimated that the number of graduates from institutions of higher education around the world has reached a total of approximately 1.7 million each year, which is roughly one-sixth of the total number of students enrolled at the third level of education. Nearly 90 per cent of these graduates are accounted for by 37 countries, each reporting over 10,000 students enrolled and more than 1,000 graduates in a recent year. These countries are listed in Table 14 below, with the most recent data available on total number of graduates from institutions of higher education. This table suffers from the omission of a number of countries where higher education is well developed but for which no comparable data on graduates are available to the Unesco Secretariat.[1]

Certain observations may be made concerning the data presented in Table 14. First, the two countries—U.S.A. and U.S.S.R.—which have between them over 50 per cent of the world's students at the third level of education, account for more than 40 per cent of all the graduates from higher education institutions. Secondly, the ratio between number of graduates and number of students enrolled varies widely from country to country, ranging from over 30 per cent in a few countries (such as India, Netherlands, New Zealand) to under 10 per cent in many countries (such as Chile, Colombia, Pakistan, Spain, Turkey, United Arab Republic). Obviously, this ratio is affected by the inclusion or exclusion of those students receiving various types of diplomas and certificates below the standard of university degrees. This explains in part the discrepancy between, for example, Australia (where only university degrees and diplomas were counted in this connexion) and New Zealand (where more than half of the awards reported were at a level below the standard of university degrees). Finally, the time reference of the data in this table is not uniform for all countries. While in the majority of cases they refer to the year 1958, in a few instances, for lack of more recent data, figures for 1957 or 1956 have been used (in the case of India, the enrolment figure is for 1957 but the number of graduates refer to 1955). All these qualifications must be borne in mind by the reader before he draws any comparisons between countries from the figures here presented.

Comparable figures are not available to show the absolute

1. The following countries, for example, which are omitted from the table, are known to have 10,000 or more students enrolled in their institutions of higher education: Burma, China (mainland), Cuba, Denmark, Eastern Germany, Indonesia, Iran, Mexico, Puerto Rico, Rumania, Union of South Africa, Uruguay, Venezuela.

TABLE 14. Enrolment and graduates at the third level of education, in 37 countries, around 1958

(arranged in order of total student enrolment)

Country	Total student enrolment (000's)	Number of graduates (000's)	Graduates per 100 students enrolled
United States of America[1]	3 236	438	14
U.S.S.R.[2]	2 179	291	13
India	833	269	32
Japan	636	160	25
Philippines	250	36	14
France	226	25	11
Germany (Federal Republic of) and West Berlin	181	34	19
Italy	164	20	12
Argentina[3]	156	7	5
Spain	143	10	7
Poland	121	19	15
United Arab Republic	105	10	9
United Kingdom[4]	103	29	28
Yugoslavia	97	10	10
Pakistan	94	8	9
Canada	93	22	24
Brazil	87	16	18
Korea, Republic of	80	16	20
Czechoslovakia	75	13	18
Australia[5]	73	5	6
Turkey	49	4	8
Thailand	48	5	11
Belgium	45	9	21
Netherlands	35	11	32
Bulgaria	33	6	17
Hungary	31	7	23
Austria	30	3	10
Sweden	28	4	15
China (Taiwan)	28	4	14
Greece	25	5	19
Portugal	24	2.3	10
Finland	20	4	18
Colombia	19	1.8	9
Chile	19	1.4	7
Switzerland	19	2.3	12
Peru	19	4	20
New Zealand	16	5	31

1. Graduates exclude those under the Bachelor degree level.
2. Including evening school and correspondence students.
3. Graduates are from public institutions only.
4. Students and graduates refer to universities only.
5. Graduates from universities only.

or relative increase in number of graduates, for all these countries, between two recent years. However, Table 15 below, which covers only 30 countries (among those not included being Argentina, China, India, Italy, Japan, Federal Republic of Germany, Mexico, United Arab Republic, United Kingdom), shows a 25 per cent increase in the total number of graduates between 1954 and 1958. The fields of study where the greatest increase was reported by these 30 countries are: engineering (61 per cent), and natural sciences (46 per cent). Agriculture (38 per cent), social sciences (33 per cent) and humanities (30 per cent) registered increases commensurate with the world average rate of increase in student enrolment at the higher education level. Graduates in medical science (16 per cent) and education (6 per cent) increased relatively slightly. No increase was shown in the number of law graduates; while fine arts suffered a decrease amounting to some 3,000 graduates (12 per cent of the number of graduates in 1954).

TABLE 15. Graduates at the third level of education, by field of study, in 30 countries, 1954 and 1958

Field of study	Number of graduates (000's)		Per cent increase or decrease 1954–58
	1954	1958	
All fields	**722**	**901**	**+25**
Engineering	87	140	+61
Natural sciences	48	70	+46
Agriculture	40	55	+38
Social sciences	122	162	+33
Humanities	84	109	+30
Medical science	69	80	+16
Education	205	218	+ 6
Law	29	29	—
Fine arts	25	22	—12
Other	13	16	+23

PUBLIC EXPENDITURE ON EDUCATION

World summaries or international comparisons are extremely difficult, if not impossible, on the subject of educational expenditure. First of all, the coverage of data on educational expenditure, even confined to the government sector, is quite different for different countries. For example, capital expenditure may or may not be included; the figures reported may refer to all levels of government (central, provincial and local), or only to the central or federal government, or even to the Ministry of Education alone; expenditure on higher education may be included wholly or in part or not at all; various expenses for adult education, cultural activities, auxiliary services, etc., may be included or excluded. Secondly, educational expenditure from non-government sources (private organizations, religious bodies, households, etc.) is generally not available from official reports; yet private agencies play a more or less important role in the provision of education in a great many countries. Hence the accounting of only government expenditure on education very often presents an incomplete picture. Finally, unless there is an international unit for the expression of educational expenditure, any comparison between countries is affected by the real purchasing power of the amounts given in terms of national currency units.

One possible basis of comparison, which overcomes the last-named difficulty but not the others, is to relate the total public expenditure on education to the total national income of the country. Thus, among half of the countries shown in Table 17 (page 31), where it is known that capital expenditure was included in the total public expenditure on education (as reported), the proportion of national income represented by public expenditure on education ranges from 1.3 per cent to 6.9 per cent, with a median percentage of 3.5. Among eight countries in Africa, the range is from 1.9 to 5.5 per cent, with the median at 3.3 per cent. Among eight countries in the Western Hemisphere, the range is from 1.4 to 6.9 per cent, with the median at 2.5 per cent. Among eight countries in Asia, the range is from 1.3 to 5.5 per cent, with the median at 3.9 per cent. Among eleven countries in Europe and Oceania, the range is from 1.4 to 5.2 per cent, with the median at 4.0 per cent. These median percentages, based on limited numbers of countries, can only be taken as roughly indicative, since the inclusion of a few more countries in each case could change the medians substantially in either direction.

TABLE 16. Public recurring expenditure on education per pupil enrolled at each level of education, for selected countries

Country	Year	Currency unit	Expenditure per pupil[1]		
			Primary	Secondary	Higher
Brazil	1957	Cruzeiro	1 365	4 449	57 949
Colombia	1957	Peso	67	268	1 261
France[2]	1957	Franc	2 739	67 037	113 520
Hungary	1957	Forint	1 018	1 496	9 186
India	1956	Rupee	24	65	441
Japan	1957	Yen	9 037	14 078	68 168
Netherlands	1957	Guilder	339	591	1 479
New Zealand	1957	Pound	25	35	239
Norway	1957	Krone	929	1 834	6 769
Pakistan	1957	Rupee	19	66	339
Panama	1957	Balboa	46	81	157
Sweden	1956	Krona	1 247	1 551	4 595
Thailand	1957	Baht	173	495	541
Tunisia	1957	Dinar	15	48	159
Viet-Nam, Rep. of	1957	Piastre	258	1 486	9 200
Yugoslavia	1956	Dinar	8 750	26 486	54 172

1. Based on total enrolment of full-time pupils, in both public and private schools.
2. Expenditure of the Ministry of Education only.

Another suggested method of comparison is to show the percentage distribution of total recurring expenditure by level and type of education. Such distributions are shown in Table 18 (page 33) for 78 countries, relating to various years between 1956 and 1959. Subject to all the limitations of comparability, it may nevertheless be noted that the relative proportion of expenditure for pre-primary and primary education, for example, can vary from 32 to 89 per cent; for secondary education, including general,

vocational and teacher training, from 7 to 47 per cent; for higher education from 0 to 24 per cent. Bearing in mind that, for the world as a whole, about 76 per cent of all pupil enrolment is at the primary school level, 21 per cent at the secondary school level, and only 3 per cent at the higher education level (see Table 2), it is evident that the relative costs of education at each level are often at great variance with the numerical importance of pupil enrolment at the respective levels.

Statistics are not available in sufficient detail and in comparable form to draw any international comparisons on this point. However, a rough idea of the relative amounts spent by government authorities on education at each level, per pupil enrolled in both public and private schools, may be gained from Table 16 (page 30), which covers only 16 selected countries. Thus, in Sweden for example, government expenditure on higher education was roughly three times as high as for secondary education, which in turn was about 25 per cent higher than for primary education, relative to the numbers of pupils or students enrolled at these levels. On the other hand, in Yugoslavia about twice as much was spent by the Government for each student in higher education as in secondary education, but the latter amount was three times as high as expenditure per pupil in primary education. These figures must, of course, be interpreted in the light of the actual coverage of government expenditure in each country, as well as the structure and organization of its educational system. They must not be regarded as the real cost of education per pupil, since many other factors besides government expenditure will have to be taken into account before the per pupil cost of education can be computed for any country.

TABLE 17. Public expenditure on education and national income per inhabitant in 70 selected countries

Country	Year	Currency unit	Educational expenditure		National income per inhabitant (in units of national currency)	Educational expenditure as percentage of national income
			Capital expenditure included (I) or excluded (E)	Per inhabitant (in units of national currency)		
Africa						
Belgian Congo	1958	Congolese franc	I	156	3 548	4.4
Ghana	1958/59	Pound	I	1.5	71	2.2
Kenya	1958/59	Pound sterling	I	[1]1.0	33	[1]3.0
Mauritius	1957/58	Rupee	E	31	1 128	2.7
Morocco[2]	1957	Franc	E	2 001	64 785	3.1
Nigeria, Federation of[3]	1956	Pound sterling	I	0.46	25	1.9
Rhodesia and Nyasaland, Fed. of	1958/59	Pound sterling	I	1.5	48	3.2
Tanganyika	1958	Pound sterling	I	0.67	20	3.4
Uganda	1957/58	Pound sterling	I	[4]1.0	18	[4]5.5
Union of South Africa	1957/58	Pound	E	3.6	125	2.9
United Arab Republic (Region of Egypt)	1956/57	Pound	I	[5]1.5	39	[5]3.9
America, North						
Canada	1957	Dollar	...	56	1 438	3.9
Costa Rica	1958	Colon	E	58	1 889	3.1
Cuba	1957/58	Peso	I	12	362	3.4
Dominican Republic	1957	Peso	I	4.3	234	1.8
Guatemala	1958	Quetzal	...	[5]3.6	155	[5]2.3
Honduras	1957	Lempira	I	[5]4.8	331	[5]1.4
Mexico	1958	Peso	...	[5]35	3 147	[5]1.1
Puerto Rico	1955/56	U.S. dollar	I	29	426	6.9
United States of America	1957/58	Dollar	I	92	2 132	4.3
West Indies, Federation of the						
Jamaica	1956	Pound sterling	...	2.3	94	2.4
Trinidad and Tobago	1957	B.W.I. dollar	I	16	616	2.6
America, South						
Argentina	1957/58	Peso	...	293	9 486	3.1
Brazil	1957	Cruzeiro	I	318	14 123	2.3
Chile	1958	Peso	...	[5]8 098	342 272	[5]2.4
Colombia	1957	Peso	I	17	911	1.9
Ecuador	1958	Sucre	...	[5]39	2 492	[5]1.6
Paraguay	1958	Guarani	...	[5]208	12 361	[5]1.7
Peru	1957	Sole	...	[1]82	2 384	[1]3.4
Venezuela	1958/59	Bolivar	...	[1]58	2 785	[1]2.1

1. Expenditure by Central Government only.
2. Data refer to former French Zone only.
3. Not including Southern Cameroons.
4. Includes expenditure by voluntary agencies.
5. Expenditure by Ministry of Education only.

Country	Year	Currency unit	Educational expenditure		National income per inhabitant (in units of national currency)	Educational expenditure as percentage of national income
			Capital expenditure included (I) or excluded (E)	Per inhabitant (in units of national currency)		
Asia						
Burma	1958/59	Kyat	I	7.8	214	3.6
Cambodia	1957/58	Riel	I	130	3 157	4.1
Ceylon	1957/58	Rupee	I	21	527	4.1
China (Taiwan)	1958/59	New Taiwan Yuan	...	110	3 238	3.4
Cyprus	1957/58	Pound sterling	I	6.1	140	4.3
India	1958/59	Rupee	...	[5]5.5	314	[5]1.7
Israel	1958/59	Pound	...	[1]41	1 366	[1]3.0
Japan	1957/58	Yen	I	4 974	89 891	5.5
Korea, Republic of	1958	Hwan	I	[5]1 574	65 919	[5]2.4
Lebanon	1958	Pound	I	[5]18	855	[5]2.1
Pakistan	1957/58	Rupee	I	3.2	248	1.3
Philippines	1958/59	Peso	...	[1]11	384	2.9
Thailand	1958	Baht	...	[1]54	2 141	2.5
Turkey	1958/59	Lira	...	[5]28	1 285	[5]2.2
United Arab Republic (Region of Syria)	1957	Pound	...	14	560	2.5
Europe						
Austria	1959	Schilling	...	[1]459	15 250	[1]3.0
Belgium	1958	Franc	I	2 320	44 626	5.2
Denmark	1957/58	Krone	I	233	6 045	3.9
Finland	1957	Markka	...	13 640	208 326	6.5
France	1958	Franc	I	[1]12 202	401 713	[1]3.0
Germany, Federal Republic of	1957/58	Deutschmark	I	113	3 222	3.5
Eastern Germany	1958	Mark	...	173	3 986	4.3
Greece	1957/58	Drachma	...	[5]139	8 584	[5]1.6
Hungary	1957	Forint	E	252	10 933	2.3
Iceland	1956	Króna	...	708	22 360	3.2
Ireland	1958/59	Pound	...	5.6	164	3.4
Italy	1958/59	Lira	...	[5]8 043	269 350	[5]3.0
Luxembourg	1957/58	Franc	...	908	53 481	1.7
Malta	1956/57	Pound sterling	I	5.9	114	5.2
Netherlands	1957	Guilder	I	136	2 647	5.1
Norway	1957	Krone	I	294	6 551	4.5
Poland	1957	Złoty	I	452	10 650	4.2
Portugal	1958	Escudo	I	[5]80	5 823	[5]1.4
Spain	1959	Peseta	...	[1]161	15 786	[1]1.0
Sweden	1958/59	Krona	...	[5]211	6 766	[5]3.1
Switzerland	1957	Franc	E	151	5 355	2.8
United Kingdom						
England and Wales	1957/58	Pound sterling	I	13		
Scotland	1957/58	Pound sterling	I	19	342	*4.0
Northern Ireland	1958/59	Pound sterling	I	12		
Yugoslavia	1958	Dinar	...	3 079	104 733	3.0
Oceania						
Australia	1958/59	Pound	...	[6]11	501	[6]2.2
New Zealand	1957/58	Pound	I	15	418	3.5

6. Expenditure by state and local governments only.

TABLE 18. Percentage distribution of recurring public expenditure on education, by level and type of education, for 78 countries and territories

Country	Year	Central administration	Pre-primary and primary education	Secondary education				Higher education	Other types of education[1]	Other recurring expenditure	Total recurring expenditure
				General	Vocational	Teacher training	Total				
Africa											
Algeria	1957/58	1.8	57.2	13.7	6.4	1.9	22.0	1.9	1.7	15.4	100
Basutoland	1957/58	5.5	60.1	8.2	7.3	5.2	20.7	–	13.7	–	[2]100
Bechuanaland	1957	12.7	63.9	16.8	1.5	4.4	22.7	–	0.8	–	[2]100
British Somaliland	1958	14.9	63.0	6.7	10.0	5.4	22.1	–	–	–	100
Chad	1958	...	55.2	19.8	9.4	...	29.2	–	3.0	12.5	[3]100
Comoro Islands	1959	0.1	52.2	[4]26.1	9.2	...	35.3	–	–	12.4	100
Gambia	1958	11.1	40.4	22.7	6.4	16.5	45.6	–	2.9	–	[2]100
Kenya	1956/57	4.1	62.2	20.1	5.6	[5]7.4	33.1	...	0.6	–	[2 3]100
Malagasy Republic	1957	4.7	48.1	[4]21.7	16.6	...	38.3	1.3	1.8	5.8	100
Mauritius and Deps.	1956/57	3.0	74.0	14.5	0.2	5.1	19.8	...	3.2	–	[6]100
Morocco	1957	2.7	51.2	9.7	10.4	1.0	21.1	11.5	6.6	6.9	100
Niger	1957	5.0	58.9	12.5	1.9	7.1	21.5	–	0.3	14.3	100
Nigeria, Fed. of[7]	1956	8.1	64.4	9.5	3.7	9.8	23.0	1.5	2.2	0.8	100
Reunion	1957	0.7	77.1	[4]14.5	4.7	...	19.2	...	–	3.0	100
Rhodesia and Nyasaland, Fed. of											
Northern Rhodesia	1956/57	16.3	68.3	5.2	4.9	[5]5.1	15.2	...	0.1	–	[2]100
Nyasaland	1956/57	7.0	70.1	8.2	3.1	[5]10.5	21.8	...	1.1	–	[2]100
Seychelles	1957	4.2	38.7	26.8	13.3	6.4	46.5	–	10.6	–	[2]100
Sudan	1957/58	4.8	42.4	27.4	5.5	7.0	39.9	...	1.5	11.4	[8]100
Swaziland	1957	5.6	[9]64.0	8.7	6.7	...	15.4	–	–	15.0	[2]100
Tanganyika	1958	6.9	44.0	36.0	3.8	3.8	43.6	5.6	–	–	[2]100
Tunisia	1957/58	2.0	56.6	[4]18.2	9.4	...	27.6	4.4	0.3	9.1	100
Uganda	1956/57	4.4	57.9	20.3	6.5	8.2	35.0	–	2.7	–	[2]100
Zanzibar and Pemba	1957	5.8	59.6	15.1	7.6	4.9	27.6	–	–	7.1	[2]100
America, North											
Bermuda	1957	2.7	60.1	25.6	4.2	–	29.8	–	4.3	[10]3.1	100
British Honduras	1957	6.6	78.0	4.0	6.3	–	10.3	2.6	2.5	–	100
Cuba	1957/58	5.2	65.4	15.0	3.6	1.4	20.0	5.3	–	4.1	100
Haiti	1956/57	5.8	49.9	8.6	11.0	1.3	20.9	7.4	3.4	12.7	100
Netherlands Antilles	1957	2.2	37.9	38.5	5.3	6.3	50.1	–	1.3	8.5	100
Panama	1957	12.8	59.1	...	...	...	22.2	3.4	0.9	1.6	[6]100
St. Pierre and Miquelon	1958	...	56.6	1.6	22.4	...	24.0	–	0.8	18.5	100
Virgin Islands (U.K.)	1955	0.3	70.5	22.5	...	4.4	26.9	–	2.4	–	100
West Indies, Federation of the											
Leeward Islands	1956	3.2	74.2	14.2	1.0	2.2	17.4	–	5.2	–	100
Trinidad and Tobago	1956	2.8	72.4	11.8	[11]2.6	...	14.2	3.8	1.0	5.6	100
America, South											
Brazil	1957	9.2	39.1	[12]20.2	...	...	20.2	24.3	0.2	7.0	100
Colombia	1957	3.9	43.6	9.0	6.2	4.4	19.6	16.4	4.0	12.5	100
Uruguay	1958	...	[4]45.3	20.8	8.6	...	29.4	21.1	3.4	0.8	100

Note. Owing to the rounding of figures the sum of the components may not add to exactly 100 per cent.

1. Includes special education, adult education, and other types of education.
2. Includes some expenditure by voluntary agencies.
3. Includes some capital expenditure.
4. Includes expenditure for teacher training.
5. Includes expenditure for teacher training at the higher level.
6. Refers to expenditure by the Central Government only.
7. Not including expenditure for Southern Cameroons.
8. Not including expenditure for higher education.
9. Includes some expenditure for secondary education.
10. Expenditure on scholarships for teacher training studies abroad.
11. Includes some expenditure for vocational expenditure at the higher level.
12. Includes expenditure for vocational education and teacher training.

Country	Year	Central administration	Pre-primary and primary education	Secondary education				Higher education	Other types of education[1]	Other recurring expenditure	Total recurring expenditure
				General	Vocational	Teacher training	Total				
Asia											
Aden Colony	1956/57	8.7	34.9	20.9	17.3	3.2	41.4	–	15.1	–	100
Brunei	1957	5.1	59.2	20.4	10.8	3.7	34.9	–	0.9	–	100
Burma	1958/59	2.7	47.9	20.8	8.5	...	29.3	9.9	–	10.2	100
Cambodia	1958	...	86.5	12.0	1.5	...	13.5	...	–	–	[8]100
Cyprus	1957/58	2.1	62.3	26.7	4.3	–	31.0	4.7	–	–	100
Hong Kong	1957/58	7.1	51.1	20.1	3.2	–	23.3	15.0	3.5	–	[6]100
India	1956/57	2.2	32.1	32.0	2.1	1.1	35.2	18.0	1.8	10.7	100
Israel	1957/58	4.8	66.0	2.8	4.2	2.4	9.4	8.0	3.8	8.0	[2]100
Japan	1957/58	6.9	32.0	[12]30.6	...	...	30.6	11.8	2.4	16.3	100
Korea, Rep. of	1959	0.6	78.5	11.6	2.1	1.5	15.2	4.0	0.5	1.3	100
Kuwait	1957/58	14.4	62.7	6.1	4.4	...	10.5	–	1.9	10.5	100
Laos	1957	...	89.2	[13]6.9	1.2	0.9	9.0	–	1.8	–	100
Malaya, Fed. of	1957	6.5	66.8	13.0	0.7	2.6	16.3	0.3	–	10.1	[2]100
Netherlands New Guinea	1957	5.1	76.0	5.3	7.5	6.0	18.8	–	0.1	–	100
North Borneo	1957	7.5	73.8	11.7	1.8	5.2	18.7	–	–	–	[2]100
Pakistan	1957/58	5.0	33.0	33.2	1.6	1.7	36.5	16.1	2.8	6.6	100
Philippines	1957/58	...	83.8	8.1	[11]7.5	–	15.6	0.5	0.1	–	100
Portuguese India	1958	11.1	32.6	12.5	16.5	–	29.0	12.5	3.7	11.1	[14]100
Ryukyu Islands	1956/57	5.6	36.8	36.0	...	–	36.0	5.5	2.0	14.1	100
Sarawak	1957	2.9	68.7	20.1	...	3.6	23.7	–	4.8	–	[2]100
Singapore	1956	3.8	66.6	22.0	0.7	–	22.7	5.1	1.8	–	[2]100
Thailand	1957	4.1	65.5	14.9	5.2	4.4	24.5	2.9	1.9	1.1	100
United Arab Rep. (Region of Syria)	1958/59	8.9	51.7	21.0	3.2	2.3	26.5	13.0	–	–	100
Viet-Nam, Rep. of	1957	10.0	41.0	23.3	5.8	1.6	30.7	7.6	2.2	8.5	100
Europe											
Bulgaria	1958	0.7	42.8	11.3	18.0	1.1	30.4	8.4	10.1	7.7	100
France	1957	1.5	48.1	19.7	13.7	2.2	35.6	7.1	1.3	6.4	100
Germany, Fed. Rep. of	1957/58	1.7	50.1	[4]23.0	14.2	...	37.2	9.8	...	1.2	100
West Berlin	1957/58	2.1	36.3	24.4	16.2	...	40.6	20.0	...	1.0	100
Gibraltar	1957	4.5	43.1	32.3	6.9	–	39.2	–	2.1	[10]11.1	100
Hungary	1957	1.2	63.1	4.9	1.2	1.5	7.6	12.3	15.8	–	100
Italy	1957	14.0	50.5	[12]30.4	...	...	30.4	5.1	–	–	[6]100
Malta	1956/57	3.2	69.2	7.0	5.5	–	12.5	5.7	–	9.3	100
Netherlands	1957	1.2	45.5	19.4	16.2	1.9	37.5	9.7	1.9	4.2	100
Norway	1957	1.5	55.6	11.5	13.2	1.8	26.5	6.3	2.5	7.6	100
Spain	1957	3.8	61.0	3.6	2.3	1.0	6.9	12.1	14.1	2.1	[15]100
Sweden	1956/57	0.5	58.9	12.5	5.8	1.7	20.0	6.6	4.1	9.9	100
Yugoslavia	1956	...	59.7	10.8	9.1	3.2	23.1	16.5	0.7	–	100
Oceania											
Australia	1956/57	(3.1)	47.3	17.6	18.3	4.8	30.7	10.9	11.0	(11.5)	100
British Solomon Islands	1957	8.8	80.0	5.0	1.5	3.3	9.8	–	1.4	–	[2]100
Cook Islands	1957/58	7.7	64.2	[4]25.0	–	...	25.0	–	–	3.1	100
Fiji	1957	3.0	70.7	19.8	[11]1.7	–	21.5	3.7	1.1	–	[15]100
New Zealand	1957/58	6.4	41.5	[16]18.1	...	–	18.1	14.7	2.2	17.1	100
Western Samoa	1957	4.6	66.2	6.7	1.9	9.2	17.8	–	0.6	10.8	100

13. Includes some expenditure on scholarships for higher education.
14. Includes expenditure for private education.
15. Refers to expenditure by Ministry of Education only.
16. Includes expenditure for vocational education.

The object of the following analysis is to highlight the main problems and achievements of education at all levels in 32 countries of Tropical Africa.[1] The group under consideration consists of all states and territories in Middle Africa, including the Malagasy Republic, but excluding French Somaliland, the Portuguese overseas provinces in Africa and island territories off the mainland. Also excluded are the Union of South Africa, and the three territories of Basutoland, Bechuanaland and Swaziland.

POPULATION OF THE REGION UNDER SURVEY

Over the nine years mid-1950 to mid-1959 the total population of these 32 countries rose, according to official estimates, from about 120 million to 155 million, an increase of nearly 30 per cent. The average annual rate of increase of population based on these estimates was 2.9 per cent. It should, of course, be borne in mind that the population estimates shown in Table 19 opposite for individual countries are subject to considerable reserves. Full censuses are rare in this area of great distances and poor communications, in which moreover the economic and social conditions are such that orderly census methods cannot be generally applied. Very little is known with exactitude of the past rate of population growth in Africa. Approximate projections of future population have nevertheless been attempted on various assumptions by the United Nations, and it would appear that estimates based on an expectation of rapid growth are justified. The current rate of increase seems likely to be at least maintained as improved health services and modern economic and social conditions are gradually achieved throughout the area.

On this basis, it may be assumed that the population of the area under consideration will reach some 175 million by 1970 and 200 million by 1975.

SCHOOL-AGE POPULATION IN TROPICAL AFRICA

No reliable statistical information is available on the age breakdown of population in the different countries of this region. However, some very approximate estimates of future child population (see Table 20, page 36) have been calculated for the period 1965–75 from the United Nations projections.[2]

From these it may be estimated that by 1975 there will be about 50 million children between the ages of 5 and 14 and 20 million young people between 15 and 19.

1. The reader is reminded that throughout this volume the names of states and territories reflect the political status of the world on 31 May 1960. (See Preface.)
2. United Nations, *Future Growth of World Population*, 1958. (Population Studies, N° 28.)

TABLE 19. Population estimates for 32 countries of Tropical Africa in mid-1950 and mid-1959 and the average annual rate of increase

Country	Estimated population (000's)		Percentage average annual rate of increase
	Mid 1950	Mid 1959	
Total[1]	**119 778**	**154 454**	**2.9**
Belgian Congo	11 258	13 840	2.3
British Somaliland	500	[2] ...	[2] ...
Cameroun	3 070	3 230	0.6
Central African Republic	1 072	1 190	1.2
Chad	2 241	2 630	1.8
Congo (Brazzaville)	684	810	1.9
Dahomey	[3] 1 535	1 750	1.6
Ethiopia	16 104	21 800	3.4
Gabon	409	420	0.3
Gambia	273	290	0.7
Ghana	4 275	[4] 6 691	4.6
Guinea	[3] 2 261	2 727	2.3
Ivory Coast	[3] 2 169	3 120	4.7
Kenya	5 579	6 450	1.6
Liberia	...	[5] 1 250	...
Malagasy Republic	4 305	5 280	2.3
Mauritania	[3] 657	730	1.4
Niger	[3] 2 127	2 555	2.3
Nigeria (including Southern Cameroons)	25 352	35 284	3.7
Rhodesia and Nyasaland, Fed. of			
Northern Rhodesia	1 860	2 360	2.7
Nyasaland	2 290	2 770	2.1
Southern Rhodesia	2 060	2 860	3.7
Ruanda-Urundi	3 927	4 780	2.2
Senegal	[3] 2 093	2 570	2.6
Sierra Leone	1 880	2 400	2.8
Somaliland (It.)	1 246	[6] 1 990	[6] 1.5
Sudan (Mali)	[3] 3 347	4 330	3.3
Tanganyika	7 733	9 076	1.8
Togo	990	1 670	5.9
Uganda	5 103	6 517	2.8
Upper Volta	[3] 3 109	4 030	3.3
Zanzibar and Pemba	269	304	1.4

1. Excluding Liberia.
2. Included with Somaliland (Trust Territory under Italian administration).
3. Estimate for 1951.
4. Estimate for 1960.
5. Estimate for 1956.
6. Including British Somaliland.

These estimates must be viewed in light of the current educational situation. Table 21 (page 36) shows enrolment at all levels of education in 1953/54 and 1957/58. It will be seen that despite an increase in total enrolment from 5.6 million to 9.2 million (over 60 per cent) during this period, the proportion of enrolment to total population increased only from 4.3 per cent to 6.4 per cent. To meet

TABLE 20. Estimated population of 32 countries[1] of Tropical Africa in 1965, 1970 and 1975

Age group	Approximate percentage of total population	Estimated population (in millions)		
		1965	1970	1975
5–14	25	40.0	43.8	50.0
15–19	10	16.0	17.5	20.0
5–19	35	56.0	61.3	70.0
Total population	100	160.0[2]	175.0[2]	200.0[2]

1. Comprising the 32 countries shown in Table 1.
2. It will be observed that these estimates although based on 'high assumptions' appear conservative in relation to latest official population estimates for 1959 and the rate of population growth in the area. (See Table 14.)

the growth in population and stem the tide of illiteracy in the present generation only an educational campaign of heroic proportions will meet Tropical Africa's enormous problem. The figures available are roughly estimated but their import can be exactly assessed. There are at present considerably under 10 million children and young people enrolled in educational institutions in tropical Africa out of a child population of not less than 50 million between the ages of 5 and 19 years inclusive. By 1975 it is estimated that there will be 70 million children in this age group.

The development of education varies, of course, between the different countries of the region but nowhere does pupil enrolment attain 20 per cent of the total population. In seven countries the proportion is between 10 and 18 per cent and in 18 countries, less than 5 per cent.

Table 22 (page 37) shows enrolment at the primary and secondary levels of education expressed as a percentage ratio of estimated population in the age groups 5–14 and 15–19 respectively. The age groups have been calculated

TABLE 21. Enrolment at all levels of education as a proportion of total population in 32 countries of Tropical Africa in 1953/54 and 1957/58

Country	1953/54			1957/58		
	Total enrolment at all levels (000's)	Estimated population (000's)	Enrolment as percentage of population	Total enrolment at all levels (000's)	Estimated population (000's)	Enrolment as percentage of population
Total	**5 641.9**	**132 715**	**4.3**	**9 205.4**	**143 891**	**6.4**
Belgian Congo	997.8	12 154	8.2	1 634.4	13 124	12.5
British Somaliland	1.5	640	0.2	2.3	650	0.4
Cameroun	178.6	3 085	5.8	304.3	3 187	9.5
Central African Republic	32.2	1 094	2.9	47.3	1 140	4.1
Chad	14.2	2 350	0.6	33.3	2 580	1.3
Congo (Brazzaville)	59.3	700	8.5	82.4	762	10.8
Dahomey	55.9	1 500	3.7	78.2	*1 715	4.6
Ethiopia	84.6	*18 000	0.5	181.2	*20 000	0.9
Gabon	29.5	410	7.2	41.0	410	10.0
Gambia	4.9	290	1.7	6.6	290	2.3
Ghana	482.3	4 478	10.8	615.9	4 763	12.9
Guinea	25.2	2 236	1.1	45.3	2 498	1.8
Ivory Coast	48.8	2 390	2.0	95.7	2 607	3.7
Kenya	377.1	5 851	6.4	564.8	6 254	9.0
Liberia	42.0	1 250	3.4	51.1	1 250	4.1
Malagasy Republic	278.4	4 540	6.1	342.3	4 930	6.9
Mauritania	4.3	540	0.8	6.8	630	1.1
Niger	6.7	2 166	0.3	12.2	2 450	0.5
Nigeria	1 136.0	31 557	0.4	2 596.2	33 995	0.8
Rhodesia and Nyasaland, Fed. of	744.3	6 700	11.1	979.5	7 450	13.1
Northern Rhodesia	(198.4)	(2 010)	(9.9)	(252.7)	(2 240)	(11.3)
Nyasaland	(241.3)	(2 430)	(9.9)	(268.4)	(2 650)	(10.1)
Southern Rhodesia	(304.6)	(2 260)	(13.5)	(458.4)	(2 560)	(17.9)
Ruanda-Urundi	202.3	4 144	4.9	242.5	4 568	5.3
Senegal	56.2	2 102	2.7	87.7	2 280	3.8
Sierra Leone	46.9	2 020	2.3	69.7	2 120	3.3
Somaliland (It.)	7.7	1 269	0.6	15.5	1 310	1.2
Sudan (Mali)	34.2	3 350	1.0	44.8	3 730	1.2
Tanganyika	295.1	8 158	3.6	423.0	8 760	4.8
Togo	54.3	1 052	5.2	72.7	1 093	6.7
Uganda	305.2	5 343	5.7	468.4	5 680	8.2
Upper Volta	25.3	3 072	0.8	42.9	3 380	1.3
Zanzibar and Pemba	11.1	274	4.1	17.4	285	6.1

TABLE 22. Estimated population 5–19 years and estimated school enrolment ratios in 32 countries of Tropical Africa around 1957/58

Country	Estimated total population 1957 (000's)	Estimated population (000's)			Pupil enrolment (000's)			Estimated enrolment ratios		
		5–14 (24.2%)	15–19 (10.4%)	5–19 (34.6%)	Primary	Secondary	Primary plus secondary	Primary ratios	Secondary ratios	Total primary and secondary ratios
Total	**143 891**	**34 821**	**14 966**	**49 787**	**8 677.4**	**520.9**	**9 198.3**	**24.9**	**3.5**	**18.5**
Belgian Congo	13 124	3 176	1 365	4 541	1 572.8	61.3	1 634.1	49.5	4.5	31.2
British Somaliland	650	157	68	225	2.1	0.2	2.3	1.3	0.3	1.0
Cameroun	3 187	771	332	1 103	294.0	10.3	304.3	38.1	3.1	27.6
Central African Republic	1 140	276	118	394	45.8	1.5	47.3	16.6	1.3	12.0
Chad	2 580	624	269	893	32.6	0.7	33.3	5.2	0.3	3.7
Congo (Brazzaville)	762	185	79	264	79.0	3.4	82.4	42.7	4.3	31.2
Dahomey	1 715	415	178	593	75.4	2.8	78.2	18.2	1.6	13.2
Ethiopia	20 000	4 840	2 080	6 920	173.8	6.8	180.6	3.6	0.3	2.6
Gabon	410	99	43	142	39.8	1.2	41.0	4.0	2.8	2.9
Gambia	290	70	30	100	5.9	0.7	6.6	8.4	2.3	6.6
Ghana	4 763	1 153	495	1 648	468.0	146.9	614.9	40.6	29.7	37.3
Guinea	2 498	604	260	864	42.5	2.8	45.3	7.0	1.1	5.2
Ivory Coast	2 607	631	271	902	90.9	4.8	95.7	14.4	1.8	10.6
Kenya	6 254	1 514	650	2 164	548.0	16.5	564.5	36.2	2.5	26.1
Liberia	1 250	303	130	433	46.1	4.6	50.7	15.2	3.5	11.7
Malagasy Republic	4 930	1 193	513	1 706	321.5	20.4	341.9	26.9	4.0	20.0
Mauritania	630	152	66	218	6.5	0.3	6.8	4.3	0.5	3.1
Niger	2 450	593	255	848	11.8	0.4	12.2	2.0	0.2	1.4
Nigeria, Fed. of	33 995	8 227	3 535	11 762	2 498.5	96.2	2 594.7	30.4	2.7	22.1
Rhodesia and Nyasaland, Fed. of										
Northern Rhodesia	2 240	542	233	775	245.0	7.7	252.7	45.2	3.3	32.6
Nyasaland	2 650	641	276	917	266.1	2.3	268.4	41.5	0.8	29.3
Southern Rhodesia	2 560	620	266	886	439.2	19.2	458.4	70.8	7.2	51.7
Ruanda-Urundi	4 568	1 105	475	1 580	237.5	5.0	242.5	21.5	1.1	15.3
Senegal	2 280	552	237	789	80.5	6.1	86.6	14.6	2.6	11.0
Sierra Leone	2 120	513	220	733	61.9	7.4	69.3	12.1	3.4	9.5
Somaliland (It.)	1 310	317	136	453	14.4	0.9	15.3	4.5	0.7	3.4
Sudan (Mali)	3 730	903	388	1 291	42.1	2.7	44.8	4.7	0.7	3.5
Tanganyika	8 760	2 120	911	3 031	374.3	48.7	423.0	17.7	5.3	14.0
Togo	1 093	264	114	378	70.6	2.1	72.7	26.7	1.8	19.2
Uganda	5 680	1 374	591	1 965	434.1	33.4	467.5	31.6	5.7	23.8
Upper Volta	3 380	818	352	1 170	40.5	2.4	42.9	5.0	0.7	3.7
Zanzibar and Pemba	285	69	30	99	16.2	1.2	17.4	23.5	4.0	17.6

on the basis of the age breakdown assessed for the area of Middle Africa by the United Nations.[1] Thus for every country it is assumed that the age group 5–14 forms 24.2 per cent and the age group 15–19, 10,4 per cent of the total population. The population figures thus arrived at are purely estimates for purposes of comparison of enrolment ratios between countries.

The average primary enrolment ratio for the 32 countries combined is about 25 and the secondary enrolment ratio 3.5. However, the range of enrolment ratios is very wide and the median ratios—17 for primary and 2.4 for secondary enrolment—are considerably lower than the average ratios given above. Very approximately these ratios imply that in the region as a whole one child in four is enrolled in primary school but only three young people out of a hundred receive secondary education. For the age group 5–19 inclusive an average of 18 children per hundred are enrolled in some form of primary or secondary school.

The countries which appear better off from the enrolment viewpoint are Belgian Congo, Congo (Brazzaville), Ghana, Northern and Southern Rhodesia; in these countries the total school enrolment ratio is between 30 and 52. A group of six countries including Cameroun, Kenya, Malagasy Republic, Nigeria, Nyasaland and Uganda have total school enrolment ratios between 20 and 30. Twelve of the countries in the region, however, have total school enrolment ratios of under 10.

DEVELOPMENT OF PRIMARY AND SECONDARY EDUCATION 1953/54 TO 1957/58

Enrolment in primary schools in the 32 countries rose from 5.3 million in 1953/54 to 8.7 million in 1957/58, an increase of 63 per cent over 4 years at an average annual

1. United Nations, *Future Growth of World Population*, 1958. See also: Unesco, *Basic Facts and Figures*.

rate of about 12 per cent. Enrolment in secondary education increased from 303,000 to 521,000 pupils over the same period, an increase of 72 per cent at an annual average rate of 15 per cent. The median annual rates of increase were approximately the same as the average rates at both levels of education. (See Table 23 below).

The high rates of increase achieved at both levels of education over the past few years are a measure of the efforts already made by tropical African countries towards expanding their school systems. Their rate of progress is considerably higher than the world average increases in enrolment at primary and secondary levels which are approximately 5 per cent and 10 per cent per annum respectively. Moreover the advance is general throughout the area—in only one country was there a decrease in secondary school enrolment and this was probably due to a reclassification of technical education at the primary level. Seven countries in the region achieved an annual increase in secondary enrolment exceeding 20 per cent; 16 an annual increase between 10 and 20 per cent and the remainder under 10 per cent. In primary education more than half the countries under analysis achieved an annual rate of increase exceeding 10 per cent.

DISTRIBUTION OF PUPILS ENROLLED BY LEVEL OF EDUCATION

In comparison with other regions of the world, and in spite of the very rapid progress made in the past few years, the preponderance of primary school enrolment is particularly striking in Tropical Africa. In 1957, approximately 94 per cent of all pupils were in primary schools and 6 per cent in secondary schools, compared with 95 per cent and 5 per cent respectively in 1953. The number of students in higher education is infinitesimal—about one in a thousand

TABLE 23. Estimated school enrolment at primary and secondary levels in 32 countries of Tropical Africa in 1953/54 and 1957/58 and percentage increases in enrolment over this period

Country	Estimated enrolment by level (000's)				Percentage increase in enrolment 1953/54–1957/58		Annual percentage increase in enrolment	
	School year 1953/54		School year 1957/58					
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Total	**5 335.2**	**303.3**	**8 677.4**	**520.9**	**63**	**72**	**12**	**15**
Belgian Congo	974.3	23.5	1 572.8	61.3	61	161	12	27
British Somaliland	1.4	*0.1	2.1	0.2	50	100	11	19
Cameroun	173.4	5.2	294.0	10.3	70	98	14	19
Central African Republic	30.0	2.2	45.8	1.5	53	[1] .	11	[1] .
Chad	13.7	0.5	32.6	0.7	138	40	24	9
Congo (Brazzaville)	56.7	2.6	79.0	3.4	39	31	9	7
Dahomey	53.8	2.1	75.4	2.8	40	33	9	7
Ethiopia (incl. Eritrea)	81.7	*2.8	173.8	6.8	113	143	21	25
Gabon	28.8	0.7	39.8	1.2	38	71	8	14
Gambia	4.3	0.6	5.9	0.7	37	17	8	4
Ghana	375.7	105.5	468.0	146.9	25	39	6	9
Guinea	23.5	1.7	42.5	2.8	81	65	16	13
Ivory Coast	46.2	2.6	90.9	*4.8	97	85	18	17
Kenya	365.6	11.5	548.0	16.5	50	43	11	9
Liberia	39.3	*2.3	46.1	4.6	17	100	4	19
Malagasy Republic	264.6	13.5	321.5	20.4	22	51	5	11
Mauritania	4.1	0.2	6.5	0.3	39	50	12	11
Niger	6.6	0.1	11.8	*0.4	79	300	16	42
Nigeria, Fed. of	1 094.2	41.2	2 498.5	96.2	128	133	23	23
Rhodesia and Nyasaland, Fed. of								
Northern Rhodesia	193.5	4.9	245.0	7.7	27	57	6	12
Nyasaland	240.0	1.3	266.1	2.3	11	77	3	15
Southern Rhodesia	*293.8	*10.8	*439.2	*19.2	49	78	11	15
Ruanda-Urundi	199.0	3.3	237.5	5.0	19	52	5	11
Senegal	*50.3	5.5	80.5	6.1	60	11	13	3
Sierra Leone	43.0	3.8	61.9	7.4	44	95	10	18
Somaliland (It.)	7.3	*0.4	14.4	0.9	97	125	19	23
Sudan (Mali)	32.4	1.8	42.1	2.7	30	50	7	11
Tanganyika	261.9	33.2	374.3	48.7	43	47	9	10
Togo	52.7	1.6	70.6	2.1	34	31	8	7
Uganda	288.8	16.0	434.1	33.4	50	109	11	20
Upper Volta	24.2	1.1	40.5	2.4	67	118	14	22
Zanzibar and Pemba	10.4	0.7	16.2	1.2	56	71	12	14

1. There was an apparent decrease in secondary school enrolment due probably to the reclassification of some secondary technical education at primary level.

of the school-going population against a world average of about 3 per 100. In relation to total population the low proportion of university level enrolments is equally striking: approximately 5 students per 100,000 population, compared with a world average of 385.

PROPORTION OF GIRLS TO TOTAL ENROLMENT

Table 24 below shows enrolment of girls in primary and secondary education in the 31 countries under study. Excluding the Belgian Congo, the enrolment of African girls in primary education numbered about 2.3 million around 1957, representing an average of one third of the total enrolment in 31 countries. As regards secondary education, figures available for 29 countries show that some 59,000 African girls were enrolled, representing about one-fifth of the total enrolment of African students at this level. The proportion of girls in the total enrolment varied considerably between countries and the median ratios were somewhat lower than the averages quoted above. There were in addition 425,840 girls enrolled in public and aided

TABLE 24. Percentage of girls to tota lenrolment at all levels of education in 32 countries of Tropical Africa around 1957

Country	Primary		Secondary	
	Girls enrolled	Percentage of girls to total enrolment	Girls enrolled	Percentage of girls to total enrolment
Total[1]	**2 274 681**	**33**	**[2]58 846**	**[2]21**
Belgian Congo[3]	425 280	29	3 220	16
British Somaliland	135	6	–	–
Cameroun	85 348	29	...	...
Central African Republic	7 446	16	378	26
Chad	3 465	11	62	9
Congo (Brazzaville)	21 851	28	930	29
Dahomey	20 888	28	848	30
Ethiopia (incl. Eritrea)	35 007	20	1 045	15
Gabon	13 391	34	167	14
Gambia	1 554	26	227	31
Ghana	167 102	35	34 187	23
Guinea	9 522	22	373	13
Ivory Coast	18 974	21	1 110	23
Kenya	159 106	29	4 942	30
Liberia	11 993	25	[4]474	12
Malagasy Republic	129 574	42	5 819	32
Mauritania	519	8	15	5
Niger	3 373	29	37	9
Nigeria, Fed. of	865 274	35	17 562	18
Rhodesia and Nyasaland, Fed. of				
Northern Rhodesia[5]	84 765	37	845	18
Nyasaland[5]	95 341	36	410	18
Southern Rhodesia[5]	144 222	43	1 155	24
Ruanda Urundi	67 331	28	1 478	30
Senegal	23 993	30	2 030	33
Sierra Leone	20 049	32	2 312	31
Somaliland (It.)	3 357	23	74	8
Sudan (Mali)	9 623	23	453	17
Tanganyika	123 266	33	9 806	20
Togo	17 062	24	378	18
Uganda	116 799	27	5 574	17
Upper Volta	8 807	28	...	...
Zanzibar and Pemba	5 544	34	342	30

1. Excluding Belgian Congo.
2. Total excluding Cameroun and Upper Volta.
3. Data refer to 1959/60 and cover public and aided schools only. Figures for earlier years are not available.
4. Data refer to general secondary education only.
5. Enrolment of African pupils only.

TABLE 25. Pupil-teacher ratios at primary and general secondary levels of education in 32 countries of Tropical Africa around 1957

Country	Primary		General secondary	
	Teachers	Pupil teacher ratios	Teachers	Pupil teacher ratios
Belgian Congo	[1]39 915	29	[1]405	20
British Somaliland	98	21	8	9
Cameroun	5 858	50	205	15
Central African Republic	[2]446	[2]59	[2]13	[2]57
Chad	[2]481	[2]55	[2]18	[2]27
Congo (Brazzaville)	[2]568	[2]62	[2]53	[2]22
Dahomey	[2]782	[2]45	[2]37	[2]27
Ethiopia (incl. Eritrea)	*5 077	34	[2]81	[2]43
Gabon	[2]413	[2]48	[2]13	[2]44
Gambia	201	29	37	17
Ghana	15 249	31	4 733	30
Guinea	[2]843	[2]38	[2]41	[2]42
Ivory Coast	[3 2]1 474	[3 2]38	[3 2]75	[3 2]27
Kenya	13 095	42	693	16
Liberia	[3]1 478	[3]31	[3]152	[3]16
Malagasy Republic	[2]3 281	[2]63	[2]102	[2]56
Mauritania	[2]200	[2]32	[2]7	[2]42
Niger	331	36	[3]15	[3]16
Nigeria, Fed. of (incl. Southern Cameroons)	86 960	29	3 535	19
Rhodesia and Nyasaland, Fed. of				
Northern Rhodesia[4]	4 781	48	85	19
Nyasaland[4]	6 149	43	68	14
Southern Rhodesia[4]	*10 853	37	101	23
Ruanda-Urundi	[5]5 822	[5]41	81	9
Senegal	[2]1 884	[2]36	[2]134	[2]31
Sierra Leone	1 863	33	311	19
Somaliland (It.)	739	20	28	14
Sudan (Mali)	[2]925	[2]40	[2]57	[2]29
Tanganyika	6 766	55	2 121	21
Togo	[2]697	[2]51	[2]37	[2]17
Uganda	14 131	31	1 045	24
Upper Volta	[6]865	[6]44	[6]42	[6]24
Zanzibar and Pemba	576	28	58	14
Approximate averages 32 countries	232 801	34	14 391	24

1. Data for 1955/56.
2. Public schools only.
3. Data for 1956/57.
4. African education only.
5. Including pre-primary education.
6. Data for 1958/59.

primary and 3,220 in public and aided secondary schools in the Belgian Congo in 1959/60. In primary education the proportion of girls enrolled was the lowest in British Somaliland and Mauritania (6 and 8 per cent respectively) followed by Chad and the Central African Republic (11 and 16 per cent respectively). In other countries enrolment of girls exceeded 20 per cent and in 11 countries was 30 per cent or more of the total enrolled.

In secondary schools, five countries [British Somaliland, Chad, Mauritania, Niger and Somaliland (Trust Territory)] enrolled less than 10 per cent girls, 11 countries between 10 and 20 per cent and the remainder between 20 and 33 per cent.

PUPIL-TEACHER RATIOS IN PRIMARY AND GENERAL SECONDARY EDUCATION

For a number of countries data on numbers of teachers were available only for public schools. The approximate average pupil-teacher ratios for the 32 countries under review were 34 in primary education (the median was 38) and 24 in general secondary education (median ratio 21). (See Table 25 on page 39).

In primary schools, the highest ratios (more than 50 children per teacher) were observed in the Central African Republic, Chad, Congo (Brazzaville) the Malagasy Republic, Tanganyika and Togo. In a further eight countries the ratio was above 40. In only six countries were there fewer than 30 children per teacher.

In general secondary education the pupil-teacher ratios varied between a minimum of 9 in British Somaliland and Ruanda-Urundi to a maximum of 56 and 57 in the Malagasy Republic and the Central African Republic respectively. Eleven countries had pupil teacher ratios ranging from 21 to 40 and six others had ratios over 40. There were 15 countries with ratios between 9 and 20.

It may be considered that a satisfactory pupil-teacher ratio at primary level would be about 35 and at general secondary level between 20 and 25. On this basis, it will be seen that many tropical African countries are attempting to educate too many children with too few teachers, particularly at the primary level.

WASTAGE IN PRIMARY AND MIDDLE SCHOOLS

In a number of African countries the first level of education is organized in two successive stages, provided at primary and middle schools respectively. Table 26 below summarizes available data for some of these countries on enrolment of pupils in different grades of the primary plus middle school course. It will be seen that the enrolment of pupils in the first and second years of primary school is generally between 40 and 50 per cent of total enrolment. By the final grade of middle school, however, the proportion of pupils in relation to total enrolment was between 1.6 per cent (Tanganyika) and 8.6 per cent (Uganda). In 8 out of 15 school systems the proportion was under 5 per cent. It is interesting to note that whereas there was less wastage among girls than boys in the first two years of schooling, the percentage of girls surviving to the final grade at this level of education was, except in one country, lower than that for boys and girls combined.

These figures clearly demonstrate the high rate of wastage in primary education especially in the latter years of the primary school course. This falling off in numbers affects recruitment for secondary education and deserves

TABLE 26. First, second and terminal year enrolment at primary and middle schools compared with total enrolment in selected countries of Tropical Africa

Country	Year	Total number of pupils enrolled in primary and middle schools (a)	Number of pupils enrolled during first primary school year (b)	Number of pupils enrolled during second primary school year (c)	(b) and (c) as a percentage of (a)	Number of pupils enrolled during last school year (d)	(d) as a percentage of (a)
Ethiopia[1]	1958/59	158 005	59 674	30 884	57.3	5 093	3.2
Gambia[1]	1958	4 595	1 313	1 062	51.7	274	6.0
Ghana	1958	[2]556 451	123 343	86 094	37.6	36 275	6.5
Kenya[1]	1958	598 410	169 140	137 384	51.2	12 901	2.2
Liberia	1958	48 852	...	...	...	3 871	7.9
Nigeria, Fed. of							
Lagos	1957	44 227	9 108	8 178	39.1	3 119	7.1
Northern Region	1957	205 769	60 729	48 341	53.0	8 180	4.0
Western Region	1957	982 755	237 854	221 110	46.7	[3]52 475	5.3
Eastern Region	1957	1 209 167	377 450	211 216	48.7	46 502	3.8
Rhodesia and Nyasaland, Fed. of							
Northern Rhodesia[1 4]	1957/58	231 063	58 459	47 630	45.9	5 202	2.3
Nyasaland[1 4 5]	1958	144 193	25 963	20 530	32.2	4 693	3.3
Sierra Leone[1]	1958	65 172	18 164	10 910	44.6	3 953	6.0
Somaliland (It.)[1]	1958/59	15 651	...	...	...	558	3.6
Tanganyika	1958	[6]403 272	107 261	96 650	50.6	6 425	1.6
Uganda[1 4]	1957	297 769	79 987	61 836	47.6	25 573	8.6

1. Official and grant-aided schools only.
2. Including six years at primary school and two years at middle school.
3. Seventh year at primary school. There were no eighth year pupils.
4. African education only.
5. Including two years' preparatory education in column (a).
6. Including three years middle school (fifth to eighth years).

serious attention on the part of the educational authorities concerned.

Table 27 below shows the percentage of pupils sitting for the Primary School Leaving Examination compared with total primary school enrolment in 10 French-speaking African republics with comparable systems of education. In 6 out of 10 countries over 5 per cent of the total numbers enrolled sat for the primary leaving certificate, though a much lower proportion actually passed. These results seem to indicate a somewhat lower rate of wastage in primary school enrolment than in some of the countries analysed in Table 25.

EXAMINATION RESULTS IN GENERAL SECONDARY EDUCATION

Partial results of examination in general secondary education in nine countries of Tropical Africa with approximately similar educational systems are given in Table 28 below. It will be noted that in all cases the number of successful candidates for the secondary leaving certificates has increased substantially over the past few years. In 1957 the proportion of girls among examination candidates varied in these countries from 6 per cent in Kenya (African candidates only) to 32 per cent in Zanzibar and Pemba.

In Table 29 (page 42) results of three different secondary examinations are given for 14 African countries with educational systems derived from the French system. Data on the number of girls passing these examinations were insufficient for inclusion in the table but two specific cases may be quoted: in the Malagasy Republic, in 1956/57, the proportion of girls among the successful candidates was 23 per cent for the lower secondary certificate (brevet), 28 per cent for the first part of the *baccalauréat* and 54 per cent for the second part; in Cameroun the corresponding percentages were 18 per cent, 8 per cent and nil.

There has been a striking increase in the number of candidates for these three examinations over the past three or four years in all French-speaking republics, reflecting the recent progress made in general secondary education.

HIGHER EDUCATION IN TROPICAL AFRICA

There are facilities available for higher education in only 13 of the 32 countries under review, and of these, a breakdown of enrolment at institutions at university level by branch of study is available for only 10. Table 30 (page 42) shows that in 1958/59 institutions in these countries enrolled some 8,000 students, including students from other African countries, most of which had no facilities of their own for higher education. In the 10 countries combined, 20 per cent of the students were studying the humanities, 20 per cent natural sciences, 14 per cent social sciences, 12 per cent law, 11 per cent education and 7

TABLE 27. Percentage of pupils sitting for the primary school leaving examination as compared with the total primary school enrolment in certain countries of Tropical Africa

Country	Year	Total enrolment in primary schools		Number of pupils who sat for and passed the CEPE examination[1]		Percentage of pupils who sat for the primary school leaving examination as compared with total primary school enrolment
		Total	Girls	Sat	Passed	
Cameroun	1957	269 599	74 799	12 890	4 979	4.8
Congo (Brazzaville)	1957	67 638	17 081	2 692	980	4.0
Dahomey	1958	75 406	20 888	5 522	1 939	7.3
Gabon	1957	35 661	11 603	1 463	644	4.1
Ivory Coast	1957	91 176	19 107	5 799	2 113	6.4
Malagasy Republic	1958	321 518	137 145	13 441	4 998	4.2
Senegal	1957	69 966	20 394	6 036	3 109	8.6
Sudan (Mali)	1957	41 205	9 939	3 206	1 445	7.8
Togo	1958	70 618	17 062	4 472	1 151	6.3
Upper Volta	1957	31 725	8 562	1 794	927	5.7

1. Primary School Leaving Certificate (Certificat d'Etudes Primaires Elémentaires).

TABLE 28. Examination results in general secondary education in nine countries of Tropical Africa

Country	Secondary school certificate									
	1953		1954		1955		1956		1957	
	Total	Per cent female	Total	Per cent female	Total	Per cent female	Total	Per cent female	Total	Per cent female
Ethiopia	173	...	313	...	278	...	310	...	468	...
Gambia	...	...	...		21	(19)	21	(19)	18	(22)
Ghana	667	(11)	806	(16)	941	(12)	930	...	1 173	...
Kenya	144	(3)	162	(6)	233	(3)	299	(5)	363	(6)
Nigeria, Federation of	...	...	...	...	2 079	...	[1] 2 190	(8)	[2] 2 552	(11)
Northern Rhodesia	37	–	53	–	54	–	63	–	87	(8)
Tanganyika	86		98		118		139		149	
Uganda	192	(3)	253	(9)	[3] 296	(7)	[4] 394	(5)	491	(7)
Zanzibar and Pemba	[5] 32	(25)	60	...	84	(23)	49	(32)	100	(32)

1. There were in addition 709 students who passed the General Certificate of Education at the same level in 1956.
2. There were in addition 1,055 students who passed the General Certificate of Education at the same level in 1957.
3. Excluding private candidates
4. Including 38 private candidates.
5. In addition 14 private candidates passed the Cambridge Oversea School Certificate.

TABLE 29. Examination results in general secondary education in French-speaking countries of Tropical Africa

Country	Type of diploma or certificate granted					
	Lower Secondary Certificate (Brevet)		*Baccalauréat*, 1st part		*Baccalauréat*, 2nd part	
	1953/54	1957/58	1953/54	1957/58	1953/54	1957/58
Cameroun	258	300	26	96	21	70
Central African Republic	21	[1]55	4	[1]6	–	[1]–
Chad	19	[1]38	2	[1]6	–	[1]–
Congo (Brazzaville)	82	[1]112	22	[1]29	17	[1]29
Dahomey	107	[1]117	25	[1]50	18	[1]49
Gabon	36	[1]69	4	[1]19	–	[1]10
Guinea	59	[1]148	9	[1]15	5	[1]15
Ivory Coast	148	[1]271	38	[1]57	35	[1]66
Malagasy Republic	97	635	131	252	76	151
Niger	...	[2]41	...	[2]19	...	[2]3
Senegal	342	[1]493	165	[1]482	126	[1]362
Sudan (Mali)	125	[1]175	44	[1]59	23	[1]38
Togo	64	157	16	29	9	51
Upper Volta	90	227	1	24	–	20

1. For 1956/57. 2. For 1957.

per cent engineering. Only 4 per cent were studying agriculture, despite the importance of this field of study in the African economy.

There were not enough data available on the number of women students for inclusion in the table but available figures indicate that they represented approximately 15 per cent of the total in all the countries combined.

It is very difficult to form any judgement on the appropriateness of the known distribution of students by branch of study in relation to the needs of the countries concerned. At present, the total number of students is so small that over-expansion of any one branch is unlikely in the foreseeable future. Moreover, the apparent lack of facilities for certain branches of study in particular countries is met at least in part by study abroad.

There are considerable differences within the 10 countries in the proportion of students enrolled in the different branches of study. The faculties of education seem to be relatively more developed in the English-speaking countries, while the faculties of law and social sciences absorb a higher proportion of students in the French-speaking countries. For example, over half the students in Kenya are in teacher training courses whilst in Senegal more than 40 per cent are in the faculty of law; in the Malagasy Republic the proportion of law students is two-thirds of the total.

The faculties of science, engineering and agriculture together account for some 31 per cent of the students enrolled in the 10 countries under review but emphasis on these three branches of study varies between countries. In Nigeria over 30 per cent are studying the natural sciences, 7 per cent engineering and only 1 per cent agriculture. In Ghana 18 per cent are studying engineering, 9 per cent natural sciences and 7 per cent agriculture. In the Malagasy Republic, science accounts for 26 per cent of students and in Senegal 21 per cent, but the faculties of engineering and agriculture are non-existent in the former and very small in the latter.

To complete the picture of higher education in these 32 countries it is essential to bear in mind the African students enrolled in institutions outside the region. Unfortunately data are not complete; in particular no satisfactory figures are available on the number of students from tropical African countries studying in France, the United States and the U.S.S.R. Excluding these important host countries it appears that in 1958/59 there were some 7,000 students from the countries under review who were studying abroad, principally in the Federal Republic of Germany, India, Lebanon, Senegal, the United Arab Republic and the United Kingdom. There were in addition small groups of students divided amongst some 20 other countries throughout the world.

TABLE 30. Enrolment in higher education in 1958/59 by branch of study[1] in 10 countries of Tropical Africa

Country	Total enrolment	Humanities	Education	Fine arts	Law	Social sciences	Natural sciences	Engineering	Medicine	Agriculture
Belgian Congo	398	41	58	–	41	91	54	37	61	15
Ghana	1 255	215	[2]66	75	93	323	116	226	56	85
Kenya	797	30	[3]442	43	–	65	37	78	40	62
Malagasy Republic	424	30	–	–	282	–	112	–	–	–
Nigeria, Federation of	1 984	529	117	91	–	272	631	146	176	22
Rhodesia and Nyasaland, Fed. of	125	–	28	53	–	–	37	–	–	7
Senegal	1 458	317	5	–	576	21	312	14	178	35
Sierra Leone	371	108	91	–	–	105	57	10	–	–
Somaliland (It.)	245	–	–	–	–	245	–	–	–	–
Uganda	837	282	78	22	–	7	246	14	101	87
Total	7 894	1 552	885	284	992	1 129	1 602	525	612	313
(In percentages)	(100)	(20)	(11)	(4)	(12)	(14)	(20)	(7)	(8)	(4)

1. The total number of students shown in each branch of study includes students from other countries and, in certain cases, students studying abroad.
2. Students in faculties or schools attached to university in 1957. Excluding separately established teacher training colleges with some 3,900 students in 1957.
3. Students in higher teacher training courses.

CHAPTER II

SCHOOL-AGE AND SCHOOL-GOING POPULATIONS

In the planning of educational programmes, statistics on school enrolment and on the school-age population are among the essential elements. It is often difficult, however, to obtain complete information both on the school-going population by age, sex and school level, and on the population by age and sex for the same year. The last edition of the *World Survey of Education* contained diagrams showing the demographic-educational structure in 10 countries; with information now available to the Unesco Secretariat, similar charts have been prepared for 13 countries. The data have been compiled on the same principles as in the last survey, but the picture presented by the diagrams has been supplemented by tables containing the basic figures on the population and school enrolment. The tables and charts, which with few exceptions relate to 1957, are generally based on the returns to Unesco questionnaires, but in some cases they represent national data published in official yearbooks and other statistical publications. In the diagrams in the last edition information was presented on the age-groups 0–30 years. This time the tables and charts relate in most cases to the age-groups 5–24 years. Data are in general offered for single-year age-groups, but in the case of some countries they are only available for combined age-groups.

The following pages contain tables and diagrams for Australia, Austria, Belgium, France, Federal Republic of Germany, Haiti, Iran, Japan, Netherlands, Norway, United Kingdom (England and Wales), United States of America, and Viet-Nam.

A study of these tables and diagrams will show for each country the proportion of the school-going population at each age and the quantitative relationship between school enrolment at the various levels. Certain other particulars in the tables and diagrams may be of interest, as for example, the proportion of girls enrolled at different ages and school levels, and the distribution of the enrolment at the second level by type of school.

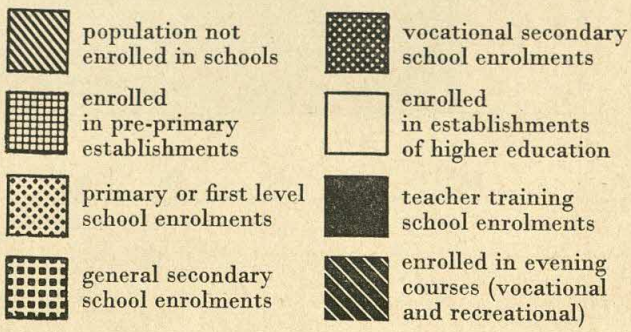
Demographic-educational research will remain topical for a long time because the large age-groups, resulting from higher birth rates and lower infant mortality rates, will affect the enrolment at every level. For example, the present enrolment bulge in the secondary schools of some countries will be affecting enrolment in colleges and universities in the near future.

The diagrams also give a general view of the structure of the school systems. In regard to types of school, the diagrammatic treatment imposes certain restrictions—no more than six or seven types of hatching can be used in the small area available, and the limit of visibility is about 1 per cent, so that schools enrolling less than 1 per cent of the total population cannot be shown. It has been decided, therefore, to give precedence in the diagrams to broad types of schools or levels of education (as far as data are available), viz., pre-primary schools, primary schools, secondary schools, vocational schools, teacher training schools, and institutions of higher education. Data on adult education, and on special education for handicapped children, are excluded.

In the tables accompanying the diagrams will be found more detailed information on population by age and sex, and on school enrolment by level of education and by age and sex.

We believe this chapter will be found useful by readers interested in an analytical study of the demographic-educational structure in different countries. With the availability of new population data from the national population censuses taken around 1960, and with the further development of enrolment statistics by age and sex, it may be expected that similar presentation of these tables and diagrams will be possible for many more countries in the next edition of the *World Survey of Education.*

The key to hatching employed in the diagrams is:



AUSTRALIA

ESTIMATED POPULATION AGED 5–24 YEARS, CLASSIFIED BY SEX AND BY AGE, 1957

Sex	Number of persons (thousands)																			
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total, aged 5–24 years
Male .	102.7	101.3	100.5	97.3	98.3	107.2	87.8	85.9	82.2	73.0	74.9	68.7	66.3	66.2	65.6	65.4	64.4	62.4	62.3	64.6	1 596.9
Female .	97.8	97.1	96.1	93.1	94.1	101.5	83.4	82.1	79.4	69.9	71.4	65.8	62.9	63.2	61.2	61.0	59.1	57.7	56.9	58.2	1 511.6
Total .	200.5	198.4	196.6	190.4	192.4	208.7	171.2	168.0	161.6	142.9	146.3	134.5	129.2	129.4	126.8	126.4	123.5	120.1	119.2	122.8	3 108.5

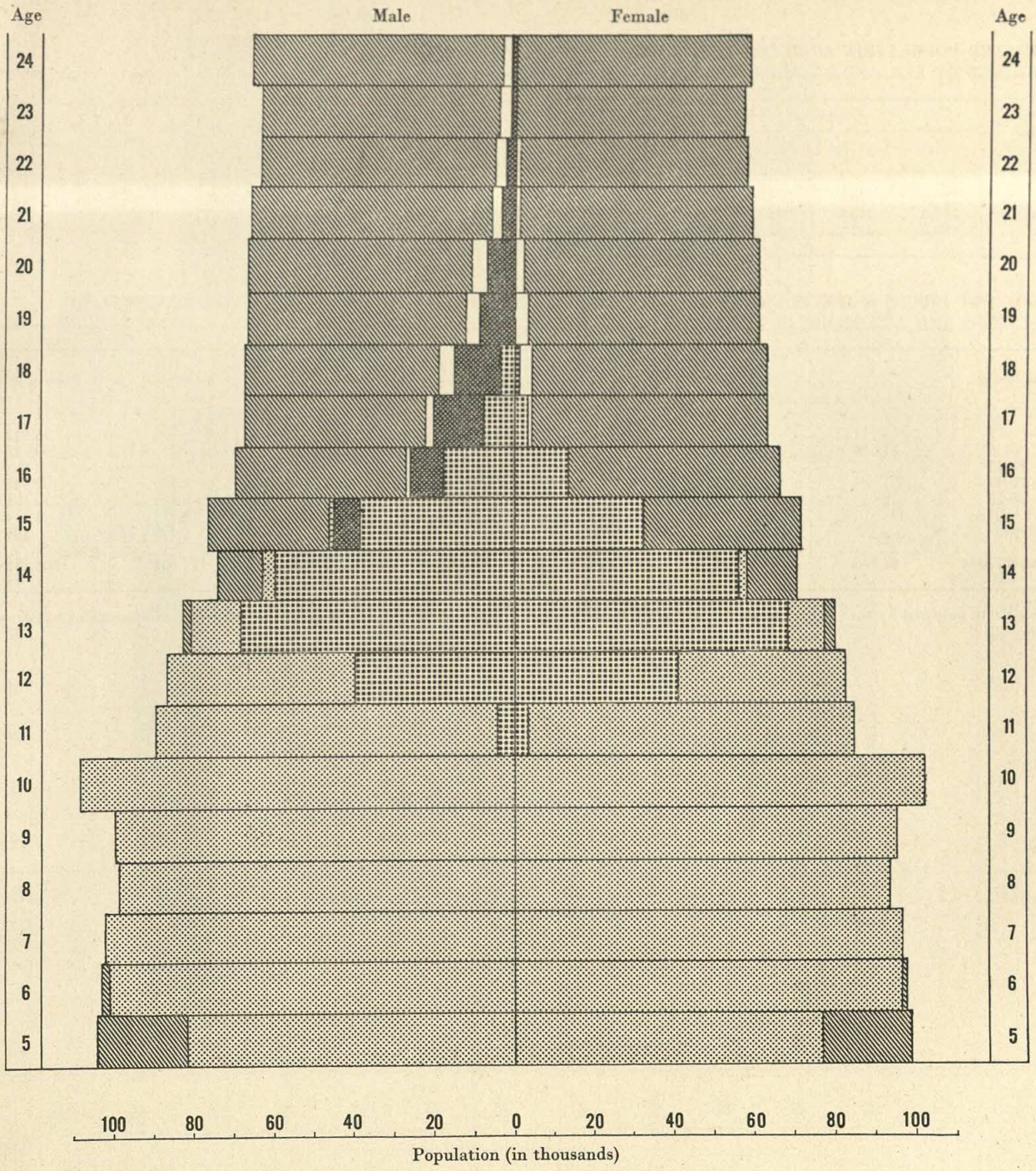
NUMBER OF PUPILS AND STUDENTS ENROLLED IN PUBLIC AND PRIVATE SCHOOLS, CLASSIFIED BY LEVEL OF EDUCATION, AGE AND SEX IN THE SCHOOL YEAR BEGINNING IN 1957[1]

Age in completed years	First level		Second level				Third level[2]		Total, all levels	
			General		Vocational					
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
5	79 824	76 137							79 824	76 137
6	99 949	96 764							99 949	96 764
7	100 806	96 796							100 806	96 796
8	97 445	93 700							97 445	93 700
9	98 203	94 070							98 203	94 070
10	106 699	101 374	39	70					106 738	101 444
11	85 505	79 663	3 531	4 010					89 036	83 673
12	46 416	40 972	39 097	40 995					85 513	81 967
13	12 446	10 264	67 834	67 140					80 280	77 404
14	2 566	1 976	59 819	56 229	629	52	4	4	63 018	58 261
15	509	393	38 277	32 424	6 041	231	170	71	44 997	33 119
16	428	250	17 415	13 696	8 244	203	712	358	26 799	14 507
17			7 391	4 017	12 586	191	1 942	1 078	21 919	5 286
18			2 627	1 271	12 146	170	3 606	3 245	18 379	4 686
19					7 740	39	3 734	3 152	11 474	3 191
20					5 917	28	3 549	2 781	9 466	2 809
21					2 643	105	2 623	880	5 266	985
22					2 203	57	2 658	704	4 861	761
23					1 070	52	2 372	347	3 442	399
24					1 070	52	2 203	275	3 273	327
24+					2 641	100	12 370	1 541	15 011	1 641
Total, all ages	730 796	692 359	236 030	219 852	62 930	1 280	35 943	14 436	1 065 699	927 927

Source. Commonwealth Office of Education, Sydney.

1. Divisions into ages have been estimated.
2. Teacher training included.

AUSTRALIA. SCHOOL-AGE AND SCHOOL-GOING POPULATION, 1957



Note on diagram

For key to hatching, see page 43.

AUSTRIA

ESTIMATED POPULATION AGED 5–24 YEARS, CLASSIFIED BY SEX AND BY AGE-GROUPS, 1958

Sex	Number of persons (thousands)				
	5–9	10–14	15–19	20–24	Total, aged 5–24 years
Male .	250.4	253.6	302.6	211.4	1 018.0
Female .	240.4	243.6	292.6	206.9	983.5
Total .	490.8	497.2	595.2	418.3	2 001.5

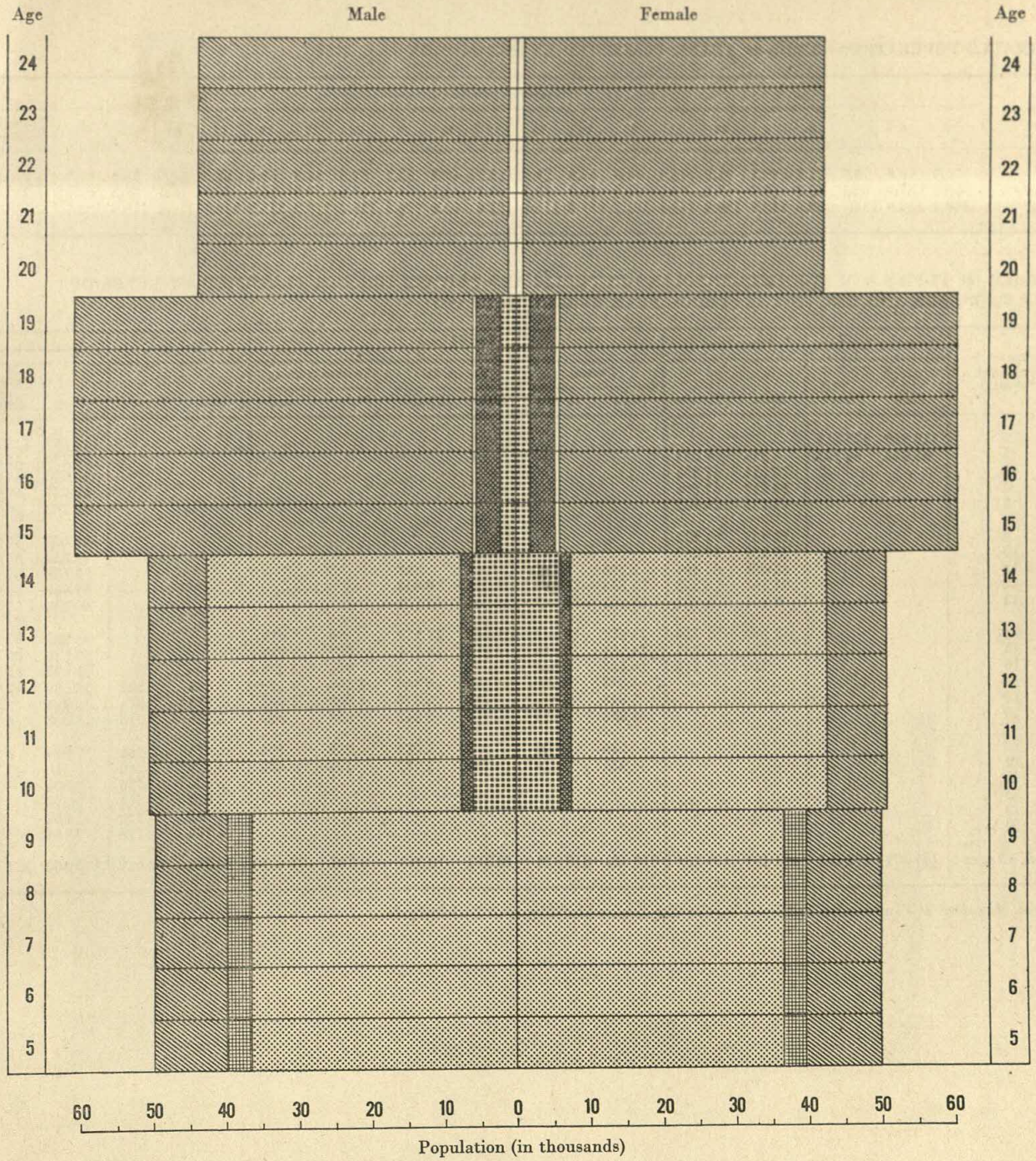
NUMBER OF PUPILS AND STUDENTS ENROLLED IN PUBLIC AND PRIVATE SCHOOLS, CLASSIFIED BY LEVEL OF EDUCATION AND AGE-GROUP IN THE SCHOOL YEAR BEGINNING IN 1957

Age-group	Preceding first level	First level	Second level			Third level[2]	Total all levels
			General	Vocational[1]	Teacher training		
—5	36 911						36 911
5– 9	31 594	363 585					395 179
10–14		350 360	60 253	12 192	1 080		423 885
15–19		2 087	22 326	30 499	4 393	4 598	63 903
20–24				1 967		8 154	10 121
24+						4 114	4 114
Unknown .						199	199
Total, all ages	68 505	716 032	82 579	44 658	5 473	17 065	934 312

Source. Data prepared by the Österreichisches Statistisches Zentralamt, Wien.

1. Complete data on pupils at vocational schools according to this system not available.
2. Includes regular Austrian students only.

AUSTRIA. SCHOOL-AGE AND SCHOOL-GOING POPULATION, 1957



Notes on diagram

1. For key to hatching, see page 43.
2. Population and school enrolment figures have been distributed equally over the five-year span.
3. School enrolment figures have been distributed equally between male and female.
4. Teacher training figures have been grouped with vocational.

BELGIUM

ESTIMATED POPULATION AGED 5–24 YEARS, CLASSIFIED BY SEX AND BY AGE, 1957

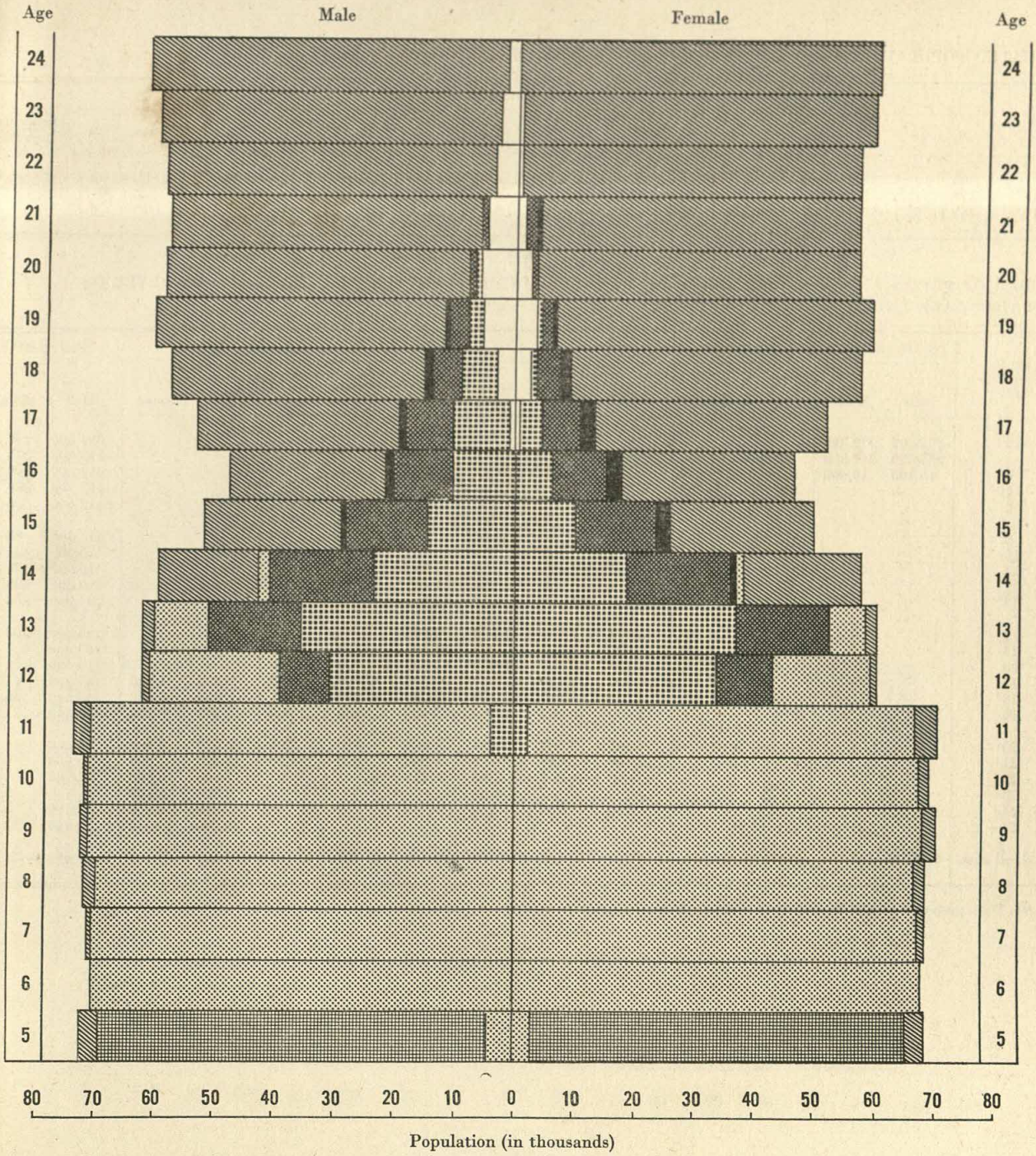
Sex	Number of persons (thousands)																			
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total, aged 5–24 years
Male	71.9	70.0	70.6	71.2	72.1	71.2	73.0	61.6	61.8	59.5	51.7	47.2	52.7	57.6	59.8	58.4	57.3	58.0	59.6	60.9	1 246.0
Female	68.2	67.9	68.1	68.3	69.9	68.7	70.1	60.1	59.7	57.3	49.7	46.1	51.7	57.6	59.2	56.9	56.8	57.1	59.3	60.0	1 212.6
Total	140.1	137.9	138.7	139.5	142.0	139.9	143.1	121.7	121.3	116.8	101.4	93.3	104.4	115.2	119.0	115.3	114.1	115.1	118.9	120.9	2 458.6

NUMBER OF PUPILS AND STUDENTS ENROLLED IN PUBLIC AND PRIVATE SCHOOLS, CLASSIFIED BY LEVEL OF EDUCATION, AGE AND SEX, IN THE SCHOOL YEAR BEGINNING IN 1957

Age in completed years	Preceding first level		First level		Second level						Third level		Total, all levels	
					General		Vocational		Teacher training					
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
—5	119 257	115 666											119 257	115 666
5	65 044	62 595	4 245	3 068									69 289	65 663
6			70 014	67 836									70 014	67 836
7			69 917	67 265									69 917	67 265
8			69 782	66 582									69 782	66 582
9			70 627	67 720									70 627	67 720
10			70 833	67 469									70 833	67 469
11			66 606	64 494	3 728	2 363	224	289					70 558	67 146
12			21 167	16 350	30 538	33 374	8 275	9 039					59 980	58 763
13			8 976	5 882	35 551	36 467	15 761	15 511					60 288	57 860
14			1 888	1 166	23 617	18 844	17 683	17 357	99	412			43 287	37 779
15			286	243	14 554	10 280	13 963	13 391	827	2 231			29 630	26 145
16			114	178	10 447	6 202	10 116	9 054	995	2 278			21 672	17 712
17					8 681	3 760	17 787	6 444	1 164	2 399	448	348	18 080	12 951
18					5 878	1 474	5 053	3 370	1 060	1 802	2 813	2 674	14 804	9 320
19					2 324	376	2 789	1 948	569	599	5 386	3 316	11 068	6 239
20					536	31	1 313	1 078	229	194	5 778	2 266	7 856	3 569
21					127	62	1 388	1 732	102	490	4 899	1 229	6 516	3 513
22											3 806	726	3 806	720
23											3 072	514	3 072	514
24											1 862	238	1 862	238
24+											4 184	778	4 184	778
Total, all ages	184 301	178 261	454 455	428 253	135 981	113 233	84 352	79 213	5 045	10 405	32 248	12 089	896 382	821 454

Source. Ministère de l'Instruction Publique, Service des Études Statistiques et Sociologiques.

BELGIUM. SCHOOL-AGE AND SCHOOL-GOING POPULATION, 1957



Note on diagram

For key to hatching, see page 43.

FRANCE

ESTIMATED POPULATION AGED 5–24 YEARS, CLASSIFIED BY SEX AND BY AGE, AS OF JANUARY 1959

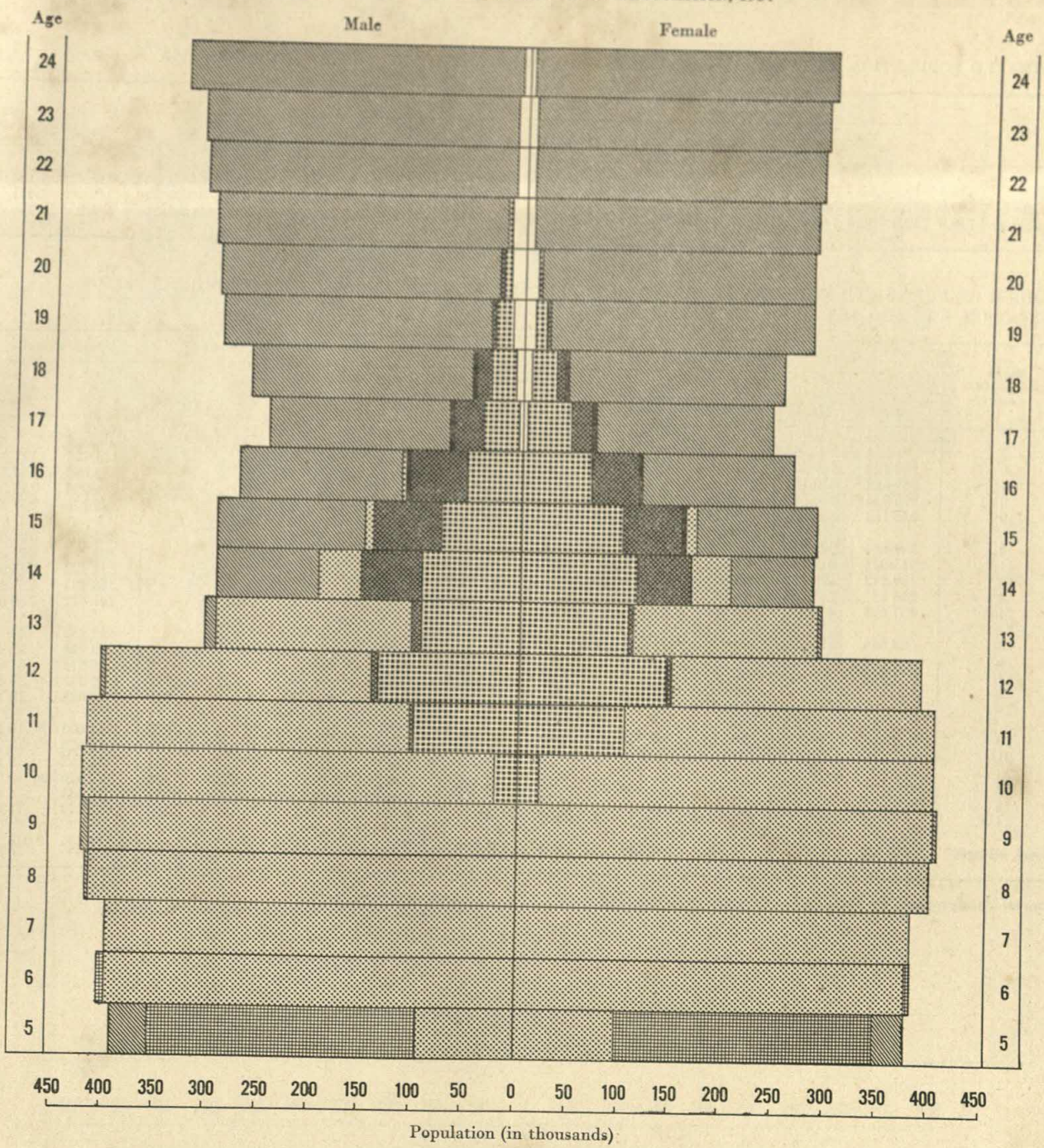
Sex	Number of persons (thousands)																			
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total, aged 5–24 years
Male .	390.1	401.5	395.0	416.0	420.5	418.9	416.3	403.4	303.5	293.4	295.5	274.8	246.8	262.6	288.8	292.7	298.6	307.5	311.6	326.9	6 764.4
Female .	378.0	383.6	383.4	400.6	406.3	403.6	402.7	388.4	291.5	284.6	283.5	262.8	240.0	253.8	280.3	281.8	283.8	289.0	292.0	301.6	6 491.3
Total .	768.1	785.1	778.4	816.6	826.8	822.5	819.0	791.8	595.0	578.0	579.0	537.6	486.8	516.4	569.1	574.5	582.4	596.5	603.6	628.5	13 255.7

NUMBER OF PUPILS AND STUDENTS ENROLLED IN PUBLIC AND PRIVATE SCHOOLS, CLASSIFIED BY LEVEL OF EDUCATION, AGE AND SEX, AS OF NOVEMBER 1958

Age in completed years	Preceding first level		First level		Second level						Third level		Total all levels	
					General		Vocational		Teacher training					
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
—5	394 500	379 300											394 500	379 300
5	259 500	247 800	95 500	97 300									355 000	345 100
6	16 100	19 600	395 400	380 200									411 500	399 800
7			403 700	389 700									403 700	389 700
8			412 600	400 300									412 600	400 300
9			414 400	403 400									414 400	403 400
10			401 900	392 100	20 900	19 500	200						423 000	411 600
11			315 200	305 100	100 000	102 900	3 100	500					418 300	408 500
12			254 700	241 500	136 500	145 000	8 200	1 900					399 400	388 400
13			188 100	179 700	95 700	104 400	11 000	4 100					294 800	288 200
14			43 500	39 300	93 900	112 100	61 300	52 400					198 700	203 800
15			6 200	7 500	76 600	97 600	65 200	54 300	1 600	1 700			149 600	161 100
16			2 000	3 500	54 700	69 500	55 900	44 900	2 700	3 000			115 300	120 900
17			600	1 100	34 600	41 300	28 000	20 600	2 500	2 800	2 200	1 900	67 900	67 700
18			1 400	900	24 100	23 400	13 100	8 000	2 200	2 500	6 700	5 500	47 500	40 300
19					14 600	10 400	6 300	3 100	1 100	1 300	11 300	8 700	33 300	23 500
20					6 500	3 000	2 600	1 200	700	700	13 500	9 200	23 300	14 100
21					2 100	600	800	300	600	600	13 400	7 800	16 900	9 300
22					600	200	300	100			11 800	6 900	12 700	7 200
23					300	–	100	–			10 300	5 600	10 700	5 600
24					100	100	100	–			7 900	4 500	8 100	4 600
24+											23 400	13 300	23 400	13 300
Total, all ages	670 100	646 700	2 935 200	2 841 600	661 200	730 000	256 200	191 400	11 400	12 600	100 500	63 400	4 634 600	4 485 700

Source. Data prepared by the Bureau Universitaire de Statistiques.

FRANCE. SCHOOL-AGE AND SCHOOL-GOING POPULATION, 1957



Note on diagram

For key to hatching, see page 43.

FEDERAL REPUBLIC OF GERMANY (excluding Saarland and West Berlin)

ESTIMATED POPULATION AGED 5–24 YEARS, CLASSIFIED BY SEX AND BY AGE, AS OF DECEMBER 1957

Sex	Number of persons (thousands)																				Total, aged 5–24 years
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Male .	380.0	375.0	378.0	382.0	365.0	342.0	320.0	266.0	361.0	371.0	362.0	446.0	488.0	490.0	463.0	432.0	421.0	410.0	388.0	318.0	7 758.0
Female .	360.0	357.0	359.0	364.0	346.0	328.0	307.0	258.0	348.0	357.0	350.0	431.0	473.0	472.0	445.0	416.0	412.0	400.0	380.0	310.0	7 471.0
Total .	739.0	732.0	738.0	745.0	711.0	669.0	626.0	524.0	709.0	728.0	712.0	877.0	961.0	962.0	908.0	849.0	833.0	810.0	768.0	628.0	15 229.0

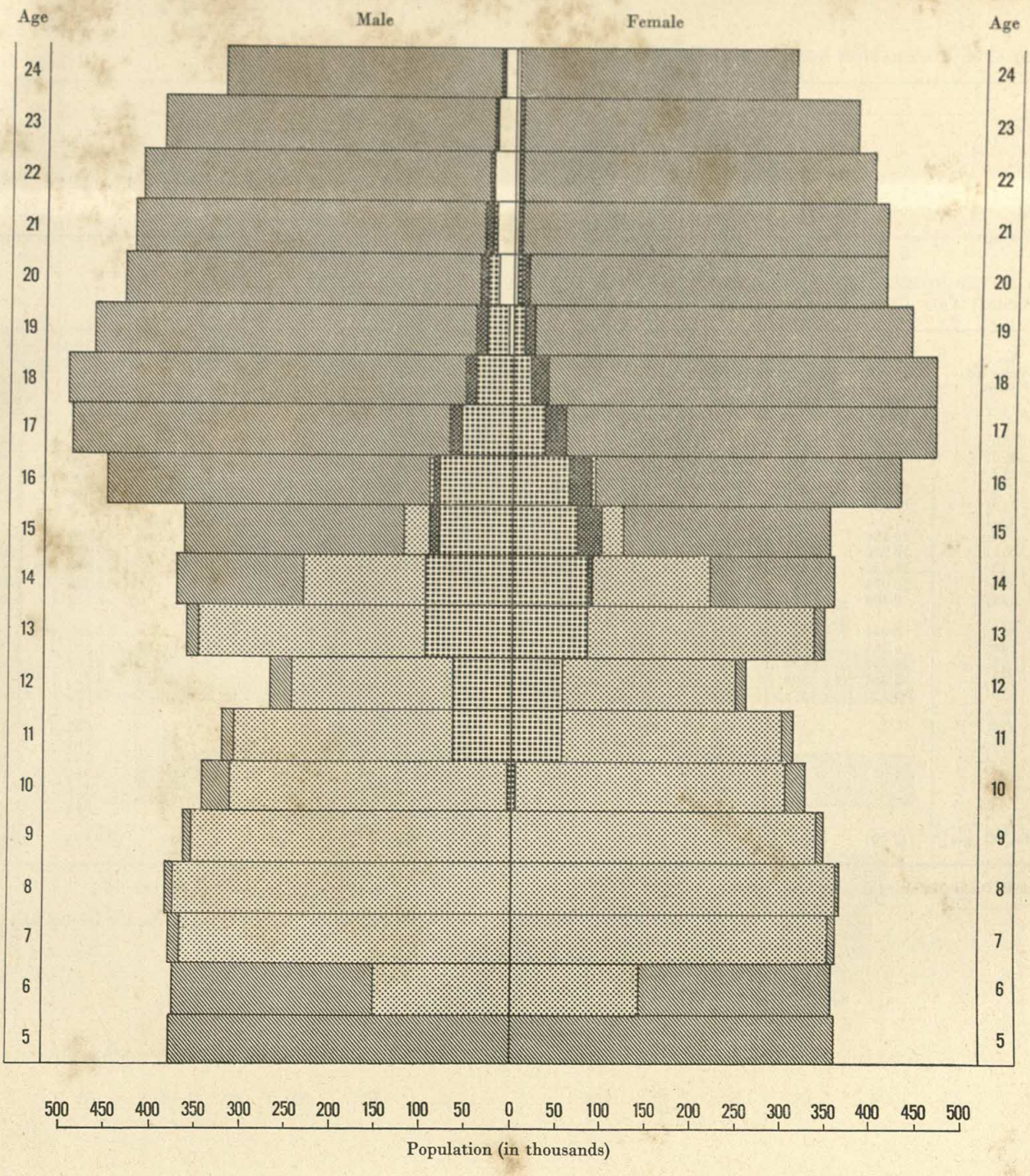
NUMBER OF PUPILS AND STUDENTS ENROLLED IN PUBLIC AND PRIVATE SCHOOLS, CLASSIFIED BY LEVEL OF EDUCATION, AGE AND SEX, AS OF DECEMBER 1957[1]

Age in completed years	First level		Second level						Third level		Total, all levels	
			General		Vocational[2]		Teacher training					
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
5	61	65									61	65
6	154 722	147 926									154 722	147 926
7	367 685	350 182									367 685	350 182
8	376 956	358 512									376 956	358 512
9	355 162	339 208	14	15							355 176	339 223
10	309 604	300 850	23 958	20 600							333 562	321 450
11	245 035	244 741	64 334	54 594							309 369	299 335
12	189 242	193 872	64 895	55 057							254 137	248 929
13	253 537	253 784	94 947	83 621							348 484	337 405
14	137 696	130 459	94 974	85 539	9 002	23 879					241 672	239 877
15	28 564	24 296	79 970	71 607	10 618	28 221					119 152	124 124
16	5 462	4 714	78 413	63 942	9 811	24 233					93 686	92 889
17	1 521	915	56 544	34 579	10 809	23 398			1	1	68 875	58 893
18			38 807	19 780	13 087	18 862	6	107	647	275	52 547	39 024
19			25 025	11 352	11 843	13 880	195	1 008	5 965	1 925	43 028	28 165
20			10 747	3 322	7 686	8 280	686	2 518	14 684	4 079	33 803	18 199
21			3 649	643	6 147	4 952	1 013	2 791	21 849	4 534	32 658	12 920
22			1 187	160	5 282	2 954	991	1 915	23 702	4 222	31 162	9 251
23			1 421	234	5 235	2 476	686	932	19 994	3 235	27 336	6 877
24					2 925	995	407	411	13 049	2 034	16 381	3 440
24+					11 558	4 759	2 729	1 516	36 732	5 185	51 019	11 460
Total, all ages	2 425 247	2 349 524	638 885	505 045	104 003	156 889	6 713	11 198	136 623	25 490	3 311 471	3 048 146

Source. Data prepared by Statistisches Bundesamt, Wiesbaden.

1. Excluding foreign students.
2. Part-time pupils in vocational schools not included.

FEDERAL REPUBLIC OF GERMANY. SCHOOL-AGE AND SCHOOL-GOING POPULATION, 1957



Notes on diagram

1. For key to hatching, see page 43.
2. The figures above exclude Saarland and West Berlin.

HAITI

ESTIMATED POPULATION AGED 5–24 YEARS, CLASSIFIED BY SEX AND BY AGE, 1958

Sex	Number of persons (thousands)																			
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total, aged 5–24 years
Male .	40.2	45.1	48.4	49.3	35.1	57.4	25.7	56.6	46.8	36.8	44.4	33.1	26.5	42.0	23.5	47.3	16.1	29.0	21.6	19.3	744.4
Female .	39.9	45.4	48.9	51.1	36.6	55.0	25.0	54.6	45.4	34.0	40.9	32.7	26.2	43.5	25.7	53.3	18.3	36.5	27.5	25.0	765.5
Total .	80.1	90.5	97.3	100.4	71.7	112.4	50.7	111.2	92.2	70.8	85.3	65.8	52.7	85.5	49.2	100.6	34.4	65.5	49.1	44.3	1 509.9

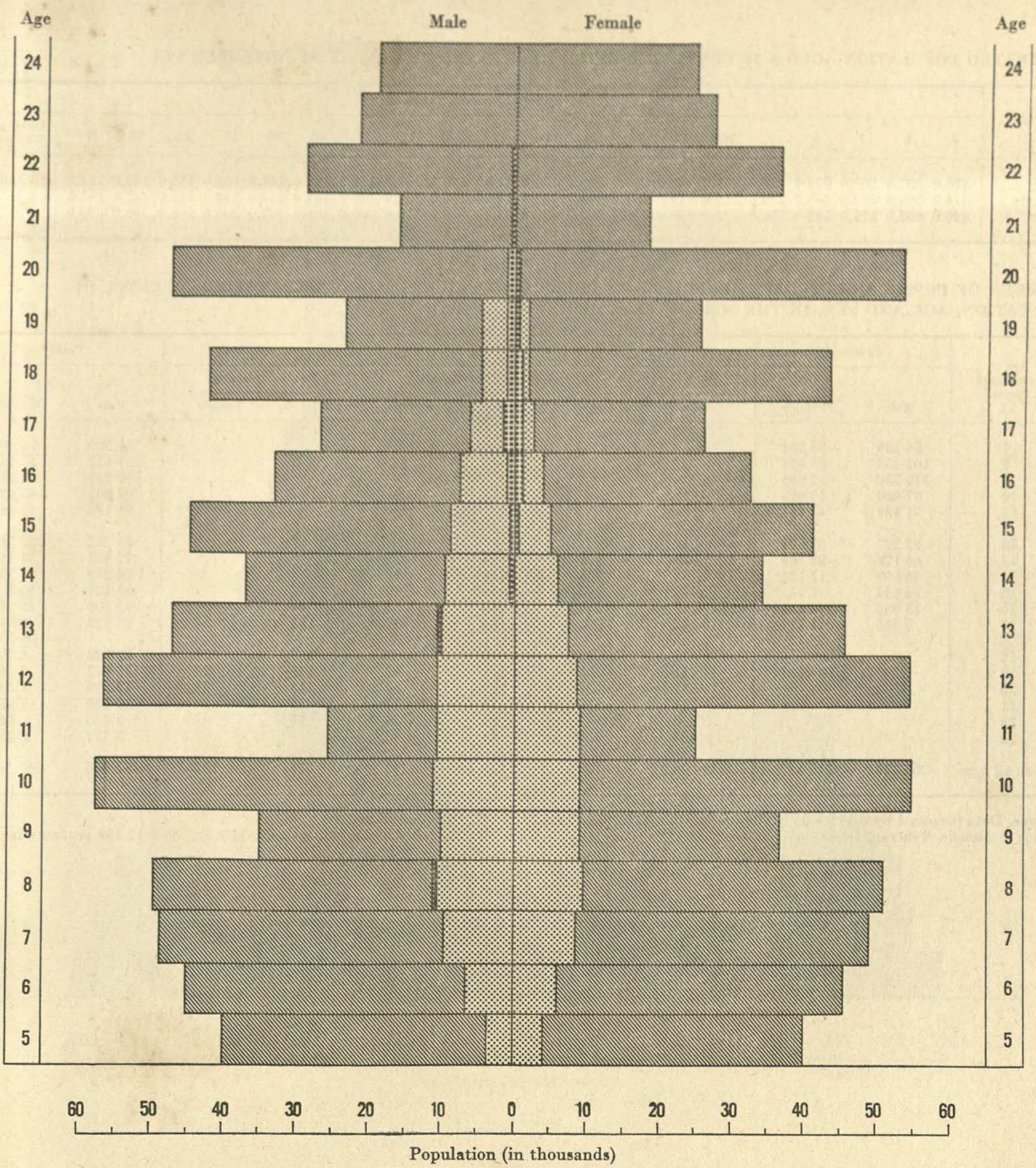
ESTIMATED NUMBER OF PUPILS AND STUDENTS ENROLLED IN PUBLIC AND PRIVATE SCHOOLS, CLASSIFIED BY LEVEL OF EDUCATION, AGE AND SEX, AS OF MARCH 1958

Age in completed years	First level[1]		Second level						Third level		Total, all levels	
			General		Vocational		Teacher training					
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
—6	3 581	4 039			46	14					3 627	4 053
6	6 302	5 978			28	8					6 330	5 986
7	9 550	8 315			73	15					9 623	8 330
8	10 663	9 511			252	8					10 915	9 519
9	10 231	8 793			148	16					10 379	8 809
10	10 880	9 186	2	–	172	13					11 054	9 199
11	10 296	9 195	2	–	177	16					10 475	9 211
12	10 721	8 493	36	11	221	14					10 978	8 518
13	10 074	7 315	109	72	255	19					10 438	7 406
14	9 196	6 166	389	199	187	19					9 772	6 384
15	8 081	4 535	628	536	181	33					8 890	5 104
16	6 366	3 132	1 034	912	192	38		1			7 592	4 083
17	4 531	1 732	1 407	1 031	146	53		4			6 084	2 820
18	3 553	890	1 121	811	107	84	2	11			4 783	1 796
19	[2]3 576	[2]853	1 206	408	113	96	2	24	8	2	[3]4 905	[3]1 383
20			816	298	81	93	13	18	42	12	952	421
21			433	141	41	70	12	10	78	14	564	235
22			399	78	23	53	17	15	105	18	544	164
23			174	63	22	37	22	2	90	22	308	124
24			53	17	17	16	18	–	131	16	219	49
24+			49	15	6	39	22	2	484	30	561	86
Total, all ages	117 601	88 133	7 858	4 592	2 488	754	108	87	938	114	128 993	93 680

Source. Institut Haïtien de Statistique, Haïti.

1. Including pre-vocational education at the first level.
2. Aged 19 years and over.
3. Including pupils over 19 years of age at the first level of education.

HAITI. SCHOOL-AGE AND SCHOOL-GOING POPULATION, 1957



Note on diagram

For key to hatching, see page 43.

IRAN

ESTIMATED POPULATION AGED 5–24 YEARS CLASSIFIED BY SEX AND BY AGE, AS OF NOVEMBER 1956

Sex	Number of persons (thousands)																				
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total, aged 5–24 years
Male .	326.0	307.0	293.0	275.0	258.0	243.0	225.0	209.0	205.0	187.0	179.0	170.0	158.0	153.0	154.0	154.0	155.0	155.0	153.0	151.0	4 110.0
Female .	314.0	295.0	282.0	265.0	248.0	234.0	215.0	201.0	195.0	183.0	171.0	160.0	152.0	147.0	147.0	148.0	148.0	148.0	147.0	145.0	3 945.0
Total .	640.0	602.0	575.0	440.0	506.0	477.0	440.0	410.0	400.0	370.0	350.0	330.0	310.0	300.0	301.0	302.0	303.0	303.0	300.0	296.0	8 055.0

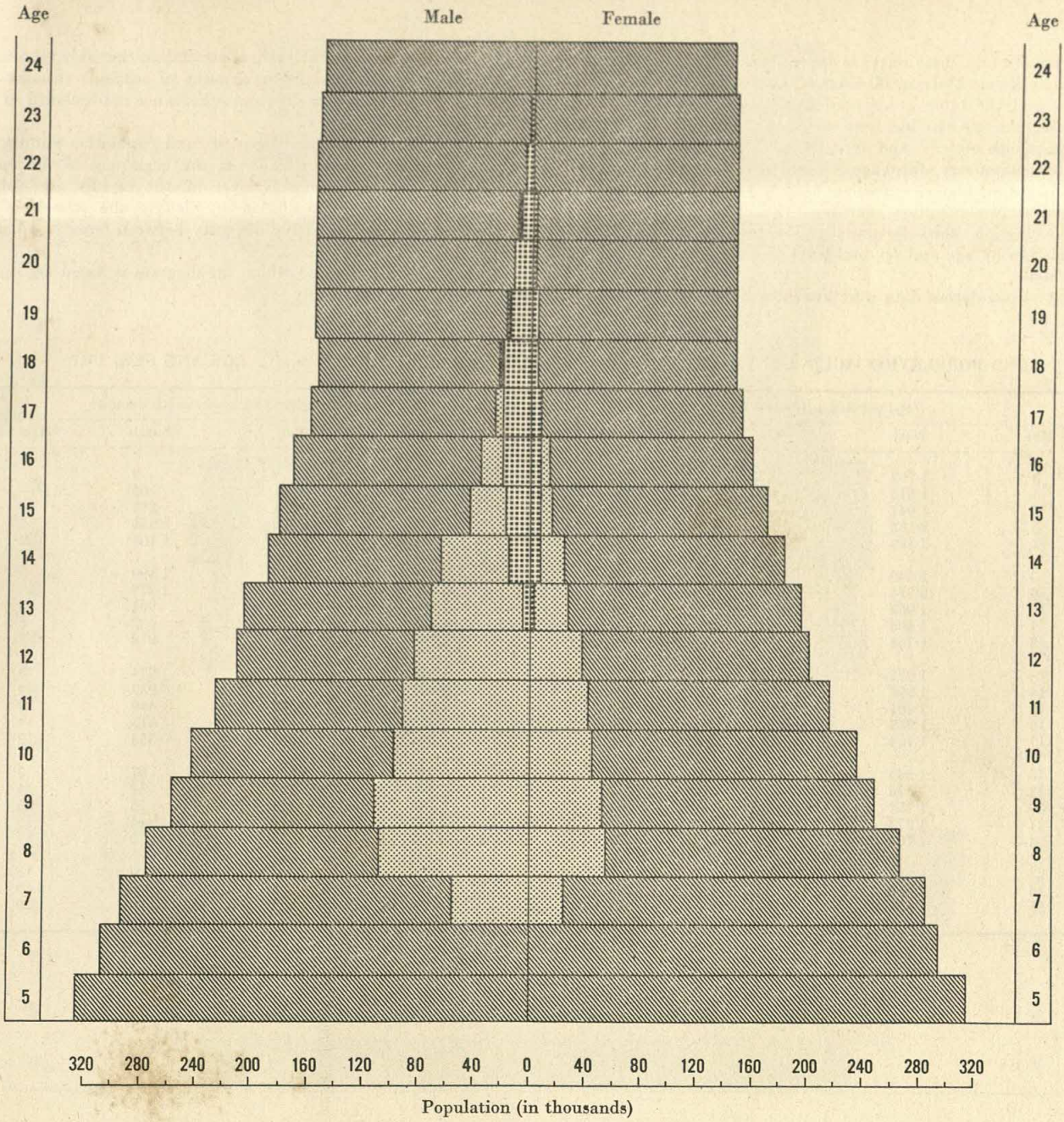
NUMBER OF PUPILS AND STUDENTS ENROLLED IN PUBLIC AND PRIVATE SCHOOLS, CLASSIFIED BY LEVEL OF EDUCATION, AGE AND SEX, IN THE SCHOOL YEAR BEGINNING IN 1957

Age in completed years	First level		Second level						Total[2]	
			General		Vocational		Teacher training[1]			
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
7	54 589	25 204							54 589	25 204
8	107 452	55 424							107 452	55 424
9	110 230	52 986							110 230	52 986
10	97 063	45 923							97 063	45 923
11	91 189	42 861							91 189	42 861
12	83 227	37 561							83 227	37 561
13	66 178	28 503	5 023	2 632	222	15			71 423	31 150
14	48 699	17 724	14 794	7 335	736	61			64 229	25 120
15	24 639	7 943	17 499	8 133	989	82			43 127	16 158
16	13 958	3 831	20 162	8 354	980	68			35 100	12 253
17	5 516	1 177	18 848	7 206	938	109	123	54	25 425	8 546
18			18 872	6 042	964	89	387	89	20 223	6 220
19			14 821	4 392	581	98	545	77	15 947	4 567
20			11 531	2 683	322	87	543	71	12 396	2 841
21			8 364	1 518	131	74	1 338	64	9 833	1 656
22			5 896	847	69	34	70	7	6 035	888
23			3 484	362	43	28			3 527	390
Total, all ages	702 740	319 137	139 294	49 504	5 975	745	3 006	362	851 015	369 748

Source. Data prepared by Service de Statistique du Ministère de l'Éducation Nationale, Teheran, Iran.

1. Including Fine Arts.
2. Excludes higher education, which enrolled 12,349 students in 1957.

IRAN. SCHOOL-AGE AND SCHOOL-GOING POPULATION, 1957



Note on diagram

For key to hatching, see page 43.

JAPAN

The material on these pages is taken from the publication *Education in Japan* (Tokyo, Ministry of Education, 1959). The text below and the table are quoted from page 81 of the original; the diagram opposite has been modified slightly by the omission of age-groups under 5 and over 24.

Most compulsory school age children attend compulsory schools and the percentage of enrolment is very high: the percentage of enrolment in elementary schools is 99.5.

The diagram shows the actual and relative distribution of total population by age and sex and level of school for those enrolled in schools.

School population data were available by grade and sex only. The age distribution of the school population therefore represents estimates based on normal progression of students through the grades. Students in miscellaneous schools are not included in the diagram.

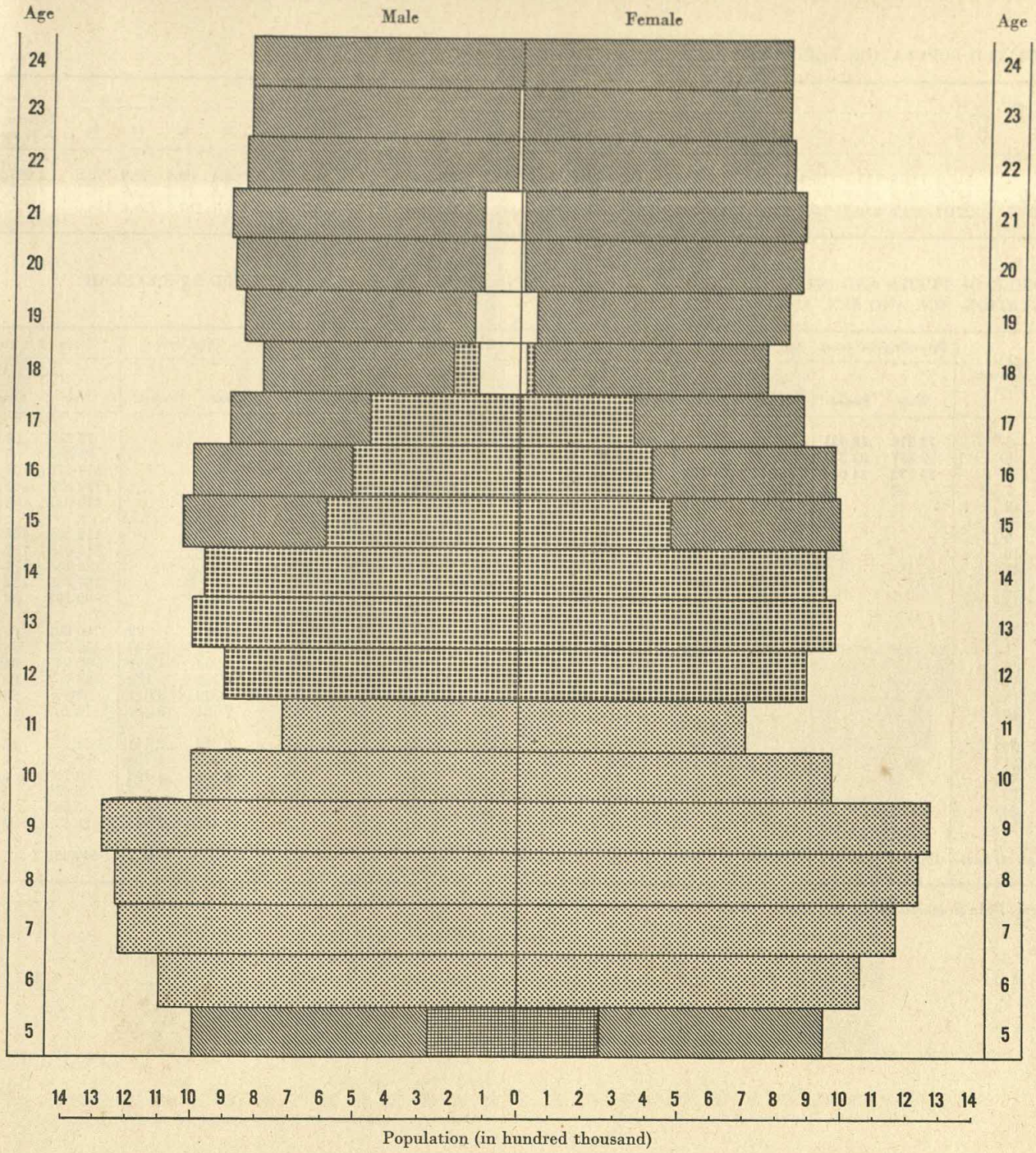
Sex differences in percentages of total population enrolled in the schools are noteworthy, from the beginning of the upper secondary school. From this level on, the rapidly diminishing percentage of total population enrolled in the schools is accompanied by an increasing disparity between female and male school population.

The statistical data on which the diagram is based are shown in the table below.

ESTIMATED POPULATION AGED 3–25 YEARS, AND POPULATION ENROLLED IN SCHOOLS, BY AGE AND SEX, 1957

Age	Total population (thousands)			Population enrolled in schools (thousands)			
	Total	Male	Female	Total	Male	Female	School year
3	1 702	873	829	18	9	9	–
4	1 815	930	885	136	71	65	–
5	1 941	993	948	509	261	248	–
6	2 162	1 104	1 058	2 147	1 096	1 051	1
7	2 382	1 216	1 166	2 377	1 213	1 164	2
8	2 449	1 249	1 200	2 446	1 247	1 199	3
9	2 514	1 284	1 230	2 511	1 282	1 229	4
10	1 968	1 006	962	1 965	1 004	961	5
11	1 408	715	693	1 406	714	692	6
12	1 768	897	871	1 766	896	870	7
13	1 977	1 002	975	1 975	1 001	974	8
14	1 893	960	933	1 891	959	932	9
15	2 001	1 013	988	1 051	582	469	10
16	1 985	1 006	979	928	513	415	11
17	1 764	888	876	804	451	353	12
18	1 549	779	770	275	208	67	13
19	1 676	840	836	176	134	42	14
20	1 752	881	871	126	111	15	15
21	1 773	892	881	132	118	14	16
22	1 700	851	849	5	5	0	17
23	1 652	826	826	5	5	0	18
24	1 668	833	835	1	1	0	19
25	1 651	824	827	1	1	0	20

JAPAN. SCHOOL-AGE AND SCHOOL-GOING POPULATION, 1957



Note on diagram

For key to hatching, see page 43.

NETHERLANDS

ESTIMATED POPULATION AGED 5–24 YEARS, CLASSIFIED BY SEX AND BY AGE, 1958

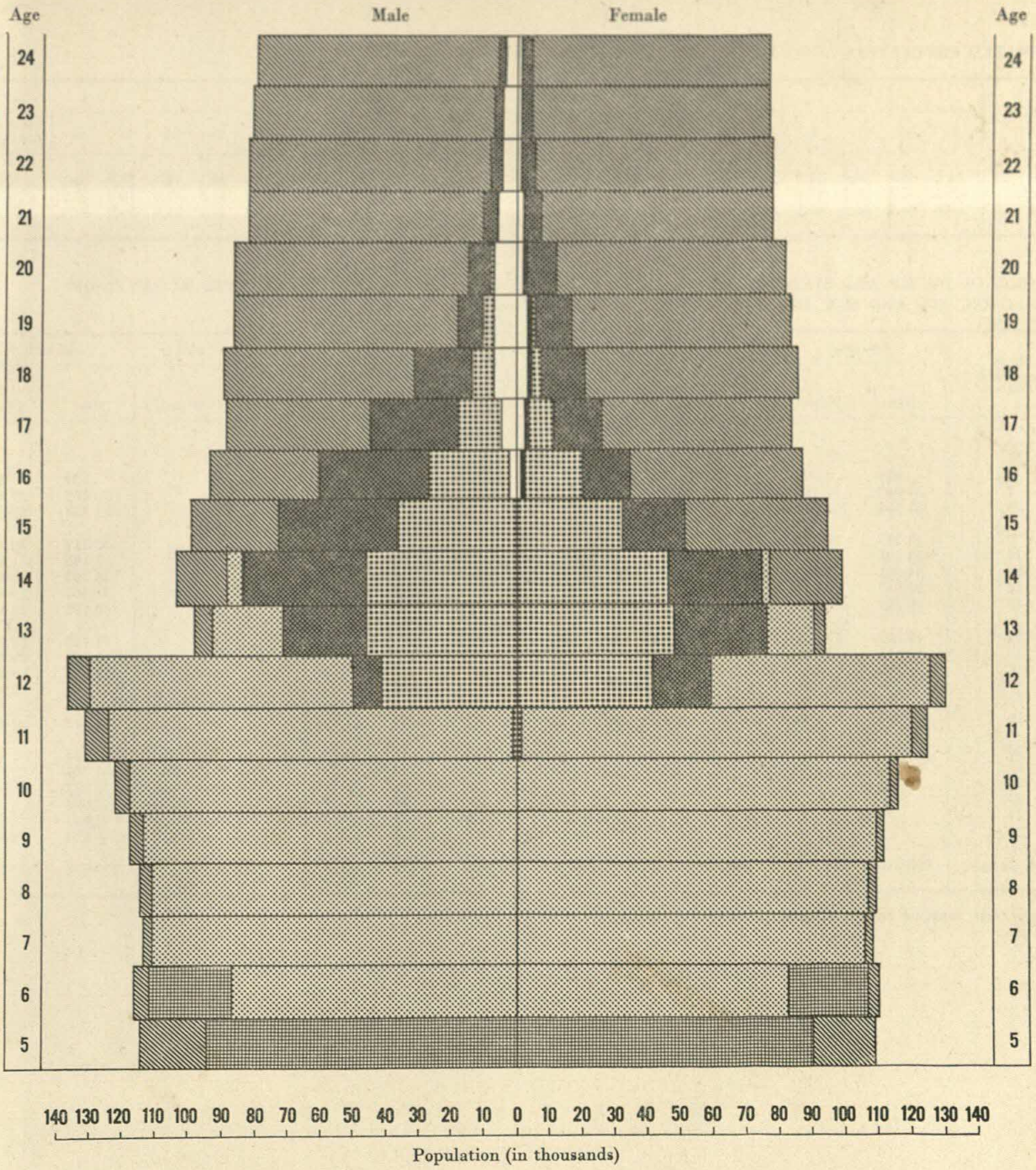
Sex	Number of persons (thousands)																			
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total, aged 5–24 years
Male .	113.8	115.0	112.5	113.4	116.6	121.7	129.3	135.6	96.3	102.0	98.2	90.7	86.4	87.9	85.2	84.3	80.4	80.4	78.9	78.5	2 007.2
Female .	107.9	108.8	106.7	107.4	110.5	114.9	123.6	128.9	92.0	97.4	93.3	86.0	82.4	85.0	83.0	81.3	77.3	77.2	75.9	76.1	1 915.5
Total .	221.7	223.8	219.2	220.8	227.1	236.6	252.9	264.5	188.3	199.4	191.5	176.7	168.8	172.9	168.2	165.6	157.7	157.6	154.8	154.6	3 922.7

NUMBER OF PUPILS AND STUDENTS ENROLLED IN PUBLIC AND PRIVATE SCHOOLS, CLASSIFIED BY LEVEL OF EDUCATION, AGE AND SEX, AS OF 31 DECEMBER 1958

Age in completed years	Preceding first level		First level		Second level						Third level		Total, all levels	
					General		Vocational		Teacher training					
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
—5	72 216	68 921											72 216	68 921
5	93 257	89 211											93 257	89 211
6	25 172	24 014	85 306	81 102									110 478	105 116
7	2	1	110 357	104 839									110 359	104 840
8			110 031	105 131									110 031	105 131
9			112 381	108 132									112 381	108 132
10			116 995	112 253	4	1	17						117 016	112 254
11			122 732	119 118	651	619	60	1					123 443	119 738
12			78 697	65 967	40 848	40 944	8 310	17 678					127 855	124 589
13			21 018	13 999	45 411	47 076	25 768	28 325					92 197	89 400
14			4 511	2 628	45 051	44 789	37 272	29 197	–	9	47	25	86 881	76 648
15			158	137	35 014	31 658	36 633	18 923	–	41	472	408	72 277	51 167
16					23 816	17 968	33 166	14 486	–	499	1 934	1 291	58 916	34 244
17					13 540	8 143	26 265	14 250	–	1 056	4 256	2 128	44 061	25 577
18					7 111	3 161	18 307	13 013	–	1 347	6 578	3 071	31 996	20 592
19					3 011	1 049	8 165	10 665	–	1 262	7 121	3 347	18 297	16 323
20					916	174	3 797	8 384	–	915	6 544	2 747	11 257	12 220
21					238	22	3 867	6 050	–	426	5 222	1 755	9 327	8 253
22					67	7	3 585	4 668	–	206	4 536	1 198	8 188	6 079
23					18	5	2 705	3 515	–	131	3 936	857	6 659	4 508
24					5	1	2 073	2 764	–	95	3 617	672	5 695	3 532
24+					6	10	8 827	16 691	–	320	17 760	3 926	26 593	20 947
Total, all ages	190 647	182 147	762 186	713 306	215 707	195 627	218 817	188 610	–	6 307	62 023	21 425	1 449 380	1 307 422

Source. Data prepared by Central Bureau of Statistics, The Hague.

NETHERLANDS. SCHOOL-AGE AND SCHOOL-GOING POPULATION, 1957



Note on diagram

For key to hatching, see page 43.

NORWAY

ESTIMATED POPULATION AGED 5–24 YEARS, CLASSIFIED BY SEX AND BY AGE, 1957

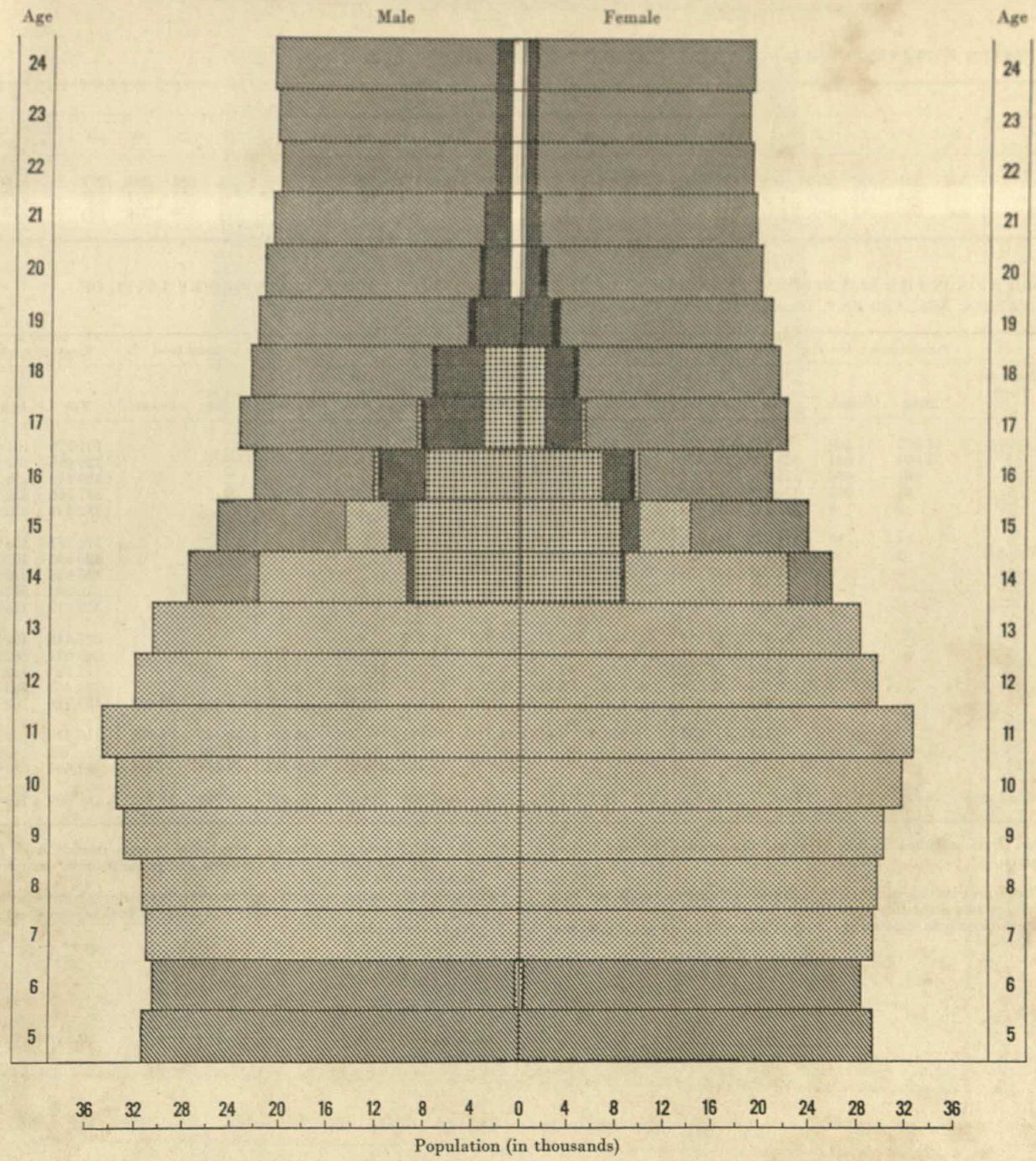
Sex	Number of persons (thousands)																			
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total, aged 5–24 years
Male .	31.2	30.3	30.9	31.2	32.8	33.3	34.4	31.7	30.3	27.2	25.0	22.0	23.1	22.3	21.7	21.0	20.5	19.7	20.0	20.3	528.9
Female .	29.4	28.4	29.3	29.7	30.4	31.7	32.7	29.7	28.2	25.8	24.0	21.1	22.1	21.5	21.1	20.2	19.6	19.2	19.0	19.2	502.3
Total .	60.6	58.7	60.2	60.9	63.2	65.0	67.1	61.4	58.5	53.0	49.0	43.1	45.2	43.8	42.8	41.2	40.1	38.9	39.0	39.5	1 031.2

NUMBER OF PUPILS AND STUDENTS ENROLLED IN PUBLIC AND PRIVATE SCHOOLS, CLASSIFIED BY LEVEL OF EDUCATION, AGE AND SEX, IN THE SCHOOL YEAR BEGINNING IN 1957

Age in completed years	First level		Second level						Third level		Total, all levels	
			General		Vocational		Teacher training					
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
—5												
5												
6	329	374										
7	30 802	29 199									329	374
8	31 158	29 611									30 802	29 199
											31 158	29 611
9	32 717	30 375										
10	33 195	31 684									32 717	30 375
11	34 303	32 657									33 195	31 684
12	31 567	29 681									34 303	32 657
13	30 191	28 197									31 567	29 681
											30 191	28 197
14	12 385	13 544	8 802	8 559	535	349						
15	3 613	4 307	8 709	8 426	2 079	1 356					21 722	22 452
16	200	367	7 941	6 938	3 549	2 291	164	150			14 401	14 089
17	200	367	3 146	2 241	4 765	3 041	158	138			11 854	9 746
18	26	99	3 110	2 215	3 774	2 363	130	151			8 269	5 787
19	26	99			3 712	2 654	474	669			7 040	4 828
											4 212	3 422
20					1 975	1 288	273	450	796	185	3 044	1 923
21					1 975	1 287	13	84	796	185	2 784	1 556
22					1 208	788	28	72	796	185	2 032	1 045
23					1 208	787	28	72	797	185	2 033	1 044
24					1 207	787	28	73	797	186	2 032	1 046
24+					5 049	3 292	176	497	995	232	6 220	4 021
Total, all ages	240 712	230 561	31 708	28 379	31 036	20 283	1 472	2 356	4 977	1 158	309 905	282 737

Source. Data supplied by the Central Bureau of Statistics, Oslo, in September 1959.

NORWAY. SCHOOL-AGE AND SCHOOL-GOING POPULATION, 1957



Note on diagram

For key to hatching, see page 43.

UNITED KINGDOM (ENGLAND AND WALES)

ESTIMATED POPULATION AGED 5–24 YEARS, CLASSIFIED BY SEX AND BY AGE, 1957

Sex	Number of persons (thousands)																				
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total, aged 5–24 years
Male .	331	331	339	355	375	425	392	322	356	324	309	272	277	289	291	291	285	282	281	272	6 399
Female .	316	316	324	339	358	406	375	307	339	309	295	263	269	283	287	285	281	277	277	271	6 177
Total .	647	647	663	694	733	831	767	629	695	633	604	535	546	572	578	576	566	559	558	543	12 576

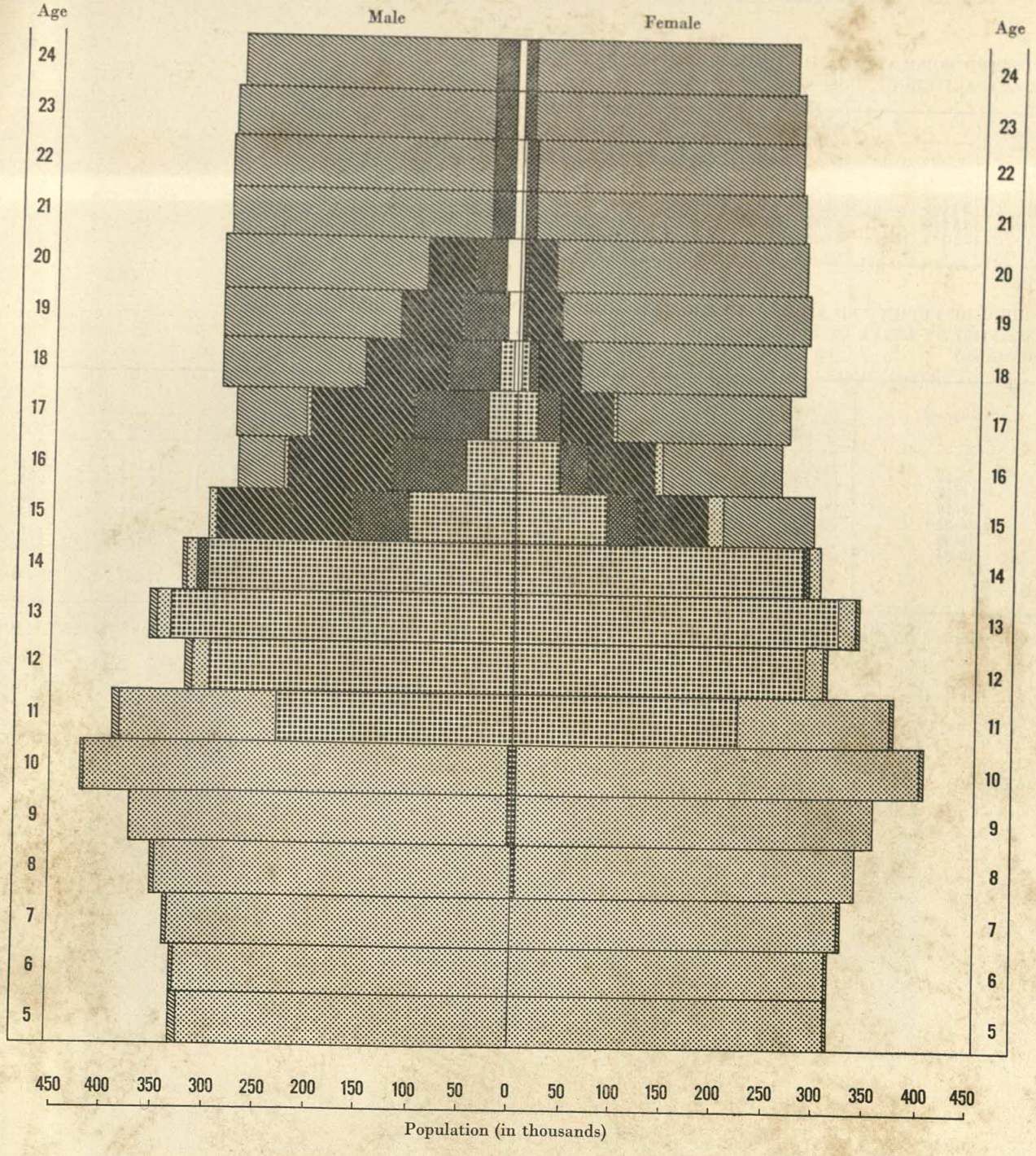
NUMBER OF PUPILS AND STUDENTS ENROLLED IN PUBLIC AND PRIVATE SCHOOLS, CLASSIFIED BY LEVEL OF EDUCATION, AGE AND SEX, IN THE SCHOOL YEAR BEGINNING IN 1957

Age in completed years	Preceding first level		First level[1]		Second level						Third level		Total, all levels	
					General[2]		Vocational[3]		Evening[4]					
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
—5	13 072	11 589	94 712	89 236	90	266							107 874	101 091
5	1 094	1 051	325 276	310 430	275	1 065							326 645	312 546
6	501	488	329 006	313 555	333	1 232							329 840	315 275
7	95	102	336 916	320 930	549	1 541							337 560	322 573
8	8	8	351 199	334 594	1 187	1 960							352 394	336 562
9	4	10	371 742	354 433	2 035	2 464							373 781	356 907
10	2	6	416 406	398 072	4 288	4 335							420 696	402 413
11	–	5	154 747	149 736	231 108	220 811							385 855	370 552
12	–	1	17 763	17 687	298 580	285 609							316 343	303 297
13			15 075	18 462	335 538	317 559							350 613	336 021
14			11 211	16 969	303 423	284 730	10 812	6 972					325 446	308 671
15			8 146	12 332	104 480	91 142	57 330	27 165	99 735	71 573			269 691	202 212
16			4 604	6 432	49 602	42 071	72 397	27 991	101 331	66 344			227 934	142 838
17			2 804	2 806	27 819	20 838	73 375	21 453	100 465	58 176			204 463	103 273
18			1 049	674	11 878	5 869	57 593	9 221	80 465	44 376	4 731	2 417	155 716	62 557
19			117	238	1 657	472	44 318	5 091	60 278	34 404	10 100	4 029	116 470	44 234
20							31 370	3 114	44 857	28 391	15 007	5 132	91 234	36 637
20+							83 971	43 402	454 332	609 793	30 151	7 464	568 454	660 659
Total, all ages	14 776	13 260	2 440 773	2 346 586	1 372 842	1 281 964	431 166	144 409	941 463	913 057	59 989	19 042	5 261 009	4 718 318

Source. Data supplied by the National Commission for the United Kingdom.

1. The figures include children in independent schools which are both primary and secondary.
2. The data include children in the lower school of direct grant grammar schools.
3. Figures of students attending vocational courses include both full-time day and part-time day students and relate to both second and third levels of education.
4. Figures of evening students include students attending both vocational and recreational courses of study and relate to both second and third levels of education.

UNITED KINGDOM (ENGLAND AND WALES). SCHOOL-AGE AND SCHOOL-GOING POPULATION, 1957



Notes on diagram

1. For key hatching, see page 43.

2. Enrolments over 20 in vocational second level and in third level have been distributed evenly over the age-groups 21 to 24.

UNITED STATES OF AMERICA

ESTIMATED POPULATION 5–34 YEARS, CLASSIFIED BY SEX AND AGE-GROUP, 1958[1]

Sex	Number of persons (thousands)						
	5–13	14–17	18–19	20–24	25–29	30–34	Total, aged 5–34 years
Male .	15 905	5 402	2 339	5 495	5 612	5 953	40 706
Female .	15 240	5 233	2 270	5 425	5 635	6 196	39 999
Total .	31 145	10 635	4 609	10 920	11 247	12 149	80 705

NUMBER OF PUPILS AND STUDENTS ENROLLED IN PUBLIC AND PRIVATE SCHOOLS, CLASSIFIED BY LEVEL OF EDUCATION, AGE-GROUP AND SEX, 1958

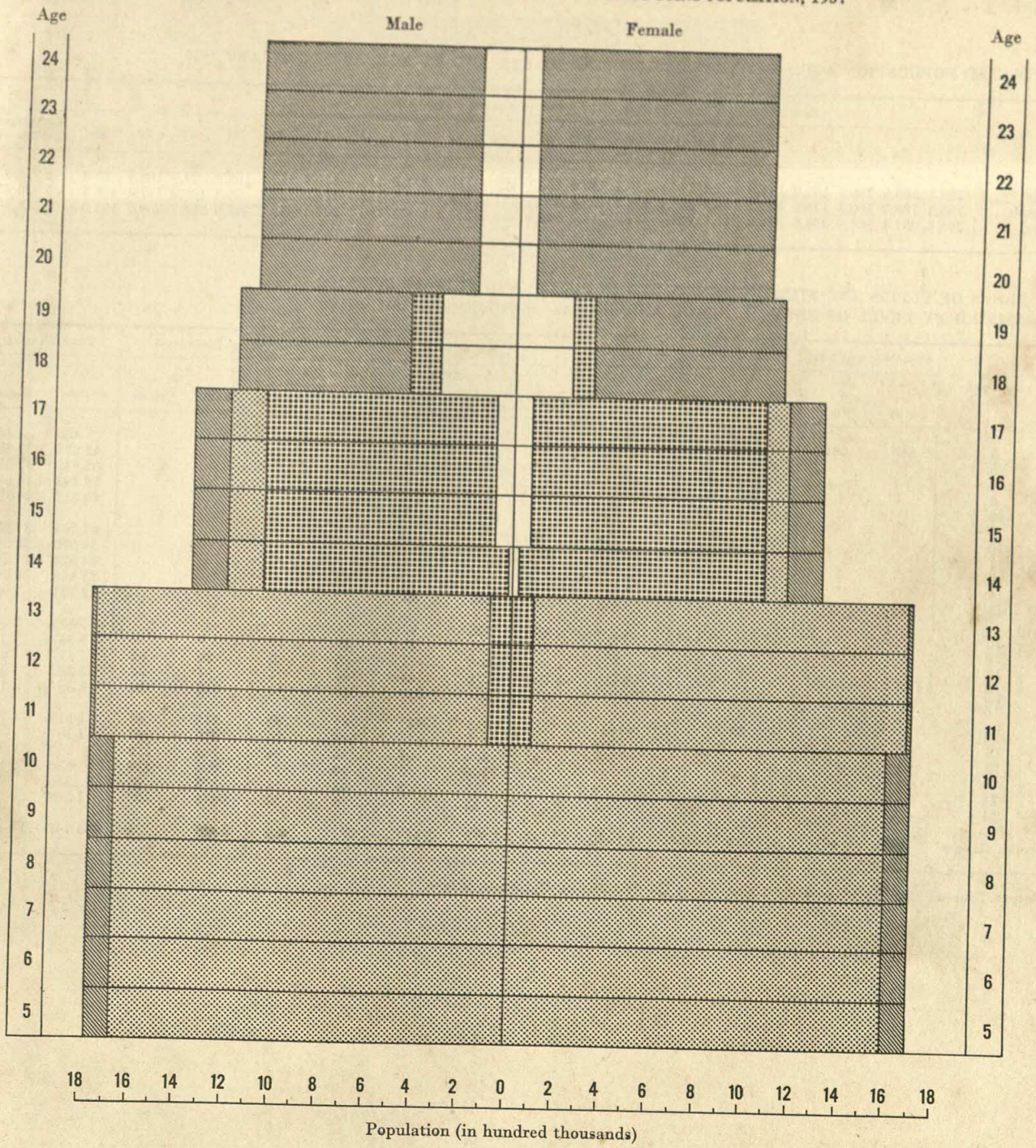
(in thousands)

Age-group	Elementary and kindergarten		High school		College or professional school		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
5–13	14 922	14 257	261	284	–	–	15 182	14 541
14–17	617	354	4 164	4 144	73	94	4 854	4 591
18–19	4	6	273	167	621	493	898	667
20–24	7	1	56	23	850	371	915	393
25–29	3	1	41	24	439	95	483	121
30–34	2	1	18	28	146	60	165	90
Total, 5–34 . . .	15 555	14 620	4 613	4 669	2 129	1 113	22 497	20 404

Source. Statistical abstract of the United States, 1959.

1. Figures represent total population including armed forces overseas.

UNITED STATES OF AMERICA. SCHOOL-AGE AND SCHOOL-GOING POPULATION, 1957



Notes on diagram

1. For key to hatching, see page 43.

2. Population and enrolments have been distributed evenly over the years covered.

VIET-NAM

ESTIMATED POPULATION AGED 5–24 YEARS, CLASSIFIED BY SEX AND BY AGE, AS OF JANUARY 1959

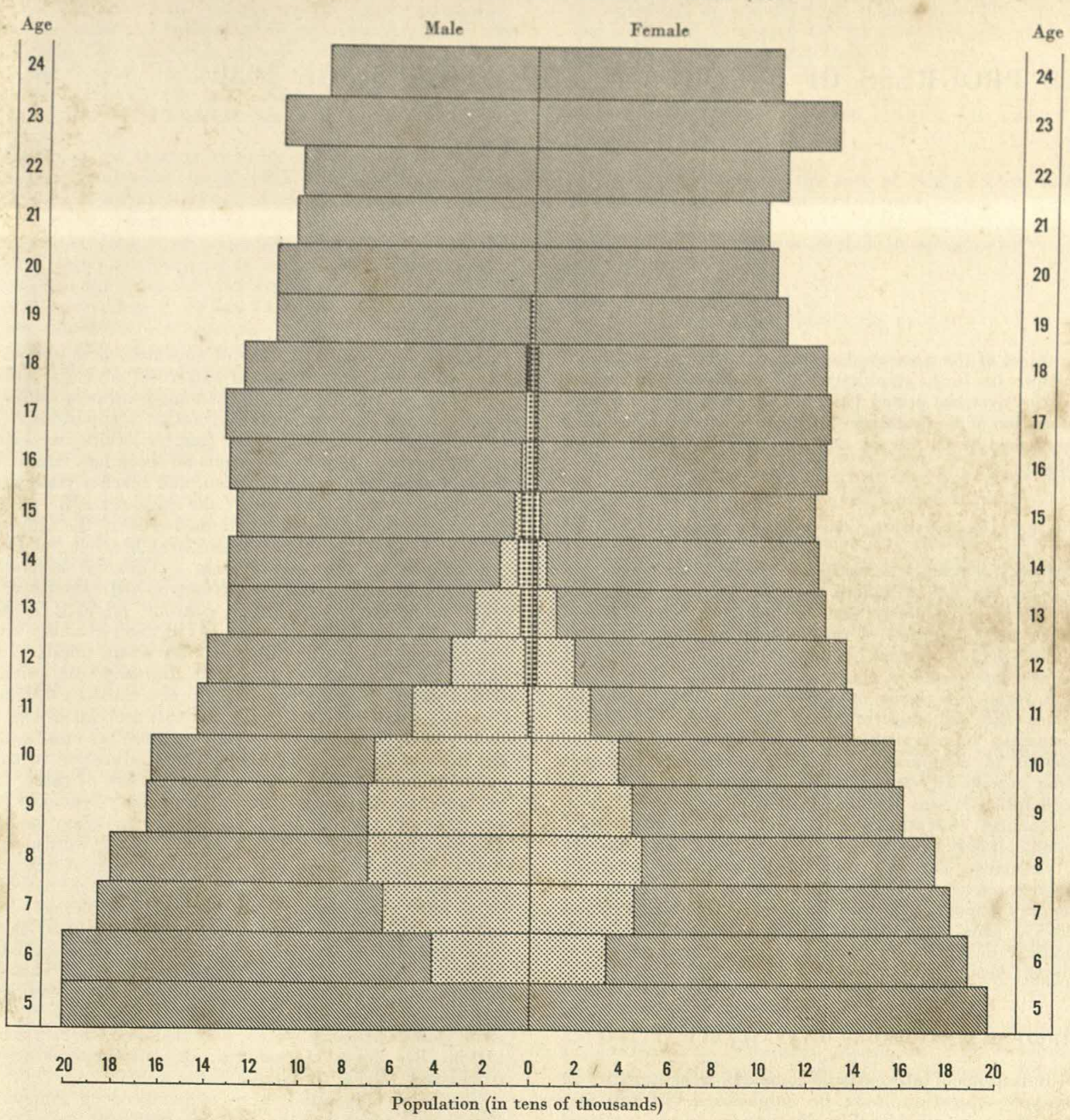
Sex	Number of persons (thousands)																			Total, aged 5–24 years
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Male .	200.5	200.5	186.7	182.0	164.8	163.0	144.6	139.5	130.6	131.1	128.1	130.9	131.8	125.0	110.9	110.5	102.2	98.9	108.1	88.7	2 778.6
Female .	196.3	186.9	180.3	174.6	161.2	155.9	137.8	134.6	125.6	123.5	121.0	126.7	127.5	125.7	110.2	104.7	99.8	109.8	131.1	106.3	2 739.7
Total .	396.8	387.4	367.0	356.6	326.0	318.9	282.4	274.1	256.2	254.6	249.1	257.6	259.3	250.7	221.1	215.2	202.0	208.7	239.2	195.0	5 518.3

NUMBERS OF PUPILS AND STUDENTS ENROLLED IN PUBLIC AND PRIVATE SCHOOLS, CLASSIFIED BY LEVEL OF EDUCATION, AGE AND SEX, AS OF NOVEMBER 1957

Age in completed years	Preceding first level		First level		Second level						Third level		Total, all levels	
					General		Vocational		Teacher training					
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
5	486	481											486	481
6			42 275	32 722									42 275	32 722
7			62 845	45 510									62 845	45 510
8			70 492	48 077									70 492	48 077
9			70 317	44 101									70 317	44 101
10			67 690	37 971	14	15							67 704	37 986
11			50 267	26 074	773	322							51 040	26 396
12			32 115	16 925	2 409	839							34 524	17 764
13			19 151	9 302	4 317	1 565							23 468	10 867
14			7 130	3 834	5 416	2 129	175	25					12 721	5 988
15			2 596	1 012	4 927	2 469	306	92					7 829	3 573
16			841	234	3 067	1 824	385	144	45	12	9	–	4 347	2 214
17			189	57	2 728	1 574	445	172	85	48	30	25	3 477	1 876
18			59	10	2 180	1 190	756	243	196	75	91	20	3 282	1 538
19			39	–	1 235	659	631	346	221	95	181	40	2 307	1 140
20			28	1	631	350	453	237	196	93	318	65	1 626	746
21					282	138	318	115	149	61	358	95	1 107	409
22					105	48	229	62	94	54	364	118	792	282
23					39	12	195	8	34	17	370	122	638	159
24					7	5	51	5	25	11	273	86	356	107
24+					–	3	32	–	6	10	1 471	183	1 509	196
Total, all ages	486	481	426 034	265 830	28 130	13 142	3 976	1 449	1 051	476	3 465	754	463 142	282 132

Source. Bureau des Statistiques du Département de l'Éducation Nationale, Saigon.

VIET-NAM. SCHOOL-AGE AND SCHOOL-GOING POPULATION, 1957



Note on diagram

For key to hatching, see page 43.

CHAPTER III

THE PROGRESS OF SECONDARY EDUCATION SINCE 1930

The object of the present chapter is to survey quantitative developments in the secondary level of education in various countries over the period 1930–57. The following is a brief explanation of the problems of definition and comparability encountered in the survey and the methods of calculation adopted.

TIME PERIOD COVERED BY THE SURVEY

Generally speaking, the statistics available on secondary education are less complete than for primary education and this is particularly true of countries whose school systems are in process of rapid evolution. Consequently, the time period covered by data on secondary education does not correspond in many cases to the 28-year period which forms the basis of this chapter. This might be because the sequence of years for which comparable information was available was very limited, or because problems of comparability became more complex over a long period. In spite of these limitations, which were considerable, it was felt worthwhile to present the data on secondary education over the entire time period when available, if only to discern a long term trend in a relatively few countries. The first part of the statistical analysis, therefore, concerns 41 countries for which statistics on secondary education are available over the whole period 1930–57. The second part of the analysis deals with secondary education in 93 countries and territories over the eight years 1950–57.

PRINCIPAL LIMITATIONS OF AVAILABLE STATISTICS

The limitations of international comparisons of statistics on secondary education must be emphasized. In the first place, there is considerable divergency in the national definitions of 'secondary education', a term which in some countries refers only to general or academic education at this level. An appropriate working definition, for the purpose of this analysis, is that adopted by the International Advisory Committee on the School Curriculum[1] in which the secondary stage of education is described as 'a broad based and diversified pattern of education which will cater for the needs of individuals possessing different aptitudes and likely to go into different occupations'.

The statistics used in this chapter divide secondary enrolment into three streams: general secondary education, vocational or technical education, and teacher training at secondary level. Unfortunately the data available are not always complete and distinctions between the different sectors of secondary education are often blurred.

Problems in the classification of general secondary education arose in the case of countries with intermediate level secondary schools. The solution adopted in this survey was to classify such schools at the secondary level, even though this means that in a few cases pupils of the same age and educational level are counted with primary school pupils in systems where the intermediate category does not exist. In practical terms, this method of classification tends to present in a relatively more favourable light the level of development of secondary education in those countries having an intermediate stage, say of three, four or five years' duration, following a primary school of four years, and in turn leading to an upper secondary stage of another three, four or five years. In other words, these countries are considered as having a total range of secondary education extending over seven to nine years, based on only four years of primary education, whereas other countries without the intermediate stage would be shown with only four or five years of secondary schooling based on seven or eight years of primary education. This discrepancy obviously affects comparability between countries, but does not invalidate comparisons over time for the same countries, except in the rare instance where a school system has been reorganized, or enrolment statistics reclassified, during the period under review.

Particular difficulties were experienced in comparing vocational education on an international basis. The structure of vocational education is undergoing change in many countries and the introduction of new courses affects comparability of figures from year to year. The relation of this sector to general secondary education is not always clear—the existence of secondary comprehensive schools with simultaneous academic and practical courses, in certain cases, complicates the task of obtaining separate data on vocational education. Some countries

1. Report of the fourth session of the International Advisory Committee on the School Curriculum, Paris, 1960. (Unesco/ED/171.)

reported part-time and post-school vocational education; others included such courses under adult education. Private commercial courses in subjects like shorthand and typing are fully reported in some cases and entirely omitted in other returns. The range of vocational education is vast and probably the most imperfectly reported of the three sectors of secondary education presented in this chapter.

Enrolment in teacher training at secondary level also presents difficulties of classification. Such training is almost always preceded by a period of varying length in general secondary education; thus, in many cases, teacher training extends the length of secondary schooling beyond the general secondary course. It is debatable whether the 'post secondary' teacher training which is, however, not of university degree standard should be considered as higher education. In general, a conservative approach has been followed and non-university teacher training is here classified as secondary education, unless the completion of general secondary education is a definite pre-requisite to the teacher training course.

Apart from these reservations, as a quantitative measure of the development of secondary education, pupil enrolment figures are still the best available. The alternative elements which might be used are the number of schools or the number of teachers. But as indices of progress in secondary education both are subject to much stronger objections than enrolment data.[1]

No attempt has been made in this survey to cover the progress made in secondary education in its broader sense. The content of curricula in different countries and changes in the scope of secondary school courses of a general or vocational nature are treated in detail in later chapters. A partial analysis of examination results in secondary education is given in Chapter I.

SECONDARY ENROLMENT IN RELATION TO POPULATION

As a statistical measure in analysing the development of secondary education on an international basis, it was decided to adopt in every case an arbitrary and frequently estimated age group covering the population 15–19 years old, and to calculate a percentage ratio relating pupil enrolment in secondary education to this population group. The resulting percentage ratio is referred to as a secondary enrolment ratio. This ratio rises, remains stationary or falls over the periods under review, and provides a rough indication of quantitative advance in secondary enrolment.

The ratio has no real significance for delimiting the age group normally covered by secondary education. It is merely a convenient measure useful for international comparisons; it may be added that the application of this very approximate secondary enrolment ratio to the statistical data under consideration has on the whole justified its use. The preliminary general impression of the extent and distribution of secondary school enrolment in the world and its probable rate of growth in different areas was confirmed in regard to the countries for which the data were analysed on this basis.

1. See *World Survey of Education: II–Primary Education*, Chapter III, page 45, on the difficulties encountered in using the number of schools, classes or teachers as a measure of progress in education.

MEASUREMENT OF CHANGES IN THE SECONDARY ENROLMENT RATIO

It is useful to measure the rate of change in secondary enrolment ratios as a means of comparing progress between countries. For this purpose the geometric rate of increase or decrease in the ratio was obtained by using the expression:

$$P_n = P_o (1 \pm r)^t$$

$$\text{or} \quad \frac{\log P_n - \log P_o}{t} = \log (1 \pm r)$$

In which P_o = amount at beginning of period
P_n = amount at end of period
r = rate of increase or decrease per year
t = number of years $(n - o)$

Thus this formula can be used when the values of P are available at the beginning and the end of the period under question, to arrive at an average rate of increase (or decrease).

The annual rate of increase in the enrolment ratio is a valuable indication of the growth of secondary enrolment for countries at various stages of educational development. For convenience, this rate is shown in the following tables as a percentage rate (i.e. $r \times 100$) and generally rounded to the first decimal place (tenth of a percentage unit).

COVERAGE OF THE STATISTICAL ANALYSIS

Although information is not available for all countries and territories of the world the analysis in this chapter shows data for 93 countries for the period 1950–57 and for 41 countries for the period 1930–34 to 1950–57. More detailed trend tables are presented in the respective country chapters in this volume. As far as possible, population and enrolment figures are given as five-year averages.

The data for child population were taken, where possible, from census results or current estimates of the population classified by age. In most cases, they were estimated by applying the percentage represented by the child population 15–19 years old in the nearest census or official estimate to the average total population of the period.

The considerable lack of precision in the estimated population data necessarily affects the enrolment ratio, and hence small changes in the ratio should not be regarded as significant.

CLASSIFICATION OF COUNTRIES BY LEVEL OF SECONDARY ENROLMENT RATIO

For convenience, the countries and territories covered in this survey have been grouped in four categories, indicating roughly the relative level of development of their secondary school systems. Subject to the practical limitations

mentioned above, the classification adopted is based on the level of the secondary enrolment ratio at the beginning of a time period, e.g., average 1930–34.

1. Countries with an initial secondary enrolment ratio under 10, which may be characterized as 'underdeveloped' in this respect.
2. Countries with an initial secondary enrolment ratio between 10 and 25, which may be characterized as 'developing' in this context.
3. Countries with an initial secondary enrolment ratio between 25 and 50, which may be characterized as 'moderately developed'.
4. Countries with an initial secondary enrolment ratio over 50, which may thus be characterized as 'well developed'.

PROGRESS OF SECONDARY ENROLMENT, 1930–57

Table 1 shows data for only 41 countries; nevertheless it provides a starting point for analysing the progress achieved in secondary education over the period 1930–57. Secondary education in countries with an initial enrolment ratio under 10 grew most rapidly. The median ratio for this 'underdeveloped' group of countries rose from 4 to 16 between 1930–34 and 1955–57 at a median annual rate of 5.6 per cent. Such countries represented nearly half the number

TABLE 1. Median secondary enrolment ratio and its rate of increase in 41 countries between 1930–34 and 1955–57

Secondary enrolment ratio in 1930–34	Number of countries	Median secondary enrolment ratio		Median annual percentage rate of increase
		1930–34	1955–57	
Under 10	18	4	16	5.6
10–24	13	15	39	3.7
25–49	8	34	72	3.8
50 and over	2	56	81	1.5
All countries	41	12	26	4.1

TABLE 2. Distribution of 41 countries showing movement of secondary enrolment ratios between 1930–34 and 1955–57

Secondary enrolment ratio 1930–34	Under 10 ('Underdeveloped')	10–24 ('Developing')	25–49 ('Moderately developed')	50 and over ('Well developed')
50 and over ('Well developed')				England and Wales (G) United States of America (GV)
25–49 ('Moderately developed')				Australia (G) Canada (GV) Denmark (GVT) Monaco (G) Netherlands (GVT) New Zealand (G) Northern Ireland (GV) Scotland (G)
10–24 ('Developing')		Austria (GT) Burma (G)	Alaska (G) Ceylon (GT) Chile (GVT) France (GVT) Ireland (GVT) Italy (GVT) Luxembourg (GVT) Sweden (GT)	Finland (GVT) Japan (GVT) Norway (GVT)
Under 10 ('Underdeveloped')	Angola (GV) Cambodia (GVT) Cape Verde (G) Mozambique (GV) Philippines (GVT) Réunion (G)	Brazil (GVT) Guadeloupe (GV) Hungary (GVT) India (GVT) Portugal (GVT) Spain (GVT) Surinam (G) Thailand (GV) Turkey (GVT)	Argentine (GVT) China (Taiwan) (GVT) Guam (GV)	
	Under 10 ('Underdeveloped')	10–24 ('Developing')	25–49 ('Moderately developed')	50 and over ('Well developed')

Secondary enrolment ratio 1955–57

G = General secondary education.
V = Vocational secondary education.
T = Teacher training at secondary level.

under analysis. The next most numerous group were countries with an initial ratio between 10 and 25 and their progress was also very rapid. The median secondary enrolment ratio for this 'developing' group was two and a half times as high in 1955–57 as in 1930–34, having risen at a median annual rate of 3.7 per cent. Eight countries with secondary enrolment ratios within the 'moderately developed' group doubled their ratios over the period under review at a median annual rate of 3.8 per cent. Only two countries were classified as 'well developed' and their rate of progress was necessarily slower. Nevertheless their median enrolment ratio rose from 56 to 81 at a median annual rate of 1.5 per cent.

The secondary enrolment ratio for all 41 countries combined doubled between 1930–34 and 1955–57 at a median annual rate of 4.1 per cent.

This preliminary analysis permits tentative conclusions of general application. First, the majority of countries fall within the groups, 'underdeveloped' and 'developing'. Secondly, it is within these groups that the most rapid rates of growth can be expected.

The limited number of countries for which data over the full 28 year period are available do not justify a breakdown by continent. Table 2, however, shows the movement of the secondary school ratios in the individual countries between 1930–34 and 1955–57 within the broad categories as defined.

The conclusions that might be drawn from Table 2 are that most countries promoted themselves through one or two categories of development over the 28 years 1930–57. The exceptions were four African countries, and two Asian countries which remained in the lowest category, and Austria and Burma which were stationary in the 10–24 category at the beginning and at the end of the period. On the whole, however, there was general progress in developing secondary education at all levels between 1930–34 and 1955–57. Perhaps the most encouraging feature was the rapid strides made by the least developed countries towards higher levels of enrolment in secondary education.

It should be noted that the code in brackets after each country denotes the coverage of the enrolment data available. Thus GVT indicates that data covered all three sectors of secondary education—general, vocational, and teacher training; GV indicates the inclusion of both general and vocational secondary education; G alone means only general secondary enrolment is covered. In a very few cases, where data for only one or two sectors of secondary education are available, the classification of the country may be underrated. This is the case for Sweden, for example, for which vocational enrolment is not available at the beginning of the period. In general, however, on the basis of available data, the omission of vocational or teacher training enrolment did not affect the category in which the country would be placed.

Table 3 shows the rate of progress in secondary enrolment achieved by 41 countries irrespective of their level of enrolment. Only two countries, Austria and Burma,

TABLE 3. Distribution of 41 countries by annual rates of increase in secondary enrolment ratios between 1930–34 to 1955–57 or approximately similar periods

Countries whose secondary enrolment ratio decreased between 1930–34 and 1955–57	Coverage	Countries with an annual increase in enrolment ratio of under 5 per cent	Coverage	Countries with an annual increase in enrolment ratio between 5 and 10 per cent	Coverage	Countries whose annual increase in enrolment ratio exceeded 10 per cent	Coverage
Austria	GT	Alaska	G	Argentina	GVT	Cambodia	GVT
Burma	G	Angola	GV	Brazil	GVT	Guadeloupe	GV
		Australia	G	Ceylon	GT	Guam	GV
		Canada	GV	China (Taiwan)	GVT		
		Cape Verde Islands	G	France	GVT		
		Chile	GVT	Hungary	GVT		
		Denmark	GVT	India	GVT		
		England and Wales	G	Italy	GVT		
		Finland	GVT	Japan	GVT		
		Ireland	GVT	Spain	GVT		
		Luxembourg	GVT	Thailand	GV		
		Monaco	G				
		Mozambique	GV				
		Netherlands	GVT				
		New Zealand	G				
		Northern Ireland	GV				
		Norway	GVT				
		Philippines	GVT				
		Portugal	GVT				
		Réunion	G				
		Scotland	G				
		Sweden[1]	GT				
		Surinam	G				
		Turkey	GVT				
		United States of America	GV				

G = General secondary education.
V = Vocational secondary education.
T = Teacher training at secondary level.
1. Excluding substantial enrolment in vocational education.

registered a very small decrease in their ratios. Some twenty-five countries achieved annual increases in their enrolment ratios of less than 5 per cent and this group included twelve European countries, four African countries, three in Northern America and two countries in each of the following regions: Middle and South America, Oceania and Asia. Eleven countries achieved annual increases of between 5 and 10 per cent including five Asian, two South American, and four European countries. Only three countries increased their secondary enrolment ratios at an annual rate exceeding 10 per cent and all were countries whose initial secondary enrolment was very small, giving rise to proportionately high increases in their ratios. For example, in Cambodia, average total enrolment in secondary education rose from 600 pupils over the period 1930–34 to 10,200 pupils in the years 1955–57. Hence the number of pupils increased seventeen fold over 28 years. The initial level of secondary enrolment in relation to the estimated population 15–19 years old was very low; nevertheless the ratio rose from 0.2 to 2.4 over 28 years, representing an average annual rate of increase of nearly 11 per cent.

The analysis so far is represented graphically in the facing diagram. The detailed figures will be found in Table 11 at the end of this chapter.

PROGRESS OF SECONDARY ENROLMENT, 1950–57

This section is concerned with the more recent trend in secondary education and covers the period of eight years between 1950 and 1957. The number of countries brought into the analysis rises from 41 to 93. Roughly speaking, this sample of 93 countries covers 86 per cent of the world population. By continent, the data are also, with the exception of Africa,[1] reasonably representative, covering approximately 95 per cent of population in North America, 94 per cent in South America, 90 per cent in Asia, 81 per cent in Europe, 78 per cent Oceania, and 42 per cent in Africa. Figures for the U.S.S.R. are also available for this period for upper secondary school enrolment.[2]

Table 4 repeats the pattern already observed in Table 1, but for a larger number of countries over a shorter time. The years between 1950 and 1957 appear to have been a period of very rapid advance in secondary education, particularly in the 'underdeveloped' countries. The largest number of countries analysed falls within this category and it is this group which achieved the most rapid rates of increase; over the eight years under review their median enrolment ratio rose from 3.6 to 5.6 at a median annual rate of 11.5 per cent.

The 'developing' group of countries with ratios between 10 and 25 also advanced fairly rapidly between 1950 and 1957 though their median annual rate of increase was much less than that of the preceding category; the median enrolment ratio rose from 16 to 21 at a median annual rate of 5.1 per cent.

In the 'moderately developed' group of countries the ratio increased from 35 to 42 at a median annual rate of 4.7 per cent. In the group of countries with the highest enrolment ratios the median enrolment ratio increased from 70 to 80 with a median annual rate of increase of 3 per cent.

TABLE 4. Median secondary enrolment ratio and its rate of increase in 93 countries between 1950–54 and 1955–57

Secondary enrolment ratio in 1950–54	Number of countries	Median secondary enrolment ratio		Median annual percentage rate of increase
		1950–54	1955–57	
Under 10	43	3.6	5.6	11.5
10–24	23	16	21	5.1
25–49	15	35	42	4.7
50 and over	12	70	80	3.0
All countries	93	11	13	5.7

Table 5 corresponds to Table 2 but for a shorter period of time and for more than double the number of countries. Although the rate of advance in secondary education has been particularly rapid in recent years, this table clearly could not be expected to show such a spectacular movement of countries between categories of enrolment ratios as was observed over the 28-year period in Table 2. Nevertheless, the proportion of countries with the lowest ratios is again particularly encouraging. While a comparatively large number (34) remained in the lowest category at the beginning and at the end of the period, nine entered the next higher group, including four South American and three Asian countries. One third of the 'developing' group also rose to the next higher category by the end of the period. These promotions included three Asian and three Middle and South American countries. In the two highest categories progress in enrolment is more marginal and hence the movement between categories is less striking than in the countries still developing their secondary school systems. However, the scope for further advance in the moderately developed category is quite considerable and this group of countries includes a fair number in Europe.

Table 6 shows the distribution of 93 countries by continent with their corresponding median secondary enrolment ratios. Twenty-two African countries had a very low median enrolment ratio in 1950–54 of approximately 1.8. During the period 1950–57, however, their median ratio increased to 3.3 at a median annual rate of 9.2 per cent. In 19 Asian countries, progress was even more spectacular; their median enrolment ratio almost doubled from 8 to 15 and the median annual rate of increase was over 11 per cent. Thus it is broadly true to say that in Asia and Africa, where the level of secondary school enrolment is the lowest, the largest strides have been made in recent years. In 20 Middle and South American countries the median ratio rose from 11 to 13 over the eight years under review at a median annual rate of 4.8. A high median annual rate of increase of over 7 per cent was achieved in the U.S.S.R.[1], and in five countries of Oceania, despite

1. Unfortunately, time limitations made it impossible to assemble comparable data on secondary enrolment trends for many of the newly independent States in Africa.
2. Grades 8–11 of general secondary schools.

1. This increase refers to the higher grades (8–11) of general secondary enrolment. In the lower grades (5–7) the trend in enrolment shows a decline. (See Chapter I.)

CHANGES IN SECONDARY ENROLMENT RATIOS IN SELECTED COUNTRIES

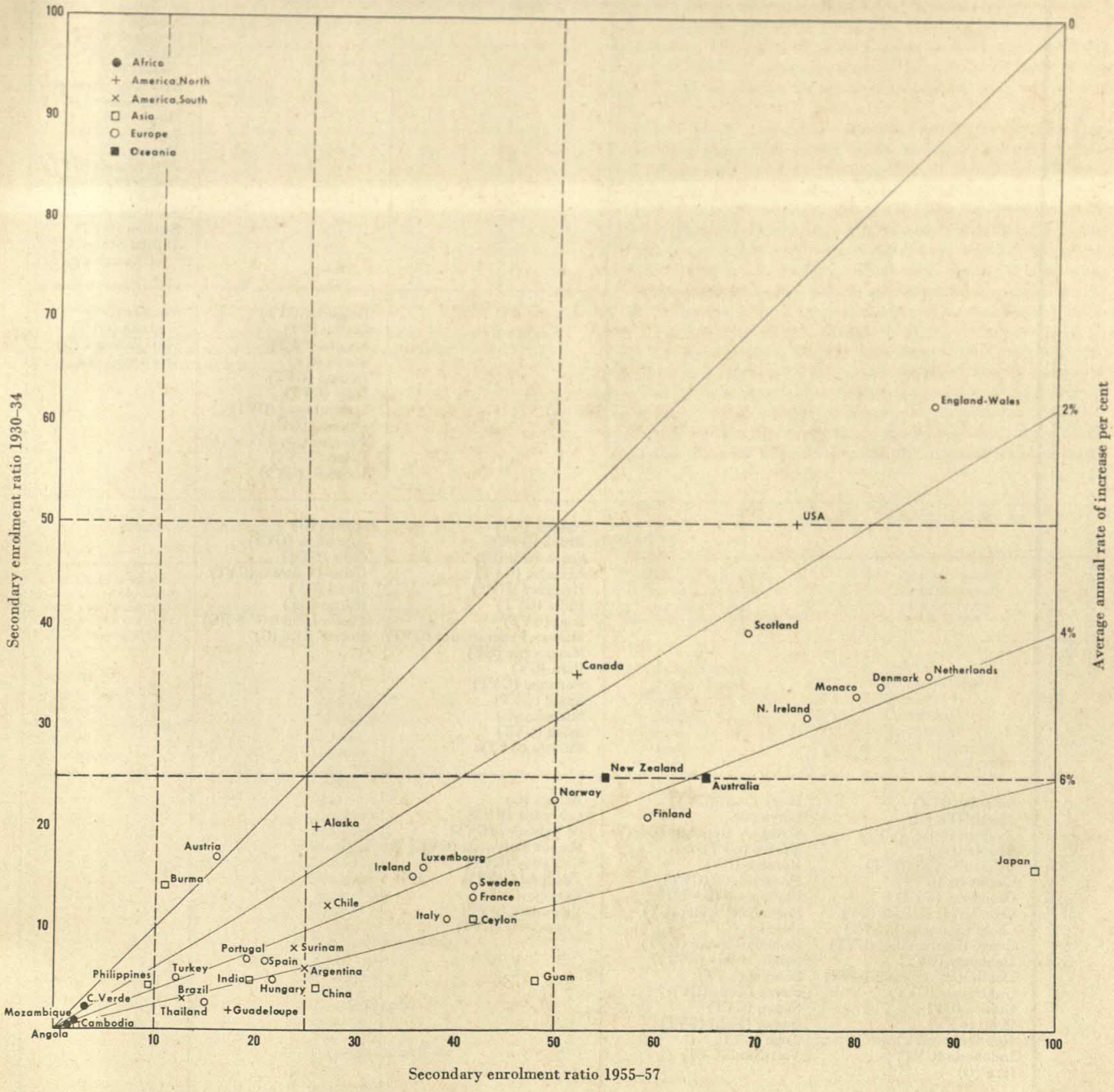


TABLE 5. Distribution of 93 countries showing movement of secondary enrolment ratios between 1950–54 and 1955–57

Secondary enrolment ratios 1950–54	Under 10 ('Underdeveloped')	10–24 ('Developing')	25–49 ('Moderately developed')	50 and over ('Well developed')
50 and over ('Well developed')				Australia (G) Denmark (GVT) England and Wales (G) Germany, Federal Republic of (GV) Hawaii (G) Japan (GVT[1]) Monaco (G) Netherlands (GVT) Northern Ireland (GV) Scotland (G) Sweden (GVT) United States of America (GV)
25–49 ('Moderately developed')			Bulgaria (GVT) Ceylon (GT) France (GVT) Guam (GV) Ireland (GVT) Italy (GVT) Luxembourg (GVT) Panama (GVT) Panama Canal Zone (G) Poland (GVT) U.S.S.R. (GVT)	Canada (GV) Finland (GVT) New Zealand (G) Norway (GVT)
10–24 ('Developing')		Austria (GT) Brazil (GVT) Costa Rica (G) Ecuador (GVT) Hungary (GVT) India (GVT) Iraq (GVT) Malaya, Federation of (GVT) Martinique (GV) Peru (GV) Portugal (GVT) Spain (GVT) Surinam (G) Syria (GVT) Tunisia (GVT)	Alaska (G) Argentina (GVT) Chile (GVT) China (Taiwan) (GVT) Israel (GV) Macao (GV) Pacific Islands (U.S.) (G) Puerto Rico (G)	
Under 10 ('Underdeveloped')	Albania (GVT) Algeria (French *départements*) (GVT) Angola (GV) Belgian Congo (GVT) Cambodia (GVT) Cameroun (GVT) Cape Verde Islands (GV) China (Mainland) (GVT) Congo (Brazzaville) (GVT) Dahomey (GVT) Dominican Republic (GVT) Guatemala (GVT) Guinea (GV) Haiti (GVT) Honduras (GVT) Indonesia (GVT) Iran (G) Ivory Coast (GVT) Libya (G) Malagasy Republic (GVT) Mexico (GVT) Morocco (GV) Mozambique (GVT) Philippines (GVT[1]) Portuguese India (GV) Réunion (G) Ruanda-Urundi (GVT) Saudi Arabia (GVT) Senegal (GVT) Sierra Leone (GV) Sudan (GVT) Sudan (Mali) (GVT) Togo (GVT) Viet-Nam (GVT)	Burma (G) Colombia (GVT) El Salvador (GVT) French Polynesia (GV) Paraguay (GVT) Thailand (GVT[1]) Turkey (GVT) Venezuela (GVT) Yugoslavia (GVT)		

Secondary enrolment ratio 1955–57

G = General secondary education.
V = Vocational or technical secondary education.
T = Teacher training at the secondary level.
1. Secondary teacher training ceased during the period 1950–57.

TABLE 6. Distribution of 93 countries by continent showing median secondary enrolment ratios in 1950–54 and 1955–57 and median percentage rate of increase

Region	Number of countries	Median secondary enrolment ratio		Median annual percentage rate of increase
		1950–54	1955–57	
Africa	22	1.8	3.3	9.2
Northern America[1]	4	53	62	3.8
Middle and South America	20	11	13	4.8
Asia	19	8	15	11.2
Europe	22	32	40	3.8
U.S.S.R.	1	27	36	7.4
Oceania	5	36	48	7.4
All countries	93	11	15	5.7

1. This region comprises Canada and the United States, with Alaska and Hawaii calculated separately, since the period covered precedes their statehood within the U.S.A.

relatively high initial enrolment ratios. In Northern America and in Europe, where the highest levels of enrolment ratios are concentrated, the median annual rate of increase was 3.8 per cent. The median secondary enrolment ratio for all 93 countries was 11 in 1950–54 and 15 in 1955–57, having risen at a median annual rate of 5.7 per cent.

Table 7 gives a greater appreciation of the wide range of rates of progress within each regional grouping. The rates of increase in secondary enrolment ratios in the same 93 countries are shown irrespective of their level of enrolment. For seven countries the secondary enrolment ratios were unchanged or decreased between 1950–54 and 1955–57. These comprise three European, two Middle American and two African countries. The remaining 86 countries are divided fairly evenly into three groups: firstly, a group of 32 countries whose annual increase in enrolment ratio was under 5 per cent, which includes 10 European, 4 Northern American, 4 Middle American, 5 South American, 4 African, 3 Asian and 2 Oceanic countries. The subsequent group of 25 countries achieving an annual increase between 5 and 10 per cent includes 9 European, 6 African, 2 Middle American, 2 South American, 4 Asian and 2 Oceanic countries. The 29 countries with the highest annual rates

TABLE 7. Distribution of 93 countries and annual rates of increase in secondary enrolment ratios between 1950–54 to 1955–57 or approximately similar periods

Countries whose secondary enrolment ratio was unchanged or decreased between 1950–54 and 1955–57	Coverage	Countries with an annual increase in enrolment ratio of under 5 per cent	Coverage	Countries with an annual increase in enrolment ratio between 5 and 10 per cent	Coverage	Countries whose annual increase in enrolment ratio exceeded 10 per cent	Coverage
Austria	GT	Alaska	G	Algeria (French *départements*)	GVT	Angola	GV
Congo (Brazzaville)	GVT	Albania	GVT	Bulgaria	GVT	Belgian Congo	GVT
Dominican Republic	GVT	Argentina	GVT	Colombia	GVT	Burma	G
Germany, Fed. Rep. of	GV	Australia	G	Finland	GVT	Cambodia	GVT
Guatemala	GVT	Brazil	GVT	France	GVT	Cameroun	GVT
Mozambique	GVT	Canada	GV	Guam	GV	China (Taiwan)	GVT
Poland	GVT	Cape Verde Islands	GV	Haiti	GVT	China (Mainland)	GVT
		Ceylon	GT	India	GVT	Costa Rica	G
		Chile	GVT	Iraq	GVT	Dahomey	GVT
		Denmark	GVT	Israel	GV	El Salvador	GVT
		Ecuador	GVT	Luxembourg	GVT	French Polynesia	GV
		England and Wales	G	Macao	GV	Guinea	GV
		Hawaii	G	Morocco	GV	Honduras	GVT
		Hungary	GVT	Netherlands	GVT	Indonesia	GVT
		Ireland	GVT	Northern Ireland	GV	Iran	G
		Italy	GVT	Pacific Islands (U.S.)	G	Ivory Coast	GVT
		Japan	GVT[1]	Paraguay	GVT	Libya	G
		Malagasy Republic	GVT	Puerto Rico	G	Malaya, Fed. of	GVT
		Martinique	GV	Ruanda-Urundi	GVT	Portugal	GVT
		Mexico	GVT	Sudan (Mali)	GVT	Portuguese India	GV
		Monaco	G	Senegal	GVT	Réunion	G
		New Zealand	G	Spain	GVT	Saudi Arabia	GVT
		Norway	GVT	Togo	GVT	Sierra Leone	GV
		Panama	GVT	U.S.S.R.	GVT	Sudan	GVT
		Panama Canal Zone	GV	Yugoslavia	GVT	Surinam	G
		Peru	GV			Thailand	GVT[1]
		Philippines	GVT[1]			Turkey	GVT
		Scotland	G			Venezuela	GVT
		Sweden	GVT			Viet-Nam	GVT
		Syria	GVT				
		Tunisia	GVT				
		United States of America	GV				

G = General secondary education.
V = Vocational or technical secondary education.
T = Teacher training at secondary level.
1. Secondary teacher training ceased during the period 1950–57.

of increase include 12 Asian, 10 African, 4 Middle American, 1 South American, 1 European and 1 Oceanic country.

Thus the continental distribution of the countries within the highest category of increases confirms the conclusions tentatively advanced in the analysis of Table 6, namely that it is in a group of African and Asian countries that the rate of advance in secondary education in recent years has been the most rapid.

At the end of this Chapter, Table 12 summarizes the data for secondary enrolment and population used in the preceding analysis. The 93 countries are grouped by continent in alphabetical order. Further details of coverage will be found in the respective country chapters.

PROGRESS OF ENROLMENT SINCE 1930 IN THE DIFFERENT SECTORS OF SECONDARY EDUCATION

There are only a limited number of countries for which enrolment data on a comparable basis are available over the period 1930–57 giving a breakdown into general, vocational and teacher training enrolments respectively. The following analysis covers a rather small group of 15 countries which cannot be claimed as representative. They include four Asian, three South American and eight European countries. No African, North American or Oceanic country is included. The comments and conclusions on the following tables, regarding the relative weight and importance of general vocational and secondary teacher training respectively, should be regarded as purely tentative.

General secondary education. General secondary education forms the base of the pyramid to further secondary education of a vocational nature, either technical or pedagogic, and to higher educational institutions. As expected, Table 8 confirms that general secondary education is by far the largest element in secondary education, representing on an average about two-thirds of total enrolment. In 1955–57 the lowest proportion of enrolment in general secondary education was found in Argentina (24 per cent) and the highest in India (97 per cent). It should, however, be mentioned that data on other sectors of secondary education are inclined to be less fully reported.

Over the years 1930–57 the proportion represented by general secondary education in total enrolment did not substantially alter in most cases though it tended to rise by the end of the period under review. In the case of Japan and the Philippines the total elimination of secondary teacher training and at the same time a particularly rapid rise in enrolment between 1930 and 1957 explains the very marked rise in the proportion of general secondary enrolment.

Vocational secondary education. Table 9 shows that, on average, vocational secondary education accounted for somewhat more than a quarter of total secondary enrolment in the countries under review. The median percentage showed little change, standing at about 27 per cent both at the beginning and at the end of the period 1930–57. The lowest proportion of enrolment in vocational education was reported in India (2.2 per cent) and the highest proportions were observed in the Netherlands and Argentina (over 51 per cent in both cases) and in Norway (47 per cent).

Teacher training at secondary level. Enrolment in teacher training is the smallest numerical element in secondary enrolment in all the countries under review and its importance is generally diminishing as the process of upgrading teacher training to university level is gradually achieved. This transition was made by both Japan and the Philippines within the period 1930–57.

The median percentage represented by teacher training in the countries analysed in Table 10 declined from 3.1 in 1930–34 to 1.8 in 1955–57. By 1955–57 second level teacher training remained substantial in the three South American

TABLE 8. Enrolment in general secondary education in 15 countries in 1930–34, 1950–54 and 1955–57 or approximately similar periods

Country	1930–34		1950–54		1955–57	
	Average enrolment (000's)	Percentage of total secondary enrolment	Average enrolment (000's)	Percentage of total secondary enrolment	Average enrolment (000's)	Percentage of total secondary enrolment
Argentina	33	43.4	90	23.8	123	25.5
Brazil	67	55.8	477	75.0	594	72.0
Chile	37	62.4	90	62.1	126	69.6
China (Taiwan)	11	63.9	98	67.1	172	70.5
Finland	50	70.9	107	76.4	147	76.9
France	330	84.4	626	69.4	823	71.7
Hungary	25	56.8	64	46.0	94	58.0
India	1 255	94.3	5 631	96.3	7 120	96.5
Ireland	32	77.1	51	70.8	63	73.7
Japan	704	67.0	6 706	88.7	7 467	87.1
Luxembourg	2.6	81.2	3.1	51.7	4.1	55.4
Netherlands	124	46.1	263	46.1	345	47.6
Norway	25	52.1	41	46.1	54	50.7
Philippines	40	66.6	171	82.5	180	80.7
Portugal	28	57.3	61	58.5	82	56.7
Median (15 countries)	.	**63.9**	.	**67.1**	.	**70.5**

countries analysed, but was generally lower than 3 per cent of total secondary enrolment in the eight European countries included in the analysis.

CONCLUSIONS

To sum up, it can be said that the preceding analysis has demonstrated the usefulness of the secondary enrolment ratio and its annual rate of increase in measuring progress in secondary education. The classification of countries into broad categories based on the level of their enrolment ratios established that those with the lowest ratios were the most numerous. In the countries analysed for the periods of 1930–57 and 1950–57 respectively, it emerged that the majority of countries fall within the ratio categories 'under 10' and '10–25'. The former group comprised many African, Asian and South American countries, and the latter covered a very wide range, including certain European and Middle American countries.

The analysis of the rates of increase in enrolment ratios, led to the conclusion that progress in improving secondary enrolment has been rapid and sustained, especially in recent years. The highest rates of increase were found in countries with the lowest ratios and particularly in Asia and Africa. Progress in Middle and South American countries seemed slower despite the scope for development which undoubtedly exists in this region. In most of Europe,

TABLE 9. Enrolment in vocational secondary education in 15 countries in 1930–34, 1950–54 and 1955–57 or approximately similar periods

Country	1930–34		1950–54		1955–57	
	Average enrolment (000's)	Percentage of total secondary enrolment	Average enrolment (000's)	Percentage of total secondary enrolment	Average enrolment (000's)	Percentage of total secondary enrolment
Argentina	22	29.0	216	57.1	250	51.7
Brazil	28	23.3	113	17.8	165	20.0
Chile	21	35.4	50	34.5	48	26.5
China (Taiwan)	5	29.1	42	28.8	65	26.6
Finland	19	27.0	31	22.1	42	22.0
France	48	12.3	261	28.9	307	26.7
Hungary	9	20.5	62	44.6	63	38.9
India	46	3.5	139	2.4	166	2.2
Ireland	9	21.7	20	27.8	22	25.7
Japan	308	29.3	858	11.3	1 100	12.9
Luxembourg	0.5	15.7	2.8	46.7	3.1	41.9
Netherlands	143	53.1	301	52.8	372	51.3
Norway	23	46.1	46	51.7	50	46.9
Philippines	16	26.6	36	17.4	43	19.3
Portugal	20	41.0	41	39.3	60	41.5
Median (15 countries)	.	**27.0**	.	**28.9**	.	**26.6**

TABLE 10. Enrolment in secondary teacher training in 15 countries in 1930–34, 1950–54 and 1955–57 or approximately similar periods

Country	1930–34		1950–54		1955–57	
	Average enrolment (000's)	Percentage of total secondary enrolment	Average enrolment (000's)	Percentage of total secondary enrolment	Average enrolment (000's)	Percentage of total secondary enrolment
Argentina	21	27.6	72	19.1	110	22.8
Brazil	25	20.9	46	7.2	66	8.0
Chile	1.3	2.2	5	3.4	7	3.9
China (Taiwan)	1.2	7.0	6	4.1	7	2.9
Finland	1.5	2.1	2.1	1.5	2.2	1.1
France	13	3.3	15	1.7	18	1.6
Hungary	10	22.7	13	9.4	5	3.1
India	29	2.2	73	1.3	93	1.3
Ireland	0.5	1.2	1.0	1.4	0.5	0.6
Japan	38	3.7	–	–	–	–
Luxembourg	0.1	3.1	0.1	1.6	0.2	2.7
Netherlands	2.1	0.8	6	1.1	8	1.1
Norway	0.9	1.8	2.0	2.2	2.5	2.4
Philippines	4.1	6.8	0.2	0.1	–	–
Portugal	0.8	1.7	2.3	2.2	2.7	1.8
Median (15 countries)	.	**3.1**	.	**1.7**	.	**1.8**

parts of Oceania and Northern America the countries had already reached a high level of secondary school development at the beginning of the period under review; their rates of increase over the longer and shorter term periods analysed are necessarily much lower than those in countries relatively underdeveloped educationally.

The relative importance of enrolment in general and vocational education respectively over the periods under review showed apparently little change. General secondary education was roughly two-thirds and vocational training one-quarter of total secondary enrolment in the countries surveyed. On the other hand, the proportion of students in secondary teacher training was, with few exceptions, a numerically small and declining element in the total picture of secondary education.

In conclusion, it is interesting to note that the median rates of increase in enrolment ratios observed in secondary education far exceed the highest rates of increase achieved in primary education over corresponding periods, even by countries with the lowest level of educational development.[1] In mitigation it must, however, be added that primary education necessarily remains the broad and frequently compulsory base for all further education. Recruitment for secondary education remains selective; except in a very few countries no saturation point is yet discernible in enrolment of youth in the age groups appropriate to secondary education.

1. See *World Survey of Education: II–Primary Education*, Chapter III.

TABLE 11. Estimated population 15–19 years old, average enrolment in secondary schools, secondary enrolment ratio and average annual rate of increase in the ratio between 1930–34 and 1955–57 or approximately similar periods, in 41 countries

Country	Years or periods	Estimated mean population 15–19 years (000's)	Average enrolment in secondary schools (000's)	Coverage	Secondary enrolment ratios	Average annual rate of increase of the ratio
Alaska	1930–34	5	1.0	G	20	1.2
	1955–57	18	4.7	G	26	
Angola	1930–34	200	1.3	GV	0.6	4.2
	1955–57	363	5.8	GV	1.6	
Argentina	1930–34	1 235	76	GVT	6	6.1
	1955–57	1 929	483	GVT	25	
Australia	1930–34	611	151	G	25	4.1
	1955–57	641	418	G	65	
Austria	1930–34	391	67	GT	17	d
	1955–57	538	86	GT	16	
Brazil	1932–34	3 758	120	GVT	3	6.6
	1955–57	6 408	825	GVT	13	
Burma	1930	1 470	204	G	14	d
	1955–57	1 899	212	G	11	
Cambodia	1930–34	277	0.6	GVT	0.2	10.9
	1955–57	431	10.2	GVT	2.4	
Canada	1930–34	1 035	363	GV	35	1.6
	1955–57	1 168	602	GV	52	
Cape Verde Is.	1930–34	11	0.3	G	2.3	2.0
	1955–57	23	0.9	G	3.7	
Ceylon	1930–34	549	60	GT	11	5.7
	1955–57	818	343	GT	42	
Chile	1930–34	482	60	GVT	12	3.5
	1955–57	666	181	GVT	27	
China (Taiwan)	1930–34	472	17	GVT	4	8.1
	1955–57	931	244	GVT	26	
Denmark	1930–34	292	*100	GVT	*34	3.7
	1955–57	317	*260	GVT	82	
Finland	1930–34	329	70	GVT	21	4.4
	1955–57	327	192	GVT	59	
France	1930–34	2 911	391	GVT	13	5.0
	1955–57	2 731	1 148	GVT	42	
Guadeloupe	1931–34	28	0.6	GV	2.1	9.2
	1955–57	22	3.6	GV	17	
Guam	1930–34	2	0.1	GV	5	9.8
	1955–57	4	2.1	GV	48	
Hungary	1930–34	843	44	GVT	5	6.4
	1955–57	727	162	GVT	22	
India	1930–34	25 909	*1 330	GVT	5	5.9
	1955–57	38 819	7 379	GVT	19	
Ireland	1930–34	265	41	GVT	15	3.7
	1955–57	235	85	GVT	36	
Italy	1930–34	4 011	435	GVT	11	5.6
	1955–56	4 103	1 581	GVT	39	

Country	Years or periods	Estimated mean population 15–19 years (000's)	Average enrolment in secondary schools (000's)	Coverage	Secondary enrolment ratios	Average annual rate of increase of the ratio
Japan	1930–34	6 553	1 051	GVT[1]	16	7.8
	1955–57	8 750	8 567	GVT[1]	98	
Luxembourg	1930–34	21	3.4	GVT	16	3.5
	1955–57	20	7.4	GVT	37	
Monaco	1930–34	1	0.3	G	33	3.8
	1955–57	1	0.8	G	80	
Mozambique	1930–34	283	2.4	GV	0.8	3.1
	1955–57	421	8.9	GV	2.1	
Netherlands	1930–34	763	269	GVT	35	3.9
	1955–57	832	725	GVT	87	
New Zealand	1930–34	123	31	G	25	3.4
	1955–57	157	86	G	55	
Norway	1930–34	216	49	GVT	23	3.3
	1955–57	215	106	GVT	50	
Philippines	1930–34	1 428	61	GVT[1]	4.3	3.1
	1955–57	2 435	223	GVT[1]	9.1	
Portugal	1930–34	698	49	GVT	7	4.2
	1955–57	778	145	GVT	19	
Réunion	1930–34	25	0.3	G	1.3	4.8
	1955–57	29	1.2	G	4	
Spain	1935	2 286	151	GVT	7	5.4
	1955–57	2 803	577	GVT	21	
Surinam	1930–34	13	1.0	G	8	4.8
	1955–57	21	5.0	G	24	
Sweden	1930–34	551	79	GT	14	4.7
	1955–57	462	194	GT	42	
Thailand	1930–34	1 220	36	GV	2.9	6.9
	1955–57	2 483	380	GV	15	
Turkey	1930–34	1 002	53	GVT	5	3.7
	1955–57	2 406	279	GVT	12	
United Kingdom						
England and Wales	1930–34	3 405	2 107	G	62	1.5
	1955–57	2 771	2 450	G	88	
Scotland	1930–34	444	172	G	39	2.4
	1955–57	360	247	G	69	
Northern Ireland	1930–34	115	35	GV	31	3.8
	1955–57	113	84	GV	75	
United States of America	1930–34	11 719	5 845	GV	50	1.6
	1955–57	11 487	8 351	GV	73	

G = General secondary education.
V = Vocational or technical education.
T = Teacher training at secondary level.

d = Decrease in secondary enrolment ratio.
1. Secondary teacher training ceased during the period 1930–57.

TABLE 12. Estimated population 15–19 years old, enrolment in secondary schools, secondary enrolment ratio and average annual rate of increase in the ratio between 1950–54 and 1955–57 or approximately similar periods, in 93 countries.

Country	Years or periods	Estimated mean population 15–19 years (000's)	Average enrolment in secondary schools (000's)	Coverage	Secondary enrolment ratios	Average annual rate of increase of the ratio
Africa						
Algeria (French *départements*)	1950–54	952	65	GVT	7	6.5
	1955–57	956	82		9	
Angola	1950–54	351	3.5	GV	1.0	12.5
	1955–57	363	5.8		1.6	
Belgian Congo	1950–54	1 119	21	GVT	1.9	17.3
	1955–57	1 218	44		3.6	
Cameroun	1950–54	328	3.5	GVT	1.1	24.0
	1955–57	330	8.7		2.6	
Cape Verde Is.	1950–54	20	1.0	GV	5.1	2.3
	1955–57	23	1.3		5.6	

Country	Years or periods	Estimated mean population 15–19 years (000's)	Average enrolment in secondary schools (000's)	Coverage	Secondary enrolment ratios	Average annual rate of increase of the ratio
Congo (Brazzaville)	1950–54	70	2.7	GVT	4	–
	1955–57	78	2.9		4	
Dahomey	1950–54	165	1.8	GVT	1.1	11.5
	1955–57	174	3.0		1.7	
Guinea	1950–54	201	1.3	GV	0.6	16.3
	1955–57	226	2.4		1.1	
Ivory Coast	1950–54	228	2.3	GVT	1.0	14.2
	1955–57	258	4.5		1.7	
Libya	1950–54	94	1.3	G	*1.3	35.6
	1955–57	96	4.2		4.4	
Malagasy Republic	1950–54	272	13	GVT	5	4.7
	1955–57	275	17		6	
Morocco	1950–54	639	33	GV	5.2	7.7
	1955–57	682	48		7	
Mozambique	1950–54	403	8.8	GVT	2.2	d
	1955–57	421	8.9		2.1	
Réunion	1950–54	27	0.8	G	3	19.0
	1955–57	29	1.8		6	
Ruanda-Urundi	1950–54	410	2.7	GVT	0.7	9.3
	1955–57	446	4.6		1.0	
Senegal	1950–54	164	4.7	GVT	2.9	8.3
	1955–57	174	6.9		4.0	
Sierra Leone	1950–54	209	3.6	GV	1.7	14.3
	1955–57	217	6.3		2.9	
Sudan	1950–54	869	*4.7	GVT	*0.5	37.7
	1955–57	1 070	19		1.8	
Sudan (Mali)	1950–54	278	1.7	GVT	0.6	7.4
	1955–57	295	2.4		0.8	
Togo	1950–54	109	1.3	GVT	1.2	9.1
	1955–57	113	1.9		1.7	
United Arab Republic: Syria	1950–54	342	51	GVT	15	3.1
	1955–57	397	66		17	
Tunisia	1950–54	322	40	GVT	12	2.1
	1955–57	340	43		13	
America, Northern						
Alaska	1950–54	15	3.3	G	22	4.2
	1955–57	18	4.7		26	
Canada	1950–54	1 076	459	GV	43	4.8
	1955–57	1 168	602		52	
Hawaii	1950–54	45	47	G	104	0.9
	1955–57	52	56		108	
United States of America	1950–54	10 659	6 846	GV	64	3.4
	1955–57	11 487	8 351		73	
America, Middle and South						
Argentina	1950–54	1 782	383	GVT	21	4.4
	1955–57	1 929	483		25	
Brazil	1950–54	5 777	636	GVT	11	4.2
	1955–57	6 408	825		13	
Chile	1950–54	606	145	GVT	24	3.0
	1955–57	666	181		27	
Colombia	1950–54	1 185	99	GVT	8	8.2
	1955–57	1 307	*150		11	
Costa Rica	1950–54	90	9	G	11	11.5
	1955–57	101	17		17	
Dominican Republic	1950–54	242	18	GVT	7	–
	1955–56	272	18		7	
Ecuador	1950–54	336	35	GVT	11	4.2
	1955–57	376	48		13	
El Salvador	1950–54	213	*13	GVT	*6	13.6
	1955–57	243	25		10	
Guatemala	1950–54	327	16.6	GVT	5	–
	1955–57	369	19.5		5	
Haiti	1950–54	315	7	GVT	2.2	8.9
	1955–57	331	10		3.1	

Country	Years or periods	Estimated mean population 15–19 years (000's)	Average enrolment in secondary schools (000's)	Coverage	Secondary enrolment ratios	Average annual rate of increase of the ratio
Honduras	1950–54	158	5.7	GVT	3.6	
	1955–57	176	10.9		6.2	14.6
Martinique	1950–54	24	2.7	GV	11	
	1955–56	24	3.2		13	4.9
Mexico	1950–54	2 785	154	GVT	6	
	1955–57	3 116	*215		*7	4.0
Panama	1950–54	85	22	GVT	26	
	1955–57	94	28		30	3.6
Panama Canal Zone	1950–54	5	2.1	G	42	
	1955–57	5	2.3		46	2.3
Paraguay	1950–54	141	11	GVT	8	
	1955–57	155	15		10	5.7
Peru	1950–54	842	92	GV	11	
	1955–57	995	124		12	2.2
Puerto Rico	1950–54	229	56	G	24	
	1955–57	240	72		30	5.7
Surinam	1950–54	19	2.8	G	15	
	1955–57	21	50		24	12.5
Venezuela	1950–54	525	43	GVT	8	
	1955–57	590	75		13	12.9
Asia						
Burma	1950–54	1 815	98	G	5	
	1955–57	1 899	212		11	21.8
Cambodia	1953–54	400	4.3	GVT	1.1	
	1955–57	431	10.2		2.4	21.5
Ceylon	1950–54	786	274	GT	35	
	1955–57	818	343		42	4.7
China (Taiwan)	1950–54	853	146	GVT	17	
	1955–57	931	244		26	11.2
China (Mainland)	1950–54	52 452	2 910	GVT	5.5	
	1955	55 320	4 437		8	13.3
India	1950–54	36 984	5 843	GVT	16	
	1955–56	38 819	7 379		19	5.1
Indonesia	1950–54	8 376	230	GVT	2.8	
	1955–57	8 910	428		4.8	14.4
Iran	1950–54	2 103	96	G	5	
	1955–57	1 940	165		9	15.8
Iraq	1950–54	288	44	GVT	15	
	1955–57	346	71		21	8.7
Israel	1950–54	125	*25	GV	20	
	1955–57	142	36		25	5.7
Japan	1950–54	8 667	7 564	GVT[1]	87	
	1955–57	8 750	8 567		98	3.0
Macao	1950–54	20	4.8	GV	23	
	1955–57	22	6.5		30	6.9
Malaya, Federation of	1950–54	500	63	GVT	13	
	1955–57	560	122		22	14.0
Philippines	1950–54	2 435	207	GVT[1]	8.5	
	1955–57	2 435	223		9.1	1.7
Portuguese India	1950–54	59	1.2	GV	2	
	1955–57	59	1.9		3	10.7
Saudi Arabia	1952–54	618	1.5	GVT	0.2	
	1955–58	622	5.1		0.8	48.6
Thailand	1950–54	2 246	213	GVT[1]	9.5	
	1955–57	2 483	380		15.3	12.7
Turkey	1950–54	2 132	169	GVT	8	
	1955–57	2 406	279		12	10.7
Viet-Nam, Republic of	1950–54	*1 240	42	GVT	*3.4	
	1955–57	1 350	80		*5.9	14.8
Europe						
Albania	1950–54	126	10	GVT	8	
	1955–57	144	13		9	3.0
Austria	1950–54	436	71	GT	16	
	1955–57	538	86		16	–

Country	Years or periods	Estimated mean population 15–19 years (000's)	Average enrolment in secondary schools (000's)	Coverage	Secondary enrolment ratios	Average annual rate of increase of the ratio
Bulgaria	1953–54	587	181	GVT	31	5.0
	1955–57	570	200		35	
Denmark	1950–54	298	222	GVT	75	*2.3
	1955–57	317	*260		82	
Finland	1950–54	316	141	GVT	45	7.0
	1955–57	327	192		59	
France	1950–54	2 974	902	GVT	30	8.7
	1955–57	2 731	1 148		42	
Germany, Federal Republic of	1950–54	3 809	3 160	GV	83	d
	1955–57	4 509	3 559		79	
Hungary	1950–57	713	139	GVT	19	3.7
	1955–57	727	162		22	
Ireland	1950–54	239	72	GVT	30	4.7
	1955–57	235	85		36	
Italy	1950–54	4 019	1 334	GVT	33	4.7
	1955–56	4 103	1 581		39	
Luxembourg	1950–54	20	6.0	GVT	30	5.4
	1955–57	20	7.4		37	
Monaco	1950–54	0.945	0.656	G	69	3.8
	1955–57	0.970	0.779		80	
Netherlands	1950–54	803	570	GVT	71	5.2
	1955–57	832	725		87	
Norway	1950–54	203	89	GVT	44	3.2
	1955–57	215	106		50	
Poland	1950–54	2 498	674	GVT	27	–
	1955–57	2 224	605		27	
Portugal	1950–54	804	104	GVT	13	10.0
	1955–57	778	145		19	
Spain	1950–54	2 720	435	GVT	16	7.0
	1955–57	2 803	577		21	
Sweden	1950–54	422	263	GVT	62	3.0
	1955–57	462	322		70	
U.S.S.R.	1950–54	18 283	4 892	GVT	27	7.4
	1955–57	19 232	6 853		36	
United Kingdom						
England and Wales	1950–54	2 721	2 129	G	78	3.0
	1955–57	2 771	2 450		88	
Scotland	1950–54	358	234	G	66	1.1
	1955–57	360	247		69	
Northern Ireland	1950–54	110	67	GV	61	5.3
	1955–57	113	84		75	
Yugoslavia	1950–54	1 773	145	GVT	8	5.7
	1955–57	1 656	159		10	
Oceania						
Australia	1950–54	568	313	G	55	4.2
	1955–57	641	418		65	
French Polynesia	1950–54	6.7	0.6	GV	9	13.6
	1955–57	7.6	1.1		15	
Guam	1950–54	4	1.6	GV	36	7.4
	1955–57	4	2.1		48	
New Zealand	1950–54	134	63	G	47	4.0
	1955–57	157	86		55	
Pacific Islands (U.S.)	1950–54	5	1.1	G	22	8.1
	1955–57	5	1.5		30	

G = General secondary education.
V = Vocational or technical education.
T = Teacher training at secondary level.

d = Decrease in secondary enrolment ratio.
1. Secondary teacher training ceased during the period 1950–57.

CHAPTER IV

THE TRENDS OF EDUCATIONAL CHANGE

In many countries today the most intractable problems of educational provision and organization are those that concern the education of young people from about 11 or 12 years of age to 17 or 18, that is, the period of post-primary or secondary education, intermediate between basic primary schooling and the higher education of universities and specialized institutes. To say this is not to deny that in primary and higher education, too, there are grave difficulties: in fact for some countries it is precisely in these other fields that the most serious problems are being faced. Yet in the main the latter are problems of provision. There are countries that have not yet managed to provide for more than a minority of the children of primary school age and that are still far from achieving universal literacy; on the other hand, there are countries in which the number of university students will double during the present decade. But in each of these cases, though the task of providing facilities and teachers is fraught with serious practical difficulties, the needs are clear, there is considerable agreement on aims and methods, and the lines of advance are plain to see. At the secondary level, however, the situation is made extraordinarily difficult because the very conception of secondary schooling is in transition, and the practical difficulties of educational development are exacerbated by a confusion of aims and a conflict of views. For the comparative educationist, probably no aspect of contemporary education offers a more rewarding study than does secondary education; and in no other field have educators and administrators so much to gain from a comparative study of the problems manifested. For in studying secondary education trends over the last three or four decades it is possible to observe school systems passing through many different phases of development and facing problems that appear to be typical of these different phases.

To speak of phases of development in this way implies that there are regularities in the changes that have been taking place, and that persistent common trends can be perceived in spite of the wide differences in the way that the nations approach their own educational problems. It implies, too, that in respect of various aspects of education many different countries appear to be travelling in much the same general direction, although, because they started at different times and have developed in different circumstances, they are to be found at different stages along the way. Such a point of view is a useful one, provided we realize that an educational system is a very complex organization. When we think of an educational system we think of its schools, their nature and their distribution; we think of the curriculum; we think of the pupils, their range of abilities, their backgrounds, and their purposes in attending school; we think of the teachers, their training and attitudes; we think of the relationship of the school with State, Church and family; and we think of the nature of educational administration and control. These elements, which have their own direction and rate of growth, can be studied separately and trends common to a number of countries can readily be perceived; but it is far from easy to characterize the development of whole systems and make valid comparisons between them. Seen as a whole, each system of education is unique. It is at any given time the product of a set of historical circumstances—social, economic, ethnic, cultural—that are not likely to be duplicated in any other country. Administrators and educators who have the task of guiding the development of an educational system need to take all these factors into account, both those that are unique and those that are shared with other systems. A knowledge of common trends and regularities may conserve their efforts and resources by enabling them to profit from the experience of other countries that have faced similar problems in similar circumstances. On the other hand, lack of appreciation of the unique elements in a country's system may lead them to introduce changes that will not survive once the initial stimulus to change has departed.

In a survey of this kind the emphasis will necessarily be on general trends and regularities, the general stages of development through which educational systems are passing, and the problems to be met in the different phases of development. For it is by such a comparative analysis that the descriptive data on the various systems of education throughout the world can contribute to the solution of educational problems. From the detailed description of the different educational systems presented in the national section of the *World Survey of Education*, however, the reader will be able to gain some appreciation of the unique elements in the situation of each country.

THREE MAJOR CONTEMPORARY TRENDS

When the course of secondary education is surveyed from the most comprehensive point of view three major directions of change can be discerned, in each of which there has been an increasing tempo of development during the past thirty or forty years. These movements are themselves composed of several elements each showing its own characteristic trend yet each related to the others. In the most general terms they may be stated as follows.

First, and what is most obvious to the onlooker, is the vast expansion of secondary education throughout the world. This is partly due to population growth but there is also an educational factor: in countries almost untouched by formal schooling before World War II, the extension of primary education is now causing an extension of secondary education, while at the same time more advanced countries are reaching the point at which all their young people have the chance to begin secondary studies, and an increasing proportion is completing them. Expansion and extension of facilities for secondary education, then, is the principal direction of advance in the present era. The second main tendency follows from the first: it is the search for the best means of making an organic connexion between primary and secondary education. In most countries the systems of primary and secondary education were developed for different purposes and for different children, and it has not been easy to make a smooth transition between them. But even in newly founded education systems, unhindered by this traditional separation, there may exist distinctive aims for primary and secondary education which themselves create difficulties in the organization of a well articulated school system. The third major direction of advance is to be seen in the theory and practice of curriculum building. The scientific and technical achievements of the modern world and the complex sociological developments that have been taking place in recent times have themselves brought inevitable changes in the curricula of schools. But a no less striking change has been a result of the extension of secondary schooling to children for whom it was not originally designed, particularly those from the lower socio-economic strata of the community and those of lower scholastic ability; the general direction of this change in the curriculum has been towards an integration of cultural and vocational elements that have long been kept separate and even provided in different types of schools.

The widening of educational opportunity

In many important respects the secondary schools of the modern world have their origins in, or have been more or less strongly influenced by, the European grammar schools of the middle ages, whose main purpose it was to prepare for the universities young men attracted to the life of scholarship, and especially those whose families were not rich enough to engage private tutors. Very early in the history of grammar schools, however, their functions broadened to include the pre-university education of a considerable number of people who eventually became, not scholars and clerics, but statesmen, lawyers, doctors, magistrates and so on. At a later date the grammar schools were attended by pupils who had no intention of proceeding to the university, but who simply wished to prepare themselves for intermediate occupations in administration, commerce and industry which did not require university qualifications. With the rapid industrialization of Europe in the eighteenth and nineteenth centuries and the consequent need for an increasing number of well-educated members of the middle classes, there was constant pressure for an increase in the provision of secondary education and a steady expansion in the number of young people attending secondary schools. During the present century the growing complexity of social and economic organization in the highly industrialized countries has demanded a steady improvement in the education of all workers, and the idea of secondary education for all young people has become increasingly accepted in both principle and practice.

The extension of secondary schooling from a small group of potential scholars to all adolescents has brought about many changes in the form and organization of educational systems and also in the curriculum and teaching methods of the schools themselves. Until the dawn of the modern era, the universities of Europe were very largely devoted to the study of the learning of Greek and Roman antiquity, and the grammar schools had as their main function the early preparation of young people in Greek and Latin so that they could study in those languages at the university. As entrance to the university was the way to rise to the highest positions in the State, access to the secondary schools was the way to the privileges of a select class; so both they and the universities tended to resist any broadening of their traditional functions and studies. With the development of science and industry in the eighteenth and nineteenth centuries, however, the middle classes in several European countries grew in power and influence. They needed secondary schools for their children, and they needed modern scientific and commercial knowledge. At first the older schools resisted the newer needs and therefore different kinds of secondary schools were set up, for example, scientific and modern language schools and a variety of technical and commercial schools. Throughout the nineteenth and the early part of the twentieth centuries these schools struggled to obtain some of the privileges associated with the older classical schools, notably the privilege of preparing pupils for entrance to the universities and other institutions of higher learning and for the higher offices of the state.

When economic development required a rudimentary education for children of the working classes, quite different school systems were set up. They were complete in themselves, and at first taught only reading and writing in the mother tongue, and the elements of religion. Later their curriculum broadened to include arithmetic, general knowledge, drawing, handwork, singing, and other subjects.

The retention of separate educational systems for different classes in a community was possible only while that community was a comparatively static one. In the scientific and industrial societies of the present age, however, the need for skilled and well-educated men and women has been constantly increasing, and it was early found that this need could not be satisfied from the restricted ranks of the privileged groups alone. In Europe, throughout the latter part of the nineteenth century,

efforts were made to provide scholarships and free places for the more talented children of the lower middle classes and the working classes to enter the secondary schools, and some of these pupils found their way to the universities. Indeed, by the first decade of the present century the abler pupils of the industrialized countries of Europe could obtain a secondary education no matter from what social class they came, but the barriers were formidable and effectively prevented the development of the talents of more than a small minority of the able young people from the lower classes. These barriers were of several kinds: the type of education given in the elementary schools did not lead naturally to the secondary schools; the scholarships available were relatively few and paid for only a small part of the real cost of undertaking a prolonged education; and the loss of a young person's wages while he attended secondary school could be a serious hardship to a poor family. These and similar factors militated against the utilization of the talents of children from the poorer classes of the community, and indeed in some parts of the world they still do.

The unifying of primary and secondary education

In spite of these problems, efforts were continued to find ways of extending secondary education to all children and of building up the conception of secondary education as simply a stage in education following the elementary or primary stage, rather than a different kind of education running parallel to the elementary system and suitable for a different class of pupil. The process of changing over from the traditional to the new concept has usually comprised several stages. The first is the general acceptance of the idea that all children should have a common elementary schooling, preparatory to whatever form of secondary education they later proceed to, so that all have an equal chance of choosing widely or of being selected fairly for the next stage of schooling. Then the school-leaving age has been progressively raised so that all children may at least begin the first phase of secondary schooling and thus have the chance of seeing how far they are fitted to proceed with it. Along with this extension of compulsory schooling has gone the abolition of fees in the public secondary schools of many countries, the provision of maintenance grants and monetary allowances in necessitous cases, the setting up of boarding schools and school transport services to enable rural children to have access to secondary schools, and so on. Elaborate systems of selecting pupils for different kinds of secondary school have been developed in those countries that retained a variety of types of school at the secondary level. At the same time, with the upward extension of the leaving age, the tendency has been to put off until later and later the choice of vocation and the introduction of highly specialized vocational teaching in the school course. In the junior stage of secondary education a common curriculum has tended to be adopted by different types of school, and in some countries an amalgamation of different types of schooling has taken place, leading to the development of the comprehensive high school to which all the children of a community can go. In the comprehensive school, rigorous selection procedures at entrance have disappeared, being replaced by student-guidance in the choice of appropriate courses in the senior stages of secondary education.

The search for a balanced curriculum

Along with these changes in the structure of school systems have gone changes in the curriculum of the schools themselves. The traditional classical course was broadened to include, first, modern literary studies and the sciences, and later commercial, technical, and trade subjects. In some countries almost every aspect of social and economic life has come to be represented in the school curriculum. In the earlier phases of industrialization, the tendency was towards a proliferation of specialized vocational subjects, intended to fit the majority of young people to enter the world of industry and commerce at the age of 15 or 16. But the rapid development of technology and science and the greater complexity of industrial processes has called for adaptable young people with a better general education, who have not specialized too narrowly too early in life, and this has led to a later start in special training. This tendency has raised extremely difficult problems in curriculum construction. The general or liberal education traditionally provided by the secondary schools had always been highly academic, designed as it was to lead to the scholarly pursuits of the university. Doubts have arisen about its suitability to the needs of all young people. More and more, therefore, the secondary schools have become concerned to work out the content and methods of a general education appropriate for all young pupils, including those of average and below average intellectual capacity. At the same time they have sought to maintain the traditional standards of scholarship for pupils of high scholastic ability.

As the curriculum has changed, so too have methods of teaching. The introduction of practical subjects and subjects with a direct bearing upon the work of the world has led to constant efforts to adapt teaching methods to the subject. The concept of learning-by-doing has led teachers to search for methods that would effectively teach the skills, develop the knowledge, and foster the attitudes that are regarded as desirable. Educators have struggled against the traditional methods of teaching all subjects in a bookish way, especially those subjects in which bookishness is inappropriate; practical work, the organization of study around centres of interest, the use of projects, visual aids, group methods, classroom discussion, have all been adopted in the search for the most effective means of teaching the wide range of subjects in the modern school.

DEVELOPMENTAL STAGES REACHED BY 1930

The main trends briefly outlined in the preceding section indicate the general direction in which the secondary school systems of the modern world have been moving. Although some of these trends can be traced back to the Industrial Revolution and beyond, there has been no period so marked by radical and rapid changes as the past thirty or forty years. The rate of growth of secondary education and the consequential changes that have taken

place in its nature and purposes have steadily accelerated; for this reason the following chapters will present a somewhat more detailed analysis of various aspects of the dominant themes in its recent transformation.

But a detailed analysis, presenting separately the various aspects of a school system, runs the risk of preventing the reader from seeing any educational system as a whole, though this is essential to an understanding of its development; it may also obscure the fact that the different systems of the world are not all at the same stage of development and are not moving at the same rate. This is a most important fact, since, three or four decades ago there were in existence simultaneously educational systems illustrating many phases of the development that modern secondary school systems of European origin have been passing through during the past two centuries. Before a detailed study of contemporary trends is made, then, it will be useful to sketch briefly the salient features of some of these widely differing systems as they existed at the beginning of the period with which we are concerned, for no study of recent trends can be fully significant unless it takes into account the vast initial differences between the countries being studied.

The earliest radical break-away from the class-stratified educational systems of eighteenth and nineteenth century Europe took place in the United States of America. There, by the first years of the twentieth century, the idea of a free, publicly controlled system of comprehensive high schools following smoothly on from the elementary schools and catering for all the children of a community, no matter what level or kind of ability they displayed nor what the social status or economic position of their parents, was becoming widely accepted in principle and was increasingly put into practice.[1] The sharp distinction between academic secondary education and the various forms of specialized vocational training at the post-primary level, typical of European systems, had already largely disappeared. The purpose of the general high school was regarded as being to educate every pupil to his fullest development, so that each could make his richest contribution to the life of a democratic community. By 1930 more than half the young people between the ages of 15 and 18 were already obtaining full-time education, the vast majority being in the public high schools;[2] the main obstacle to universal schooling in this age group was not so much the nature of the educational system as the difficulty of making adequate provision for high schools in sparsely-settled rural areas and the hardship for poorer families in keeping their children at school when they could be earning money.

By this time, too, the major pedagogical problems of the comprehensive high school had been recognized, and throughout the country innovation and experimentation were directed towards finding solutions for them. Foremost among such problems were: how best to make the transition from the common elementary school curriculum to the diversified high-school curriculum—out of which arose the junior high school and the 6-3-3 form of organization which was in full swing in the late 1920s; how best to provide for the needs of children of all levels and kinds of ability and with all sorts of vocational ambitions—out of which arose the proliferation of subjects (which, by 1929, numbered as many as 250)[1] and the attempts to base the curriculum upon the immediate needs and interests of the young people themselves rather than upon the ready-made organization of subject-matter within the traditional disciplines; and finally, how to maintain the scholastic standards of the minority of young people who would be preparing themselves for entrance to the university—out of which came, for example, enriched or accelerated curricula for the more able pupils. These, and many other consequential problems of secondary education for all young people were already being faced in practice in the United States of America at a time when few other countries had proceeded beyond the stage of making it possible, by means of scholarships and free places, for some of the most academically gifted children of the working class to follow a full course of secondary education.

Among the countries which, by 1930, probably came nearest to the United States in their efforts to open up secondary education to talented children of all sections of the community were some of the English-speaking and Scandinavian countries e.g. New Zealand, Scotland and Norway,[2] and the U.S.S.R. These countries provided a relatively long course of compulsory common elementary education for all children before dividing them into specialized schools, and had made secondary education freely available to those who reached a satisfactory standard at the end of this common period of primary education. These countries differed markedly from the United States in that, by and large, they retained qualifying examinations which determined progress up the educational ladder, thus still regarding secondary education as an advanced education for the scholastically gifted. In consequence they had retained a curriculum that was essentially intended as a preparation for entrance to the universities or other institutions of higher learning; to provide for other kinds of education, separate post-elementary schools were created. This conception of the curriculum, together with the difficulty of providing educational facilities in sparsely settled rural areas, tended to limit the number of children going on to general secondary education.

In contrast to the countries just mentioned, in 1930, most States of Europe still retained, at the upper level of the primary school, the traditional separation between elementary education for the children of the working classes and secondary education for the middle and upper classes, although the idea of the *Einheitsschule*, the *école unique*, or the common single-track approach to public secondary education was receiving increasing support. By

1. Commission on the Reorganization of Secondary Education, *Cardinal Principles of Secondary Education*, Washington D.C., Government Printing Office, 1918. U.S. Bureau of Education, *Bulletin 1918*, No.35.)
2. I.L.Kandel, *History of Secondary Education*, Boston, Houghton Mifflin, 1930, p.491.

1. U.S. Office of Education, *Bulletin* No.35, 1929, p.77 *et seq.*
2. J.H.Murdoch, *The High Schools of New Zealand*, Wellington, New Zealand Council for Educational Research, 1943.
   For articles on Scandinavian countries see: Columbia University, Teachers College, International Institute, *Educational Yearbook*, New York, Teachers College, 1924–35.
   John Strong, *A History of Secondary Education in Scotland*, Oxford, Clarendon Press, 1909.

1924 France had abolished the distinction between the curriculum of the preparatory classes attached to the *lycées* and *collèges* and the curriculum followed in the elementary school up to the age when the work of the secondary school proper began, thus instituting a period of common primary education (from 6 to 11 years of age) for all children before differentiation began. In Germany immediately after World War I the preparatory school was abolished and a four-year *Grundschule* was established for the same purpose. At the end of these relatively short periods of common primary school the more gifted pupils could, with the aid of scholarships and remission of fees, enter the various secondary schools along with the fee-paying children. Some pupils went to the various vocational schools giving specific trade training, but the majority remained in the upper section of the elementary school until the end of the period of compulsory education. The courses of instruction in the post-elementary schools attended by the majority of children were short in comparison with the seven-year course of the French *lycée* or the nine-year course of the *Gymnasium* in Germany, and consequently only a very small proportion of young people continued with full-time schooling after the age of 14.

While reforms were being initiated in several European countries, in others the traditional systems showed little sign of change. So, too, in the Latin American countries whose educational systems derived from the European tradition. The independent republics of Latin America show a considerable diversity in their origins and in their social, economic, and educational development, but they also have so much in common that in a brief survey of this kind they can be considered together. The similarities in their educational systems when compared with the rest of the world are indeed, more striking than their differences. In the earliest years of European settlement small but highly developed systems of colleges and universities were set up, mainly under the influence of the Jesuit order, and provided a classical and humanistic education, similar in many ways to the basic culture of the upper classes of Europe prior to the Industrial Revolution. But economic development in Latin America was slow and provided little incentive for educational changes like those taking place in parts of Europe by the beginning of the nineteenth century.

In the independent States that emerged during the nineteenth century efforts were made to develop a primary education related to the basic needs of the masses. Considerable progress took place in the cities and towns, but secondary and higher education still remained the prerogative of a small minority. In many States, political instability hindered both economic and educational development. In consequence even as late as the second and third decades of the twentieth century the educational situation in most of the South American republics was in essentials little changed. Only a very small proportion of the children of secondary school age was in school; most pupils were the sons of wealthy landowners or of the urban middle classes, and their education was mainly literary and academic, emphasizing disinterested humanistic culture and designed to lead on to university study. A few pupils were enrolled in commercial and vocational schools, the development of which was still in the initial stages even in countries, like Brazil, which were beginning to be industrialized.[1]

Similar in certain respects to the educational systems of the Latin American States, were those of some independent States whose general economic condition was poor, though they supported a wealthy and educated élite—e.g. China, in the first decade of the Republic, with an intelligentsia divorced from, and largely indifferent to the fate of the illiterate masses—and most of the other independent countries of the East, with the notable exception of Japan.

Many other territories, particularly in Africa and Asia, were still under the control of one or other of the European colonizing powers. Even as late as 1930 it was seldom realized how soon independence would be achieved, and educational provision remained generally at a very rudimentary level. The colonial type of economy and administration needed only a small proportion of literate people to act as minor officials, clerks, agents, and elementary school teachers, and the main educational efforts were directed towards giving a literary education in the foreign tongue to a minority of children. It is true that, even in the nineteenth century, a few far-sighted colonial administrators were proposing measures to extend and differentiate the schooling provided, but little was done to implement their proposals. Primary education was not compulsory and few children were able to complete the full course, most dropping out after only a year or so at school. A very precarious literacy was achieved by those who attended the primary school, and only a small proportion of these reached a standard high enough to allow them to attend the secondary school—if their parents could afford to keep them there. The first schools in most countries were mission schools, which later received financial support from the Government. At a later stage governments usually established their own schools as well, to supplement the inadequacies of the mission schools.

Most of these countries were underdeveloped and the greater part of their working population was engaged in agricultural production, using primitive tools and methods. Great increases in productive efficiency could hardly take place until a more appropriate basic education had been made available to the young people and until technical and vocational training were established. Neither of these conditions was present in the 1930s. Some attempt at technical education had been made in most dependencies, but its success was prejudiced from the beginning by several factors. First, since few people could envisage the emergence of their countries to independent status there was little incentive to attempt to construct a diversified, balanced economy. Secondly, a considerable proportion of the educated indigenous population had themselves become wedded to the idea of a literary academic education leading to administrative work in official positions and they did not press for technical facilities. Thirdly, apprenticeship training, where provided, was in general based on a very small amount of primary education; this made it difficult to get the able young people to undertake vocational training even when technical schools or courses were set

1. *Secondary Technical and Vocational Education in Underdeveloped Countries*, Paris, Unesco, 1959 p.9. (Educational Studies and Documents, No.33.)

up, for most preferred the traditional secondary education. Finally, in many dependencies the economic difficulties of the early 1930s caused many set-backs in education, and the technical field was one in which educational expenditure was frequently curtailed. Only a few of the larger countries had any institutions of higher learning of their own, and, in general, university education was restricted to a small number of secondary school graduates who could go to Europe for further study. And even though very few pupils ever went on to the higher stage, the curriculum of their own secondary schools was almost entirely designed to lead to the university entrance requirements of the European universities most closely associated with their country.

In 1930, then, the general world situation was that in the relatively advanced nations of the European civilization the opening up of secondary education for all children was just beginning to be generally envisaged, though it had in fact already occurred in a handful of countries; but for the greater part of the world's population only the beginnings of a primary education were conceived of as a possibility. Few people foresaw the period of rapidly accelerating advance that the world was to enter upon in little more than a decade.

THE ACCELERATION OF CHANGE SINCE 1930

It will be evident from the foregoing brief sketch of the development of secondary education reached in different communities by 1930, that the nature and rate of educational change have varied considerably according to the stage of development of countries, their varying social and economic situations, and their history, traditions and ideals. It is, of course, possible to state trends and problems in such a general manner that the similarities from country to country are emphasized. We can readily see that all countries are expanding their post-primary school populations, some by the provision of secondary education for the first time, others by extending educational facilities to more and more children of lower levels of ability than formerly entered the secondary schools and to more and more children from sections of the community which in the past seldom achieved more than a rudimentary literacy. We can also see that each country faces serious problems in the supply of buildings, equipment, and trained teachers to make provision for the expanding school population, and we can appreciate the common problem of allocating more and more of a community's resources to the support of education. Furthermore it can readily be foreseen that problems of curriculum construction, of educational guidance and selection, and of teaching methods, will arise, for the solution of which there are few precedents in the history of education. To see and understand such similarities as these is of great value: it enables the administrator to view his country's educational development in the perspective of the historical development of the contemporary world. At the same time, faced with the necessity of judging the best course of action to take when dealing with the concrete problems of his own country, he must also know intimately its present circumstances, immediate needs, and current trends. Without the long perspective, the administrators and teachers responsible for guiding the development of an educational system may be confused and vacillating; on the other hand, without a clear vision of the immediate needs and forces at work their best-intentioned educational reforms may be ineffectual in practice.

The different groups of countries already referred to provide useful examples of the way in which similar general problems are given a particular and distinctive quality by the fact that they occur in different local settings and at different phases of development. In the United States of America, which has had universal primary and junior secondary education for half a century, the past few decades have seen a steady extension of facilities for senior secondary education to more and more young people from 15 to 18 years of age, until at present some states have nearly all their 17-year-olds at school. In such states the major educational preoccupation over the past five decades has been how to devise the best curriculum for young people of average and below average intellectual ability. For them the college preparatory courses that were the staple of traditional secondary schooling were inappropriate; on the other hand, the wide variety of specific vocational courses developed in an earlier phase of industrialization have become unsuitable in an age of automation, when an increasing number of people are required to reach a high level of general unspecialized education before learning the exact vocational skills they will use in their work. The attempt to solve this curriculum problem, which is essentially one of re-thinking the conception of a liberal or general education and harmonizing it with vocational training, so as to make it valuable for all young people in an industrialized world where new technologies and new sources of power are rapidly being introduced, provides the key to many innovations in American high schools and to a good deal of the current controversy about the quality of their schooling.[1] And in countries like Australia, Canada, and New Zealand, where the proportion of young people remaining at general secondary schools beyond the age of 15 has been relatively high for some years, the same problems have forced themselves upon the notice of the educators.

In the same period, European States that were highly developed economically but whose economies had suffered more from wars and whose educational resources had been limited both by their economic difficulties and their inheritance of class-stratified school systems, have found their most pressing problems to lie in the extension of their educational facilities to provide junior secondary education for all children, and in the re-shaping of their educational structures to ensure that the fullest educational opportunity is open to all young people of high ability irrespective of their social background. Not only have they had to undertake vast school-building programmes, but they have had to decide whether to retain the variety of different types of school at the senior-primary and junior-secondary stage or whether to develop a comprehensive school at the junior secondary level; whether to continue to select children for different types of schooling at the age of 11 or 12, or

1. J. B. Conant, *Education and Liberty*, Cambridge, Harvard University Press, 1953.

whether to delay such differentiation until 14 or 15, and provide a common education emphasizing orientation and guidance during the 11 to 15 period.

Nearly all the independent, or nearly independent, underdeveloped countries have shown a remarkable expansion of basic primary education over the past 30 years, and over the past decade in particular the need for an increased provision of secondary education has become urgent. In those States like the Latin American republics that have been self-governing for several generations, the traditional structure of an academic secondary education for a social and intellectual élite, who will be the political and economic leaders of the country and will man its civil service, its commercial and industrial enterprises and its learned professions, has been in existence for some time. The recent acceleration in urbanization and industrialization is now calling for a steady increase in the number of young people obtaining an academic secondary education; at the same time a rapid growth is urgently needed in facilities for technical and trade training, which are now being provided for pupils at a much younger age and after a much shorter period of primary education than would be acceptable in the more highly industrialized parts of the world. In this sense, countries like those of Latin America are now entering a phase in their educational development that corresponds roughly to the earlier periods of industrialization of countries like Germany, Great Britain, the Union of Soviet Socialist Republics, and the United States of America. But not having made that radical break with the European tradition that characterizes the organization of North American and Russian secondary education they have tended to build up a differentiated structure at the junior secondary stage.

In many respects the underdeveloped areas of Africa and Asia that have only recently achieved political independence, or that are just reaching this stage, show similar educational needs and trends. This is particularly so in respect to their recent rapid development of basic primary education, in their need for developing the technical and administrative skills of their people in order to increase their economic productivity, and in the way in which their educational structures, rudimentary though they be, take their shape from European antecedents. But in a most important respect the newly independent countries differ from the old: few of them, until quite recently, have had enough of their own people sufficiently well educated to carry all the administrative responsibilities of a modern State. A fuller provision of general education at the secondary and the university levels is still needed. So pressing indeed is the need of these countries for general secondary education that even the education of technicians has tended to take second place. Foreign technical assistance can help to fill the gap temporarily, but the time for having a large number of foreigners in government and administration appears to be rapidly passing, and one of the immediate tasks of the secondary schools and institutions of higher education is to prepare a generation of young people who can take over entirely the political and civil affairs of their own countries. One serious difficulty, seen clearly in countries like India and Pakistan, is that it will be a long time before the effective provision of primary education for all can be afforded, and therefore in the field of secondary education such countries are concentrating their efforts upon the discovery and education of the most able young people only: a wider spread of facilities for secondary education is still a long way off.[1]

1. India, Central Advisory Board of Education, *Post-War Educational Development in India*, Delhi, Manager of Publications, 1944, Chapter 3.
India, Ministry of Education, *Report of the Secondary Education Commission 1952–53.*
Pakistan, Ministry of Education, *Report of the Commission on National Education*, Karachi. Government of Pakistan Press, 1960, Chapters 3 and 5.
Pakistan, *Government Resolution on the Report of the Commission on National Education*, Karachi, Government of Pakistan Press, 1960, p. 14.

CHAPTER V

THE EXPANSION OF SECONDARY EDUCATION

The great expansion of secondary education throughout the world during the present century, and especially over the past few decades, is a product of many different causes. The increased birthrate at the time of the second world war and immediately afterwards resulted in a wave of enrolments in those countries that were involved in the war, but there have been many other factors and among them three of prime importance: the recent creation of facilities for education in areas where these have hitherto been lacking; the opening up of access to these facilities to children from sections of society that previously would not have been able to take advantage of them; and the changed conception of the need for education at the secondary level, with the consequent steady lengthening of the time that pupils stay at school. These factors are all related, but for convenience they can be considered separately, for each of them is complex and comprises many different aspects. For example, in the opening up of access to facilities for secondary education there is the provision now being made for the education of girls in countries that have retained longer than others the older view that the education of women was either unnecessary or undesirable. Then there is the spreading of secondary education to rural areas and other remote regions that have always been difficult to serve but that now, with modern transport, regular mails and the radio, are being brought within the scope of educational services. And when we consider the lengthening period of secondary education, we become aware not only of the part played by the increasing ability of parents in the economically well developed countries to keep their children at school longer as their standard of living increases, but also of the increased holding-power of school systems themselves as they adapt their curricula to the needs of a wider range of young people. Nor should we forget, in this connexion, the significance of the fact that the advancing technology of the modern world needs more and more young people to have a longer general education rather than an early training in specific vocational skills, and that this is one of the most striking features of education today in the countries that are technically advanced.

It has already been pointed out that the earliest provision for organized education in the modern Western world took the form of classical grammar schools to initiate young men into those writings on the arts and sciences that were to be found in the literature of Greece and Rome. They were attended in the main by a very small number of children from the upper classes of society, though some of them were expressly founded for the education of poor children of ability. The provision of vernacular schools giving fundamental education in the elements of literacy was a later step, and the diversification of schooling to develop vocational skills among the young people of the working classes occurred in comparatively recent times. This process of extending educational facilities downwards, and enlarging them to include vocational training, has been a characteristic feature in the growth of modern education systems in self-governing States. In some of the industrialized countries of the world the expansion process started early in the nineteenth century and did not reach its most diversified forms until the beginning of the twentieth century. Many countries that have just begun to be industrialized are now passing through these same phases, as the following examples will show, though at a much faster tempo and as the result of a more conscious and deliberate planning than was the case with the older systems. At the same time the older systems are moving towards a different phase, in which early vocational differentiation of schooling is being eliminated and a much longer period of common schooling is being provided. Throughout the world many examples can be found of countries which are in different phases of this process of differentiation and integration. The following are a few case studies.

THE ESTABLISHMENT OF NEW SYSTEMS

Of the many States which have recently come into existence, some have achieved independent status for the first time, others are ancient nations that have long been in eclipse. In the main they have been economically underdeveloped countries, and several of them have attempted a rapid process of modernization in which phases of development that lasted centuries in the case of the Western States have been compressed into decades.

The first task in a nascent or renascent State has usually been the consolidation of a system of communications, order, and law, and next has come the development of a more productive economy. In carrying out their adminis-

trative and economic plans governments have found themselves handicapped from the outset by the lack of civil servants, technicians, managers and so on, and an early need, then, has been the development of a system of education that could quickly enable the State to fill the administrative and executive ranks. With poor resources and lack of time, educational efforts have been aimed directly at the selection and education of such an élite. In these circumstances it is common to find that a few institutions of higher learning have been set up, together with institutions at the secondary level preparing students for higher learning, long before any serious attempt has been made to develop a widespread system of elementary or primary education for the majority of the inhabitants of the State—for whom, in any case, few teachers could be found until secondary education had expanded. This parallels what happened in the early phases of development of the more advanced European States.

Countries such as Ethiopia, Iran, and Turkey provide recent examples of the process of creating a new educational system in order to consolidate or modernize a State, and a careful study of the process is instructive.[1]

Any one of these or several other countries would provide a fruitful field of study, but the illustration chosen here is Iran because the effective beginnings of its modern educational development coincide fairly closely in time with the 30- or 40-year period with which this survey is chiefly concerned.

During the nineteenth century the power of the European States began to influence the ancient Persian civilization, and a few Western institutions began to be borrowed. A polytechnical college was established in 1852, staffed by foreign professors of military studies, medicine, languages, and so on. It gave the elements of Western knowledge to a small band of students, many of whom then studied at higher institutions abroad and subsequently returned to their country to serve in positions of responsibility in the machinery of government. A few private schools, both indigenous and foreign, were established later in the nineteenth century, but they too served only a small part of the population. The basis of community life was the rural family, and the basic education of the community was that which was passed on from parent to child in the ordinary course of everyday rural life.

When a constitutional revolution took place in 1906 and a parliamentary system was established, an attempt was made to set up a centralized system of public education. The fundamental statutes of the Ministry of Education were promulgated in 1911, but several years of political instability both before and during the first world war effectively prevented any solid progress from being made by the administration. This period ended with the rise to absolute power of Resa Shah Pahlavi (1925). To consolidate the power of the Central Government over the anarchic feudal chiefs a reorganized civil service was needed. The chief lack was educated men for positions of administrative responsibility. Neither the work of the private schools nor the method of sending students abroad was able to fulfil the needs of the time, so efforts were made to found a state system of education; and in this system it was the secondary and higher education of an élite that was most urgently needed.

Secondary schools were established, modelled largely upon those of France in respect of their administration and curriculum. The shortage of teachers was acute, many were foreign and, as a temporary measure to improve the supply, each year a group of secondary school graduates was sent to Europe, mostly to France, for further training. Major advances were made in 1928 with the raising of the status of a teacher training centre in Teheran to that of an *école normale supérieure*, and in 1934 with the founding of the University of Teheran, the passing of a law on the training of teachers, and the elaboration of the first official programme of studies for secondary schools. At the same time plans were made for the gradual establishment of a considerable number of *écoles normales primaires*. The studies instituted in the secondary schools were mainly literary and humanistic. They aimed at the formation of an intellectual elite, and constituted the staple education of an executive and administrative section of the community that was rapidly increasing in size and importance.

The emphasis which of necessity was initially placed upon the consolidation of governmental power allowed, however, two marked deficiencies to detract from the value of the educational system. First, the provision of fundamental primary education for the general population was very inadequate even in the towns, and was almost non-existent in the rural areas. Secondly, only very meagre facilities were developed for technical and scientific education and for trade training. These deficiencies continued throughout the period of consolidation of governmental power, and they seriously militated against the improvement of the conditions of life of the general population, the greater part of whom had been allowed to remain illiterate and technically undeveloped. The events of the second world war stimulated attempts to develop a more democratic form of government, to modernize the economic system, and to improve the living conditions of the general population. To achieve such aims as these a vast expansion of education was needed, especially in the primary and technical fields, and the past 10 to 15 years have seen vigorous attempts to build up a network of schools serving the whole of the children of Iran.

A somewhat different set of educational problems has been faced by those more recently emerging nations which from their very beginnings have been attempting to build States that are not only independent but also democratic. In such cases educational effort could not be channelled entirely into the provision of a secondary education system for the formation of a ruling élite, but attention has had to be paid also to the need for raising the cultural and economic standard of the general population whose active participation in government is envisaged. In the economically underdeveloped countries the problem of deciding how to balance the claims of primary education against the claims of secondary education has proved to be a very difficult one. The demand for welfare services,

1. Mulugeta Wodajo, 'Post-war Reform in Ethiopian Education', *Comparative Education Review*, Vol. 2 (1959), No. 3, pp. 24–30.
Reza Arasteh, 'The Growth of Modern Education in Iran', *Comparative Education Review*, Vol. 3 (1960), No. 3, pp. 33–40.
Kazim Nami Duru, 'Turkey' in *Educational Yearbook of the International Institute, 1937*, New York, Teachers College, Columbia University, 1938, pp. 458–73.

including the enlargement of educational provision, has sometimes gone beyond the immediate economic resources of the country. Some extension has been possible at once, but more has had to await the development of greater productivity. Greater productivity, in its turn, has been found to be largely dependent upon the improvement of the skill and knowledge of the people, and exactly how best to break this vicious circle is the practical problem of new States—like those of Ghana, India, and Pakistan—which have been taking careful account of both economic and educational factors in their working out of long-range plans for national development.

The example of Ghana may be taken to illustrate the way such problems arise and the practical difficulties that have to be confronted.[1] For a decade prior to the achievement of independent status in 1957 one of the major factors influencing the trend of development of the Gold Coast, as it was then called, was the knowledge that self-government would shortly be a reality and that much educational expansion would be necessary if effective organs of government were to be developed by the African people themselves. The most serious shortage, it was known, would be in well-educated people able to undertake the executive and administrative functions of the new State. As in most territories that have been subject to colonial rule, there had been a long period during which such functions had been carried out in the main by officials sent out by the controlling power—usually Europeans educated in European secondary schools, universities, and institutions of higher technological training. What secondary education was provided for the indigenous population was usually just enough to train clerks and minor officials in the civil service and in commerce and industry. This, indeed, was a frequent complaint of those who were looking forward to political independence. As was pointed out strongly in the Report of the Commission of Inquiry into Disturbances in the Gold Coast, in 1948: 'We found no African who seriously suggested that there was as yet a sufficient number of Africans with the education or experience capable of filling an appreciable number of posts in the higher branches of the public service in the Gold Coast. But this very fact we found to be a source of complaint. It was said, and we think with some justice, "You have not provided us with sufficient opportunities to learn. In cases where we have learned you have not given us the opportunity to show our capacity".'

At that time there were only about 4,000 secondary school places in a country with a population of over 4 million people and with nearly 200,000 children in primary schools. The immediate need was clearly for a rapid extension of secondary education, and the commission recommended that the highest priority should be given to the provision of more secondary schools for the most able pupils and for the extension of senior primary school classes and part-time education for those of lower academic ability. To provide an appropriate continuation of secondary education the Government had already decided, in 1947, to convert the university classes at Achimota College into a separate institution, later called the University College of Ghana, and this gave a clear and immediate direction to the growing system of secondary education.

But an extension of secondary education was not in itself enough in an emerging State which aimed at having an enfranchised population taking part in general parliamentary elections. In 1951 the first majority African government was formed, and one of its early actions was to draw up a far-reaching plan for accelerated educational development, having as its goal the establishment of a comprehensive educational system within five years.[1] The Government's next concern was to extend primary education as widely as possible, for more than three-quarters of the adult population was estimated to be illiterate. Primary education was made free, and a steep rise in enrolment took place: in five years the primary school population doubled and has since continued to rise steadily. To cope with this a large-scale school building programme was got under way and many new teacher training institutions founded. The strain on the economic resources of Ghana has been considerable, and the problem of keeping a balance between primary and secondary school development has been a difficult one. A serious dilemma, clearly envisaged by the Commission of Inquiry in 1948, is still recognized: that if too large a proportion of the nation's resources should be invested in primary education in the early stages of educational development, secondary and higher education may be stunted. It is a dilemma that confronts several countries at the same stage of development as Ghana. At the higher levels the university classes and the sixth forms of the secondary schools have not yet produced as many students as the country needs: the proportion of primary and middle-school pupils going on to the secondary schools is low, partly because of scholastic selection, partly through the economic handicaps placed upon families that support young persons through adolescence, and partly also because of the difficulty of making provision for children in rural areas. There is also a high drop-out rate caused by various scholastic and socio-economic factors. In these circumstances some people have considered that more effort should be made to keep a greater proportion of children at middle school and secondary school for a longer period, and that the rate of provision of further facilities for the enrolment of primary pupils, many of whom will leave after only a very short span of schooling, should be somewhat reduced.

Other people, however, maintain that a third factor should be considered, namely, the possibility of rapidly increasing the wealth of the country by increasing the technical knowledge and skill of the people. If this could be done, the country would be able to afford to continue to make rapid advances in both primary and secondary education. This, indeed, has been the aim of the Ghana Government. In 1954 it opened the Kumasi College of Technology, and has since built several new institutions for technical education and trade training. Their enrolment has been increasing rapidly, but they still have only a small number of pupils compared with the secondary schools, and it will be some years before their influence on the national economy can be felt.

1. *Secondary Technical and Vocational Education in Underdeveloped Countries*, Paris, Unesco, 1959, pp.17–27. (Educational Studies and Documents, No.33.)

1. Gold Coast, Legislative Assembly, *The Development Plan, 1951*, Accra, Government Printing Department, 1951, Chapter 4.

With the gradual development of commerce and industry in economies that have been hitherto agricultural and pastoral, there is a pressing need for training in elementary commercial and industrial skills for those young people who will become supervisors, foremen, skilled craftsmen and so on. In nineteenth century Europe many of the rapidly developing industrial countries established complex systems of vocational schools catering for a wide variety of occupations. In their earlier phase of development such institutions took pupils from the primary schools, and provided courses of one, two, or more years, according to the nature and the level of the occupation being prepared for. Together with the academic secondary schools, which took pupils of high ability at an earlier stage of primary schooling, the vocational schools catered for a minority of children—the majority going to work after primary schooling only. In the underdeveloped areas of the world such vocational training was non-existent for a long time and even when special educational institutions were founded they have tended to grow slowly until quite recently.

States that have been independent for many years have already passed through the stage of establishing a system of vocational training schools, though these have often been few in number; and many of those States that still have vast natural resources underdeveloped are now on the verge of rapid advance. For example, in the Latin American countries and in several other politically independent but economically underdeveloped countries, schools for the training of artisans in urban trades such as carpentry and joinery, brick-laying, furniture-making, plumbing, printing, upholstery work, dressmaking, weaving, and so on, were established at various times throughout the past hundred years; somewhat later, commercial schools were founded, teaching shorthand, typewriting, accountancy, and various aspects of commercial practice. Sometimes these schools were private foundations, sometimes they were set up by government or local authorities, and usually they were not under the control of the ministries of education but, as in many European States, were the responsibility of other ministries such as those of industry, commerce, or science and arts, a division of functions that often caused difficulty in co-ordinating educational courses later on. They took young people who had had some elementary education and organized either full-time or part-time courses of instruction, usually of short duration, to provide for the immediate needs of the trades. More advanced schools, or upper divisions of existing vocational schools, were also founded to prepare higher-grade technicians in electricity, mechanics, mining and so on. Recruitment into these advanced courses was mainly from the ranks of those who had made good progress in the lower technical courses.

By 1930 most of the independent underdeveloped countries had a small nucleus of different vocational institutions in the main towns, and though their enrolment was small in proportion to the total school population, and often infinitesimal in proportion to the total general population, the problem of expanding the available facilities was beginning to be faced. The provision varied from country to country, according to their differing economic situation, and over the past 30 years all have been feeling their way towards systems that would be appropriate to their needs.—The disastrous effects of the world economic depression upon countries with highly specialized economies led to many attempts at building more self-sufficient and more balanced systems. In the underdeveloped countries the need for elementary technical training was especially felt, and renewed efforts were made to enlarge the scope of vocational education.

In many underdeveloped countries, such as Brazil and Ghana, although there have been striking increases in the number of young people enrolled in vocational schools or vocational courses during the past few years;[1] many hindrances to an adequate development of scientific and technical education are reported. One of the most serious is that many of the techniques now needed are more complex than the older ones; they require more understanding of basic principles and more adaptability in the young worker, and are less capable of being learned by rule-of-thumb methods by uneducated people. In the early years of industrialization in Europe it was possible for apprenticeship and trade-training to be undertaken with an illiterate population, but now several years of primary education is the minimum basis on which the modern vocational skills can be built. Attempts to make provision for vocational training for very young people have in fact proved uneconomical. This being the case, adequate vocational training and the diversification of educational provision that goes with it, cannot nowadays be greatly extended until a full primary education is generally available. In many of the underdeveloped countries, however, a large proportion of the children of primary school age fails to stay at school for as many years as are needed to give them a good basic education, and some vocational training is started earlier than it would be in a more developed economy.

The improvement of agricultural techniques has been recognized as of urgent importance for the foundation of a more diversified economy; for when the productivity of the rural areas is increased workers will be released for more varied occupations and families will be able to afford to dispense with the work of their children so that the latter can stay longer at school. Continuation classes in the rural primary schools are being used in several countries of South America, Africa, and Asia to bring about an improvement in agricultural practices, and adult education is being used for the same purpose. The end result of such trends as these is that educational provision is being greatly diversified at both the junior secondary and senior secondary level in most of those countries that have entered a phase of accelerated industrial development.

The provision of diversified vocational education at the junior secondary stage for young people from 11 or 12 to 15 or 16 years of age is now regarded as premature in those countries that have become highly industrialized, yet in many respects such provision did occur at an earlier stage of their own development. In the first decades of the present century, in Austria, France, Germany, the Netherlands, Switzerland, and the United Kingdom for example,

1. *Secondary Technical and Vocational Education in Underdeveloped Countries*, Paris, Unesco, 1959. (Educational Studies and Documents, No. 33.)

a variety of special types of school grew up to provide for the further education of children who had completed their primary schooling and who had not gone on to middle school or secondary school. Full-time vocational schools, as well as part-time courses for apprentices, trained young people for the common trades, agricultural occupations, and commercial employment characteristic of the different countries and, except in sparsely settled rural areas, facilities for specialized training were within the reach of all children who would be working in the world of commerce and industry. In a few countries such specialized courses began as early as 11 or 12 years of age after five or six years of primary education, but the general tendency came to be to defer vocational training until the age of 13 or 14, after seven or eight years of primary schooling.

Recent reforms in some countries have had the effect of putting off until even later the beginning of specialized training. This is partly a response to the nature of modern technological processes that require a higher level of general education and greater mental flexibility in the young trainees, and partly in response to the growing need for an extended general education if the future citizens of modern States are to carry out their civic duties in a satisfactory manner. The exact age at which specialized vocational training can best be started varies according to the stage of economic and industrial development reached by a given country and according to the nature of the citizens' participation in government. It varies even within a country, especially when there is a wide range of regional differences in economic life. Throughout the relatively undeveloped regions of Asia and Africa, the period of basic schooling tends to be shorter in rural areas comparatively untouched by the applications of modern science and technology than it is in the more highly developed parts. In country districts compulsory attendance laws may be unenforced at the upper levels of primary schooling and the early secondary years, not only because there are too few school buildings and teachers but also because no pressing need is felt for more than the minimum of literacy. With the advance of technical development, however, the upward extension of education is steadily occurring everywhere; the differences between areas are now mainly a matter of the age levels at which the most vigorous growing points are to be found. The problem of extending educational provision is not a new one; it was being faced in the rural areas of Europe, the United States, and the British colonial settlements throughout the latter half of last century, and there are many parallels between earlier developments in those areas and recent trends in the newly independent countries.

THE EXTENSION OF EDUCATIONAL OPPORTUNITY

In the circumstances in which school systems are created and education is made available to communities, the nature and potential abilities of the individual children themselves have little or no influence upon what can be provided for them. They are born into a highly developed society or a primitive one and their possibilities for full development are largely determined by extraneous factors over which in their early years they have no control.

The expansion of facilities for secondary education has usually been of benefit in the first instance to children of parents who were financially able to maintain them for a period of extended schooling prior to their entering employment, and who were imbued with a sense of the importance of education to help their children get on in the world. This is self-evident in the case of the establishment of private schools and endowed schools. It is even true of most public school systems in the early stages of their development. Sometimes, indeed, the provision of public secondary schools has been retarded for this reason. In the United States of America, for example, on several occasions in the latter half of the nineteenth century when districts were establishing public secondary schools financed from local taxes, there was opposition on the ground that the community should not pay for schools that would be used only by the children of a minority of parents who, in any case, could probably afford to make private provision for their children.[1] In general, however, the belief prevailed that the provision of such facilities should be a charge on the public purse, even though they would not be equally used by all sections of the community. In countries where democratic access to secondary schools is possible but where many of the inhabitants have too low a standard of living to enable them to keep their children at school for an extended period, efforts are made by means of scholarships, maintenance grants, etc., to enable some children of the highest capacity to benefit. In the meantime the capable young people who are fortunate enough to receive advanced education are looked to as one of the main sources of that ultimate improvement of the general living standards which alone can provide a complete solution.

One of the outstanding trends of recent years has been the attempt to free human development from the stunting effects of culturally impoverished environments. In so far as modern school systems are concerned, the first major efforts were those intended to mitigate the consequences of the stratification of classes in the States of Europe. Even although the particular forms of social stratification found in them in the nineteenth century are not the same as those found in other parts of the world today, much can be learned from the course of events in these States. Indeed, all countries of the contemporary world are still facing the problem of how to ensure that each child obtains the sort of education that is best for him, while at the same time the community is provided with an adequate number of people trained for the kinds of activities upon which its characteristic way of life depends. In earlier times children were confined within the bounds of the social classes and occupations of their parents; the present trend is to take more heed of the individual child's own abilities and interests, not only out of solicitude for the well-being of the individual himself but also because it is believed that a higher development of skill and ability will be achieved when a person's education and work suit his nature. It is instructive to study the processes of change as widely differing societies have faced the problems raised by the trend to make access to educational facilities more democratic.

1. I. L. Kandel, *History of Secondary Education*, Boston, Houghton Mifflin, 1930, p. 438.

From the most general point of view the greatest differences in approach can be seen by contrasting the course of development in those countries like the United States of America, certain of the British Dominions, and the U.S.S.R., which made a radical break-away from the class-stratified systems of Europe at a comparatively early stage in their educational history, and those countries like France, Germany, Great Britain and most of the industrialized European States in which a highly developed system of educational provision at the post-elementary level had come into existence at a time when class divisions and barriers between classes were more rigid than they are today. To show the contrasting problems most clearly, the development of post-elementary education for all young people in the United States is outlined first of all, and then some of the European States are presented to illustrate the different facets of the problem of democratization caused by differences in their social structure.

By the end of the second decade of the present century many of the problems of extending the provision of secondary schooling to all adolescents had been faced and in part solved in the United States of America before they were seriously being considered in most other parts of the world. The belief that secondary education was simply a stage in the general process of education of all young people and was not a particular type of education for an intellectual or social elite, was already widely accepted both by the American public and by educators. The view that a comprehensive high school would best serve the varying needs of all boys and girls no matter what their level of ability, their social background, and the place in society they were to occupy later, was also generally accepted, and much of the educational effort of the time was devoted to the practical problem of how such aims could be carried out most effectively. The free public high school was seen as a guarantee of equality of opportunity for young people in the U.S.A., just as a generation or so earlier the elementary school had been. The concept of equality of educational opportunity was itself changing: it no longer meant merely that the most able children, no matter from what social class they came, should have equal access to the traditional secondary school whose purpose was to prepare students for entrance to the university. It was coming to mean, rather, that each and every adolescent should have the education needed for his optimum development. The United States made the first attempt in history to provide a secondary education for all the young people of a nation in a single institution at the public expense. The two major problems that remained to be solved in the U.S.A. were, first, how to effect a smooth transition between the traditional stages of primary and secondary education, and secondly, how to construct a suitable curriculum in which the cultural and vocational elements were properly balanced.

The comprehensive high school is still a comparatively young institution, but its influence upon the world of education has already been great. Over the past 30 or 40 years several countries appear to have been moving towards a similar solution to the problem of providing secondary education for all. Some have already moved almost as far in certain respects as have the majority of the states of the U.S.A., while others are only just beginning.

It will therefore be useful to review briefly the course of educational development in the U.S.A. as a background to the study of similar trends in other countries.

The making of the public high school in the United States of America[1]

The first secondary schools founded in the North American colonies during the seventeenth and early eighteenth centuries were essentially Latin grammar schools similar to those in Europe. Their purpose was primarily to prepare a few young men for college and university, more particularly for entrance to the Christian ministry. They were attended, also, by other young people who had no intention of entering either the ministry or the university, but they were never regarded as providing education really suited to the needs of the leaders of a pioneering nation. By the middle of the eighteenth century the onset of the Industrial Revolution had created a need for scientific and commercial training among the urban middle classes in Europe, and this was provided by a new type of school, the academy. On the eve of Independence academies began to be established in the North American colonies.

The leading citizens of the new republic were imbued with ideals of liberty, democracy, and the perfectibility of mankind, and with these ideals went a belief in the value of education as the chief means by which men could perfect themselves. They were prepared to give public support to educational establishments, and the growth of academies was stimulated by grants of land. The academies themselves were versatile institutions. Founded by groups of citizens who were experiencing directly the need for a varied education, they provided instruction in subjects as diverse as reading, writing, arithmetic, grammar, geography, map-making, field and canal surveying, navigation, astronomy, trigonometry, plane and spherical geometry, algebra, chemistry natural philosophy, moral philosophy, rhetoric, logic, Latin, Greek and French. They were also flexible: the course that a student took was composed of whatever subjects he needed to prepare him for the duties he felt life would require of him. The academies reached the peak of their importance by the middle of the nineteenth century. Essentially, however, the academy was still a school for an elite, though an elite conceived of in very wide terms as people capable of developing a high degree of skill in any of the major arts that were of practical utility in the business of life. Essentially, too, it was a fee-charging private institution, and with the widespread extension of free primary education people became critical of these restrictions on further learning.

A new phase in the development of secondary education was initiated by the founding of free high schools by public authorities. As early as 1816 the Constitution of the State of Indiana stated the far-reaching principle that 'It shall be the duty of the general assembly as soon as circumstances will permit, to provide by law for a general system of education, ascending in regular gradation from township schools to a state university, wherein tuition shall be gratis and equally open to all'. Other states adopted the same

1. I. L. Kandel, *History of Secondary Education*, Boston, Houghton Mifflin, 1930, p. 438.

principle, but it was many years before it could be put into effect. Meanwhile, the English Classical School, founded by the School Committee of Boston in 1821, opened the new era. It was originally planned for young men who needed a modern education and who did not intend to enter university, but it was quickly followed by other public high schools which taught both classical and modern subjects, and which were as comprehensive in their curricula as the academies. The new high schools spread throughout the states, not only in the cities but also in the rural areas, where small school districts would combine into a larger unit for the purpose of maintaining a high school. By the last decade of the century public high schools were accepted every where as the natural extension of the elementary school.

Their selective character at this stage is clearly evident in the report of the Committee of Ten on Secondary School Studies, set up by the National Educational Association in 1892 to define the functions of the high schools and to suggest standards of achievement at which they should aim. While the committee stated unequivocally that the secondary schools of the United States, taken as a whole, did not exist for the purpose of preparing boys and girls for the university, it was just as definite that their main function was to prepare for the duties of life that small proportion of all the children in the country—a proportion small in number but very important to the welfare of the nation—who showed themselves able to profit by an education prolonged to the eighteenth year, and whose parents were able to support them while they remained at school. By the beginning of the twentieth century it was generally recognized that the free public high school was a single institution, in which intellectually able pupils could pursue as wide a range of studies as their communities thought were needed to fit them for entrance to the university or for some form of gainful employment. The greatly increasing wealth of the United States at this period encouraged parents to keep their children at school longer, and as there were no institutional barriers preventing the entry of pupils to high school after they had completed their primary education, the high school population was transformed during the first quarter of the present century. It was no longer an elite, either intellectually or socially, and was rapidly becoming a representative cross-section of the whole community.

By 1930 more than half the young people of the United States between the ages of 15 and 18 were attending public high schools, and educators were giving serious consideration to methods of increasing the enrolment still further and of decreasing the drop-out rate. The major problems were, first, the inability of some families to afford to keep their children at school for a prolonged period; secondly, the difficulties of providing high schools in thinly populated rural areas; and thirdly, the unsuitability of the curricula and teaching methods of many schools for children of average and below-average intellectual ability. The steady rise in the standard of living gradually reduced the importance of the first factor. The amalgamation of small districts into units of a sufficient size to support high schools greatly improved the provision in rural areas, and a vast expansion of school transport services brought most children within easy reach of a day school. Thus the second factor has also been effectively eliminated. The third will remain for some time as a challenge to educators even in those districts where nearly all the young people continue with full-time schooling at high school or junior college until the age of 18.

The unified school in the Union of Soviet Socialist Republics

What the United States of America and some of the countries of the British Commonwealth had achieved in the development of a unified school system by the early part of this century was the product of gradual growth in new countries which, in many respects, were trying to free themselves from some of the class barriers to be found in the European States. The Union of Soviet Socialist Republics achieved the same result immediately after the October Revolution of 1917 by making a clean break with a system that had been in force in Russia for 90 years. An earlier, but unsuccessful, attempt had been made to establish an *école unique* when, in 1802, the Tsar Alexander I, early in his reign, inaugurated a unified school system which was free, and which provided monetary help for poor scholars.[1] It was abandoned in 1829 by Nicholas I, who designed the two-track system that remained throughout the century. For children of the urban working people there was an eight-year elementary school commencing at 8 years of age, divided into higher and lower divisions of four years each, and followed by technical schools and teacher training institutes. For the upper classes there were *gymnasia* and *real* schools commencing at 10 years of age, the former with an eight-year course leading to the universities, the latter with a seven-year course leading to the higher technical institutes or, if Latin were studied, to the universities also. Both schools were preceded by a one-year preparatory class. In theory it was possible to transfer from the elementary school, but only if the pupil were prepared to lose two years of school life by passing from the fourth class of the elementary school to the first class of either secondary school or from the eighth class to the fourth form of the *real* school. In fact little transfer did take place and the benefits of secondary education were enjoyed only by a privileged minority.

The leaders of the Revolution considered that this dual system of schools was incompatible with their desire to develop a communist society, and they resolved to bring about 'the transformation of the school from an instrument of class domination into an instrument for the complete abolition of classes and for the communist education of society,[2] Lenin was insistent upon the need to develop a school system that would give equal opportunity for every citizen to reach as high a level of education as possible. With a largely illiterate population and few educational facilities throughout a vast area of the Union the Government recognized that such an aim could not be achieved at once; but equally it was recognized that the immediate need was to lay the foundations of a school system whose basic structure was such that it would give every child, no matter what his social background, the same opportunity

1. N. Hans, *Comparative Education*, London, Routledge and Kegan Paul, 1951, Chapter 16.
2. M. Deineko, *Forty Years of Public Education in the U.S.S.R.*, Moscow, Foreign Languages Publishing House, 1957, p. 43.

to develop his potentialities to the full, and that it would be capable of ready extension both in the number of schools and the level of education provided, as fast as buildings could be constructed and teachers trained. In place of the two-track system the unified labour school was created. In its original form this consisted of a first stage of five years and a second stage of four years. In 1923, however, the lengths of these stages were reversed, and the second stage was divided into two cycles, one of three years and one of two years. Each of these stages led directly on to the next. The curriculum was designed as a progressive sequence, and entry to each successive cycle was based upon a pupil's ability to complete the work of the preceding year of the course.

There were thus no institutional barriers to prevent pupils from passing upwards through the whole school system, provided they had the required degree of scholastic ability. The rate of enrolment was limited only by the inherent difficulties of providing enough schools in a vast and sparsely settled land where the provision of education had been so neglected. Great efforts were made to spread the four-year primary school rapidly throughout the countryside, to provide the smaller towns with incomplete secondary school of seven years, and to develop the complete nine-year secondary school in the larger towns. Because the programme of studies for the different grades was the same in all types of school, children could pass from one to another without difficulty should circumstances permit, and the upward extension of the four-year schools and the seven-year schools could be progressively carried out without any gap in the educational process as more buildings and teachers became available.

Such a rapid development of primary education took place in the first decade after the Revolution that it became possible to make the elementary stage of education compulsory, and plans were prepared for the extension of seven-year schooling to all children. In the 1930 Constitution of the U.S.S.R., Article 121, this was written into the fundamental law of the land: 'Citizens of the Union of Soviet Socialist Republics have the right to education. This right is ensured by universal and compulsory elementary education; by free education up to and including the seventh grade. . . .' During the following decade it was possible to make seven-year schooling compulsory in the towns, and the next step was to develop a comprehensive network of seven-year schools to serve the rural areas. By 1940 the seven-year school was to be found nearly everywhere. The havoc of war caused a set-back to the development of universal full-time seven-year schooling, but led to the development of a variety of part-time trade schools and general education schools for young people who had had to leave school prematurely.

Immediately after the war the school entrance age was lowered to 7 and one effect of this was to increase the number of pupils who completed the first stage of secondary schooling. In the next ten years the position was reached at which the majority of young people were completing their seven-year schooling and increasing numbers were continuing their education still further. Seven-year schooling was tending to become the minimum requirement for entry to the trade schools, and so rapid was the increase in enrolments in the full secondary schools (by this time ten-years in length) that universal ten-year schooling appeared to be the next target. Among the directives for the fifth five-year plan, 1951–55, adopted in 1952 by the Nineteenth Congress of the Communist Party of the Soviet Union was the following: 'by the end of the five-year plan the transition from the seven-year public school education to universal secondary (ten-year) education should be completed in republic capitals, cities under republic jurisdiction, province and territory capitals and the large industrial cities. The conditions should be prepared for full achievement in the subsequent five-year plan of universal secondary (ten-year) education in the remaining cities and rural localities'.[1] The corollary of universal ten-year schooling was seen to be the provision of some form of pre-vocational training for all young people in the general secondary school, since only a minority of them would be going on to the institutions of higher learning, and the directives adopted by the congress included the following: 'With the aim of further increasing the socialist educational effect of public schools and guaranteeing to students completing secondary school the conditions for a free choice of occupation, polytechnical instruction should be introduced in the secondary schools and measures necessary for shifting to general polytechnical education should be undertaken'.[2]

In the period for 1950–55 the number of pupils in the general secondary schools more than trebled,[3] and, if all types of senior secondary schools are included, ten-year schooling was rapidly becoming universal.

During 1958 the nature of the education provided in the ten-year general secondary school received much criticism on the ground that it was divorced from life and productive work, as the schools still inclined to see their role as that of preparing students for entrance to institutions of higher learning. Under the reform then initiated, the upper stage of secondary education was henceforth to be provided in a wide variety of types of school, including part-time, which would offer three years of senior secondary education based upon a unified, eight-year general educational labour and polytechnical school. This development will be dealt with more fully in the chapter on the curriculum. What is relevant here is the fact that although the nature and the form of senior secondary education is undergoing changes at present in the U.S.S.R. the trend towards lengthening the period of secondary education for all is continuing.

Stratification of schools in Europe

During the early years of this century, while the United States of America, and a few less populous countries such as Scotland and some of the British Dominions, were developing a high school that would be open to all children, most European countries were adopting a very different approach to the education of adolescents. The underlying assumption in American society was that every person should have an equal opportunity to get on in the world and the schools were used as a means of increasing social mobility. In nineteenth century Europe, on the other

1. From *Pravda*, 12 October 1952.
2. ibid.
3. M. Deineko, op. cit., p. 32.

hand, the school system was shaped as a hierarchy of privilege-granting institutions, and the democratic movement in education throughout the nineteenth century and the first quarter of the twentieth century largely took the form of attempts of schools lower down the scale to obtain for their pupils the privileges permitted to the schools above them.[1]

This movement is most clearly seen in Germany. In Prussia, early in the nineteenth century, the State had imposed a centralized control over secondary education and had given the classical *Gymnasium* the sole right to prepare young people for entrance to the universities and the higher positions in the civil service, and had given its students certain military privileges. The State had also laid down a strictly classical curriculum for the *Gymnasium* at a time when research into the natural sciences, history, economics, politics, and modern languages and literatures, was vastly expanding the range and depth of intellectual interests. Increasingly throughout the century the middle classes sought for an education at the secondary level that would more adequately prepare their children for the kind of lives they would lead. To satisfy these demands, the State permitted the increase of different types of secondary school but refused to give them state aid and withheld from them as long as possible the privileges of the *Gymnasium*. But gradually the newer schools achieved a measure of equality. In 1892 the following types of secondary school were officially recognized: the six-year *Realschule*, *Progymnasium* and *Realprogymnasium*, and the nine-year *Gymnasium*, *Realgymnasium*, and *Oberrealschule;* and in 1901 the schools of each of the two groups were given equal status with the others of the same group.

The secondary schools themselves, however, were still quite distinct from the elementary schools. Children entered them at the age of 9 after a preparatory course in the *Vorschule*, and were thus completely separated from children who took the elementary school ladder (*Volksschule*). For these children the four-year *Grundschule* was followed by a further 4 years in the higher elementary school or by a six-year course in the *Mittelschule*, which was established late in the nineteenth century to provide a general and pre-vocational education superior to that given in the elementary school but cheap enough for parents who could not afford to pay for a full preparatory and secondary schooling. The elementary school led children direct to work or to specialized trade training, while the middle school led to intermediate employment in commerce, industry, agriculture, forestry, and so on, or to higher specialized vocational training.

The general position was that even in the first decade of the twentieth century the type and nature of a child's education and his vocational preparation were largely predetermined by the socio-economic status of his parents. His own capacities and interests had little influence on the kind of schooling he was given. Criticism of the system became widespread, being directed against the lack of unity among the kinds of schooling given, against the impossibility of providing a natural differentiation of education in accordance with the abilities of the young people, and against the consequent wastage of talent. The *Einheitsschule* movement, which had begun in the latter part of the nineteenth century with the purpose of providing a common course in the junior classes of the various types of secondary school, extended its aims to include a radical transformation of the school system by providing a six-year common school for all children before differentiation into specialized types of education began. In the ferment that followed the first world war, a few steps towards reconstruction were taken: the *Vorschule* was abolished, and the four-year *Grundschule* was made the common school for all children, irrespective of the social position of their parents. At the end of the *Grundschule* period, or in three years in the case of very able children, selection for the secondary schools and for the middle schools took place. These reforms did much to make it possible for children to be selected for the kind of education best suited to their abilities. However, as fees were not abolished and as many parents could not afford to keep young people away from work, the influence of socio-economic factors upon the kind of schooling followed by the children remained powerful. The practice of remitting fees for able children of poor parents and of making grants towards the maintenance of such children increased steadily after the establishment of the common primary school, and by 1930 approximately one-third of the secondary school population was receiving free tuition.

To make it easier for rural children to obtain a secondary education, a new type of school, the *Aufbauschule*, was created in 1922. It was a six-year non-classical school which pupils entered after having spent 6 years in the elementary school. It proved to be popular, for it corrected some of the faults of early selection. Not only did it provide a second chance for pupils who had failed to obtain a place in one of the other kinds of secondary school at the age of 9 or 10, but it helped those who only at a later stage in their lives showed aptitude for secondary school studies. Its success in rural areas led to its establishment in the cities as well.

During the Nazi régime the school system was greatly simplified by the abolition of all except three of the types of secondary schools. The *Oberrealschule* and the *Aufbauschule*, which placed an emphasis on modern studies, became the main types permitted, while the classical *Gymnasium* was allowed to exist only in the larger cities and for a very limited number of pupils. Little was done to make it easier for children of the working classes and lower middle classes to attend the secondary schools, which continued to enrol only a small proportion of the children who passed through the *Grundschule*. Fees were still charged, scholarships were few, and the curriculum was primarily designed as a preparation for entrance to the universities. The separation between the various types of schools—higher elementary, trade schools, middle schools, and secondary schools—and between the different varieties of schools of each type, remained almost as rigid as ever, and much of the former hierarchy of privilege persisted. There was, in consequence, a steady pressure of pupils to enter the secondary schools, and constant dissatisfaction that opportunities were so limited.

Throughout the present century many German educationists have considered that there would be little chance

1. I. L. Kandel, *History of Secondary Education*. Boston, Houghton Mifflin, 1930, Chap. 7.

of completely escaping from this impasse until a larger period of common elementary schooling could be made general, until much greater flexibility of courses could be brought about, and until transfer from one type of school to another could be made easier. Others, however, have feared that such measures would impair the distinctive quality of the specialized branches of education and would lower the standard of work done in the 9-year *Gymnasium*. To safeguard these values they have tried to make methods of selection as accurate as possible and to find ways of alleviating the effect of errors of selection.

The changes that have taken place in Germany since the second world war have varied greatly, not only as between the Federal Republic of Germany and Eastern Germany, but also as between the different *Länder* in the Federal Republic. In Bavaria, the different types of *Gymnasium* have been modelled upon the *Aufbauschule* in taking their pupils after six years of primary schooling and giving them a seven-year course instead of the traditional nine years. In the city-states of Hamburg and Bremen and in the Western section of Berlin, there has been a marked trend towards multilateral secondary schools. In most of the *Länder* of the Federal Republic, however, the main lines of the old system have changed little. Education has become free, and something is being done to give financial assistance to children whose parents can little afford prolonged full-time schooling. Moreover, transfer from one type of school to another can now more easily be arranged if mistakes in choice of school have been made or if changes in vocational intentions occur, but as the curricula of the different kinds of school are designed as unities such changes always present some difficulty and are relatively infrequent.

In recent years further reforms have been under consideration as a result of the 'Plan for Reorganization and Unification of General Public Schools' proposed in 1959 by the German Council for Education and Culture;[1] but meanwhile the early differentiation of a multiple-track system is retained and the future education and vocational training of most children is largely decided after only four years of primary schooling. Added to this is the fact that about three-quarters of the children begin their direct occupational training by apprenticeship or similar means after eight years of schooling. These two things together have emphasized the importance of accurate procedures for selection and guidance, and since the war a widespread interest in psychological and educational testing has grown up.

From 'scholarship' to 'free place' and secondary education for all

The current interest in testing now being taken by many countries on the European mainland is comparable in many respects with the interest that developed in Great Britain in the decade before the war and in the years immediately following the 1944 Education Act. This aspect of the attempt to base access to the various types of post-primary schooling on the abilities and interests of the children rather than on the social position of their parents is one that has received very careful attention in England, and much can be learned from the diversity of experience of that country.

In contrast to Germany, the State in England entered the field of secondary education only late in the nineteenth century. Until then only endowed schools or privately owned secondary schools existed. In 1864 a Schools Inquiry Commission, set up to survey the existing provision of facilities for secondary education, was impressed by the inadequate number of schools and the lack of consistent standards.[1] It recommended that local authorities should be set up to co-ordinate secondary education in their areas and to prepare schemes for the provision of secondary education where facilities were lacking. It recommended, too, that a central authority should be established to keep a general oversight on the work of the local authorities. No effective state action followed from the work of the commission, but the most important of the private schools themselves set about improving their professional standards. Local authorities on their own initiative began to establish technical and scientific day and evening schools and to provide advanced classes attached to the primary schools for pupils who could remain at school beyond the minimum leaving age but who could not gain access to the grammar schools. Facilities, however, remained uncoordinated, unevenly available, and inadequate. In 1894 the Bryce Commission was set up to report on the best method of establishing a well-organized system of education. It found that while a quarter of the children of all the secondary schools of the country had come from the elementary schools, they comprised only 4 or 5 per 1,000 of the pupils who left these schools each year.[2] In accordance with the commission's recommendations, the Education Act of 1902 set up a central authority for education—the Board of Education—and placed upon the counties and county boroughs the responsibility for making adequate provision for secondary schooling.

In making such provision, the local authorities were expected to take into account the availability of existing schools in their areas. They could make grants for the improvement of local grammar schools which were financed from endowments and fees, or they could establish and maintain their own schools. In the last decade of the nineteenth century and in the early years of the twentieth century the provision of scholarships to existing schools was the chief means used to enable poorer children to get a secondary education. Later, with the increase in the population and in the proportion of children staying at school beyond the minimum leaving age, the local authorities built many new schools and the number of working-class children entering grammar schools steadily increased until they became the largest single group receiving secondary education. However, in comparison with the number of manual workers in the general population their proportional contribution to the grammar schools remained low.

Scholarship pupils from the lower middle class and from the working class generally did well at grammar schools.

1. D. J. Cobb, 'The West German Rahmenplan', *International Review of Education*, Vol. V, No. 4, 1959, pp. 499–504.

1. Great Britain, Schools Inquiry Commission, *Report of the Commission*, London, 1869.
2. Great Britain, Royal Commission on Secondary Education, *Report* (The Bryce Commission), London, 1895.

They proved that ability was not restricted to the children of the more favoured classes of the community and that their entrance to the grammar schools did not lower the standard of education of these schools. In consequence the view began to be accepted that secondary education could well be extended much further. The report of the Board of Education for 1911–12 had already indicated this in its remark that 'there has been undoubtedly a growing conviction that the value of secondary schools is not limited to children of exceptional ability', and more and more the local authorities sought to increase the number of children entering the grammar schools. The conviction grew that secondary education should be provided for all who were fit to receive it, not just the exceptional children who gained the highest rank in a competitive examination. The concept of 'free places' came to supersede the concept of 'scholarships'. The number of grammar school places was steadily increased, and by the time the second world war began nearly 20 per cent of the children between 11 years of age and the minimum leaving age of 14 were in grammar schools.

For pupils who did not transfer to grammar schools at the age of 11 other kinds of educational provision were developed. A small proportion went to selective junior technical schools, but the great majority stayed in the higher classes of their elementary schools until they went to work. For those who remained at the elementary school beyond the minimum leaving age advanced classes were provided, either as upper divisions of 'all-age' schools or separately in the four-year central schools which were established by many local authorities in order to provide something more than higher elementary education for those pupils who could not obtain a place in the grammar schools. Many of the pupils of the central schools were capable of grammar school work, and though at first their curriculum was biased towards commercial and industrial vocations it tended to become more academic and general. The difference in prestige between the secondary education given in the grammar schools and the general education given in the advanced classes of the elementary schools and in the central schools became a source of anxiety to educators. As early as 1926 the Consultative Committee on the Education of the Adolescent[1] had recommended that after the age of 11 every child should have four years of post-primary education in the type of school that best suited his abilities and probable vocation. The view was becoming general that all education after the age of 11 should be regarded as secondary and should be organized accordingly. The Board of Education accepted in principle the committee's recommendations, but reorganization was delayed by the economic and political difficulties of the decade preceding the second world war. In 1944, however, an Education Act was passed which gave all children the right to free post-primary education, placed all forms of publicly maintained post-primary schools in the care of the local education authorities, and required the local authorities to make adequate provision for at least four years of post-primary education for all children in their areas. In 1947 the leaving age was raised to 15 to ensure that every child received the full 4-year course. Junior secondary education was now universal.

The local authorities were asked to submit to the Ministry of Education their proposals for the reorganization of educational facilities at the post-primary level. The majority, following the recommendation of the Consultative Committee on Curriculum and Examinations in Secondary Schools,[1] decided to retain the basic tripartite division into grammar schools, secondary technical schools, and secondary modern schools. The London County Council, however, convinced by its experience in trying to assess the potentialities of candidates for free places in grammar schools that selection as early as 10 or 11 years of age could not be accurately and justly carried out, and that the separation of children into different types of school at the junior secondary level was undesirable, decided to establish comprehensive schools to which all the children of an area would go. A few other authorities have followed London in this.

Although there has been some unevenness in the provision made by the many local authorities, which faced serious difficulties in carrying out the reorganization at a time when the rising school population placed a heavy strain upon their resources, in general a great advance has been made towards establishing a democratic system of secondary education. There is still dissatisfaction in England with the present position. It is widely considered that even with the best selection procedures a number of children are wrongly allocated each year. To overcome the effects of this, attempts are made to maintain a degree of similarity in the curriculum of the first two years in all kinds of school so that transfer of pupils can take place at the end of this period if necessary. In fact, however, very little transfer does take place, in spite of the known proportion of errors of allocation, for the barriers between different types of school are still formidable. A further attempt to adjust the situation is made by some secondary modern schools by providing grammar school courses for their most able pupils; but while considerable success is being achieved, as measured by passes in the examinations for the General Certificate of Education, the full benefit of working in a grammar school does not appear to be available to the small academic minority in a secondary modern school. Because of such problems as these, more local authorities appear to be turning to the comprehensive school as a solution.

Towards the 'école unique' at the junior secondary level

In Great Britain, where the steady growth of the scholarship and free-place system did much to break down the barriers between the public primary schools and the grammar schools, the demarcation between the primary and the secondary systems was never so sharp as in France, Germany, and other continental European States. In consequence there has not been in Britain a movement to develop a common school system comparable in its single-

1. Board of Education, *The Education of the Adolescent*, Report of the Consultative Committee (Sir W. H. Hadow, Chairman), London, HMSO, 1926.

1. *Curriculum and Examinations in Secondary Schools*, Report of a Consultative Committee (Sir Charles Norwood, Chairman), London, HMSO, 1943.

ness of aim with the movement towards the *Einheitsschule* or the *école unique*. In those countries where entrance to a co-ordinated state-wide system of secondary schools was based on a preliminary education given in special preparatory schools separate from the ordinary primary schools, the first aim of this movement was to abolish or change the nature of the preparatory schools in order to give all children aspiring to enter the public secondary schools a similar preparation for the entrance examinations.

In the beginning the intentions of the supporters of the principle of the *école unique* were mainly concerned with the problem of access to the secondary schools. They wanted a system that would give every child the chance to have his talents recognized and developed, no matter from what social class he came. In this way, it was thought, the nation would ensure that all its talented young people received a secondary education. The *Vorschule* was abolished in Germany after the first world war, and the four-year *Grundschule* became universal. In France, where a Commission de l'Ecole Unique was set up to examine the matter in 1924, the preparatory classes attached to *lycées* were not abolished, but in 1925 the curricula of the preparatory classes and the primary school were made the same so that all children would have an equal opportunity for five years to prepare for the selection examinations for entrance to the secondary schools. In Austria on the establishment of the Republic in 1918, a more sweeping change was attempted whereby all children were to attend a common *Grundschule* for four years and a *Mittelschule* for four years before being separated into different types of school. After a trial in a few schools the innovation was dropped and the German system of differentiation after the *Grundschule* period was retained.

During the first half of the present century the majority of European countries developed a common primary trunk leading up to a branched secondary school system, although the number of years of primary schooling that most children have had before entering the secondary schools has varied from four to six, and the normal age of transfer has varied from 10 to 12. Since the second world war there has been a movement in many countries to increase the length of the period of common education, i.e., to extend the *Einheitsschule* or *école unique* upwards through the period of higher primary, lower secondary, or intermediate education. The movement is an expression of the importance now being placed upon giving a longer general education to all young people, and this aspect will be dealt with later. It is also another aspect of the effort to make an accurate and just allocation of pupils into the different types of higher school. It is this further aspect of the striving for equality of opportunity for all young people to develop their talents that will be considered here.

The problem itself, and the difficulties attendant upon its solution, can be seen very clearly in the various attempts that have been made in France over the past 20 years to reform the first cycle of its system of secondary education. The beginnings of recent attempts at reform go back to 1937, when direction-finding classes (*classes d'orientation*) were set up in some of the *lycées* in order to help pupils to make a better choice of their subsequent course of secondary schooling, but the idea of making this general for all children in the primary school received a major impetus from the reports of the two Commissions d'Etudes de la Réforme de l'Enseignement that were set up immediately following the second world war. The first, the Algiers Commission, reported in 1944; the second, the Langevin Commission, in 1946. The Langevin report envisaged two phases of secondary education, which would commence at the age of 11 years after the completion of primary education. The first phase, which was termed the *cycle d'orientation*, was to last for four years and was to be open to all children. It was to comprise a common core of general studies together with some optional specialized studies, and its main purpose was to be the exploration of the aptitudes and abilities of the pupils so that the subsequent course of differentiated education could be widely chosen by the young pupils, their parents, and their teachers. The second phase was to be a three-year *cycle de détermination*, either full-time or part-time, devoted to specialized vocational training or preparation for the institutions of higher education.

The recommendations of the Langevin report were too drastic and far-reaching to be immediately acceptable, but they profoundly affected the subsequent thinking of educators both in France and elsewhere, and several measures have since been taken in the direction proposed. A major advance was made in 1946 by converting the *écoles primaires supérieures* into *collèges modernes*. This gave them secondary school status, and emphasized the idea that the primary phase of education ended for all children at the entrance to the sixth class.

The *classes nouvelles* that were formed in a number of *lycées* in 1945 provided an opportunity for experimentation with orientation procedures, activity methods and optional subjects, and for their general value to be assessed. Although these classes were given up in 1951, when they numbered 800, the experimental findings were spread widely throughout the junior forms of the secondary school and a few *classes pilotes* continued the work of experimentation. In 1949 a proposal for instituting a common two-year period of orientation was put forward, but it was not approved by the Conseil Supérieur de l'Education Nationale. Since then several further attempts to evolve an acceptable plan for reorganization have been made. A *comité d'études* headed by Jean Sarrailh drew up proposals for a three-year period of *enseignement moyen* in which there should be a common programme together with optional subjects taken according to the aptitudes and tastes of the pupils. In 1956, after a change of government, a new reform proposal was made; it reduced the orientation period to two years, but emphasized the importance of a common period of education in the first phase of secondary schooling by envisaging the establishment of separate *écoles moyennes*, not only to enable all pupils to make a wider choice of subsequent education but also to extend upwards the period of general education for all. The proposal to establish *écoles moyennes* was, however, regarded as too costly to be acceptable.

In 1959 the Government passed a law that embodied a considerable measure of reform. The school-leaving age was to be raised to 16 years, so that every child would have at least four years of junior secondary education. At the age of 11 the pupils of the primary school were again to be allocated to different types of secondary school, but the curriculum of the first two years in these different schools

would be very similar for all, and this two-year period would be especially devoted to the exploration of the children's aptitudes. At the end of this period the school would advise the parents on the best form of continued education for their children. The kinds of secondary school were to be: *lycées*, both classical and modern to give a general education leading up the universities; *lycées techniques*, to give a general and technical education also leading to the universities and institutions of higher technology; *collèges d'enseignement technique* (the old *centres d'apprentissage*), to provide a shorter technical education and trade training to those who would then go to work; and *collèges d'enseignement général*, which would be the old *cours complémentaires* and would conclude the general education of those pupils who intended to leave school at 16 years. In order to facilitate transfer from one type of school to another after the two orientation years, special adjustment classes were to be set up.

It was recognized that there would be many difficult problems to be solved when the specialized teachers of different kinds of secondary school were expected to teach a common curriculum and provide the guidance upon which their pupils' subsequent schooling might be based. There has been a rapid development of educational and psychological research in France in recent years and an expansion of psychological services to schools. This development, together with the British experience, has made French educators profoundly conscious of the need for a fairly lengthy period of exploration and expert psychological assistance before far-reaching decisions affecting the child's future are made, and it is possible that the unification of schooling in the *cycle d'orientation* may be carried even further in the future.

The 'enhetsskola' of Sweden

One of the most carefully prepared changes in the direction of the *école unique* is that which is now being made in Sweden.[1] The public school system that evolved in Sweden during the second half of the nineteenth century and the first quarter of the twentieth century was characterized by a variety of types of school. The primary school could be a six-, seven- or eight-year school, according to the district in which it was found, and a pupil who wanted education beyond the primary level could transfer to a five-year *realskola*, after completing four years' primary study at the age of 10 or 11, or to a four-year *realskola* after six years of schooling at the age of 12 or 13. To prepare for the university he could then transfer to a three- or four-year *gymnasium*, and to prepare for intermediate occupations he could specialize in commercial or technical subjects during the last two years at the *realskola* or he could attend the *praktiska mellanskolor* that were to be found in the larger towns. Pupils who did not enter these forms of secondary school would attend a continuation school for one or two years after completing the basic *folkskola* course and then could enter vocational schools.

With the lengthening of the compulsory leaving age to 14 years, which was gradually brought into force in most school districts between 1936 and 1940, and with the prospect of an upward extension of leaving age as more and more children were voluntarily staying at school for a longer period, the vertical separation of schools that began from the age of 10 gave rise to dissatisfaction. In 1940 a committee of educationists was set up to study the organization of the school system, and in 1946 its work was supplemented by a lay committee representing the political parties of the Swedish parliament. As a result of these studies it was decided to bring about a radical change in the school system.

The Swedish School Reform Act, passed in 1950, provided for the establishment of a nine-year compulsory comprehensive school (*enhetsskola*) designed to replace the elementary school, the continuation school, the higher elementary school, the municipal middle school and the lower secondary school. The *enhetsskola* was to take pupils from 7 to 16 years of age, and its course of schooling was to be divided into three stages: a junior section with classes 1 to 3, a middle section with classes 4 to 6, and a senior section with classes 7 to 9. By means of a long consecutive course of compulsory subjects the nine-year school would, it was hoped, satisfy the need for a better general education for all pupils. By means of the gradual introduction of optional specialized subjects, culminating in the organization of separate divisions in the ninth class, a more rational vocational and educational guidance could be given. Moreover, the child's future education and occupation would stand a better chance of being based upon his own abilities and interests than it was when a premature choice of differentiated schools had to be made that was greatly influenced by socio-economic factors.

The 1950 Act expressly provided that the development of the *enhetsskola* should be carefully guided in the light of experimentation into such problems as the best curriculum and methods to use in a comprehensive school, the differentiation of courses of study and methods according to the varying abilities of the children, and so on. Experimental schools were set up in certain municipalities and procedures were devised so that their work could be carefully watched by the Board of Education and their experience spread throughout the school system. Impressed by the success of the experimental work, the Government agreed that the *enhetsskola* should definitely replace the older organization of schools, and in 1957 it decided that the general introduction of the new form of organization should begin everywhere between 1963 and 1969. Until the reorganization is completed provision is to be made for nearly all children in the three-year *realskola* when they have completed a six-year primary school course, though the four- and five-year *realskola* is expected to remain in existence as well for some time. The *enhetsskola* will lead to a three-year *gymnasium*, preparing students for the university and for various types of institution for higher specialized vocational training. At the present time the *gymnasium* in most cases still has the *realskola* attached to it.

In 1959 the Danish school system, too, was reorganized to provide a seven-year unified primary school leading to a three-year *realskole*, from which, in the second year, academically able pupils will transfer to the *gymnasie* which prepares for the university.

1. Ingemar Düring, ed., *The Swedish School Reform*, 1950, Uppsala, Appelbergs Boktryckeriaktiebolag, 1951.

Conclusion

Summing up, it can be stated that since 1930 there has been remarkable progress in the extension of opportunities for secondary education. In the least advanced countries access to secondary education, even if only for a minority of scholastically able pupils, is now being provided where before there were no facilities at all. It is recognized that much remains to be done even to provide for the best intellects, and it is known too that social and economic factors still play a large part in determining which of a country's able children will be fortunate enough to be selected. Yet a beginning has been made, and almost without exception the newly constructed or reconstructed systems of education in the less advanced countries have avoided the two-track public school system which the European countries struggled so long to break away from. Now it is steady quantitative growth that the underdeveloped countries most need.

One of the last countries to achieve a single-track elementary school was Egypt, and it is of value to note the way in which in the space of less than two decades the new system was established.[1] Almost as late as 1940, Egypt still had a dual system operating throughout the period of childhood. There were 'elementary' schools, which were attended by most of the children, and there were 'primary' schools for a minority. The primary schools charged fees and prepared children for entrance at the age of 12 to the secondary school and then to the modern university; the elementary school led to trade-training schools, commercial schools, agricultural schools, or to the Al-Azhar University, which was directed towards mastery of Arabic and the Koran. The primary school taught a foreign language from the outset, the elementary school not at all. The task of bringing these two types of school together was begun in 1938 with the postponement of the study of a foreign language until the second year of the primary school, and in 1945 until the third year. This made it possible for the elementary school child to change over up to the age of 10 years. In 1944 fees for primary education were abolished, and in 1945 the elementary child was allowed to sit for the Primary School Certificate and was exempted from the foreign language requirement. Thus secondary education was opened to the elementary school child. In 1950 a common syllabus was adopted for the two schools, except for the teaching of a foreign language from the third year of the primary school. In 1951 when the six-year school was made compulsory the foreign language was introduced at the fifth or sixth year for all schools, and the single track system was complete.[2]

The more advanced countries have now reached a point at which almost all their children are at school until 15 years of age, and in most cases the last three or four of these years are regarded as comprising the first stage of secondary education. Moreover, in every country in the world now the public primary school system is an *école unique* leading directly to the public secondary system, although the length of the common trunk varies greatly from countries like the Federal Republic of Germany, Spain, and Venezuela where it is only four years (from the age of 6 to 10), to countries like Canada, New Zealand, and the United States of America where the whole system is unified and where in effect it lasts 11 or 12 years from the age of 6. The most frequent length for the common trunk today is six years and in only about a quarter of the world's systems is it shorter than this. Furthermore, the tendency seems to be towards a lengthening; from which it can be seen that structurally the world's systems are now much better designed than formerly to minimize the denial of opportunity that occurs when a premature choice of specialized schooling is determined by factors that are unrelated to the child's own abilities and needs. Such factors, of course, still operate, although the more obvious effects of differences in wealth, class, caste, religion, and race upon the restriction of educational opportunity are steadily being minimized. Two other fields of inequality cause persistent problems however, namely, the provision of schooling in rural areas, and the education of girls.

1. M. K. Harby and M. H. Afifi, *Education in Modern Egypt*, Cairo, Ministry of Education, 1958.
2. Since the Law of 1953 no foreign language has been taught at primary level in Egyptian schools.

RURAL SECONDARY EDUCATION

Rural areas are always difficult to provide with educational services, and especially so in the matter of secondary education. In only a small fraction of the world's rural areas do children yet have ready access to education. Villages are often too small even to support a primary school, and many children live in isolated farms a long way from a village. The children of the wealthier families have customarily been sent to boarding schools in towns, but the children of the poorer families commonly obtain no more than an incomplete schooling and therefore would not be qualified to benefit from secondary education even if provision could be made for them. One of the major obstacles to the extension of secondary education in the remoter rural areas has been the sparseness of settlement.

The provision of scholarships and bursaries to enable children of ability to live away from home and board at a secondary school is one of the commonest methods used in the early stages of providing extended education for rural children, especially prior to the growth of efficient transport services between villages and nearby towns. In most countries of the world there are secondary schools, either publicly or privately established and controlled, that have boarding establishments attached to them. Some, indeed, have consisted entirely of boarders and have developed a characteristic form of schooling. The famous English 'public schools', for example, went much further than merely having boarding establishments attached: they organized their school life around the various 'houses', each of which with its house-master and matron constituted a circle of community life within the school. In other countries, however, even those that derived their secondary education systems primarily from England, this method has not often been followed, and the more common pattern is to have day schools with an attached boarding establishment for a proportion of their pupils. In recent years countries as different in their background and educational provision as Afghanistan, Bulgaria, Ceylon, Italy, Japan, Norway, Rumania, the U.S.S.R. and

Viet-Nam have done much to help their most isolated children by establishing residential schools and by attaching dormitories or hostels to existing secondary schools.

The provision of scholarships to enable able but poor pupils to be entirely maintained in such schools has, in the past, been rather more often made by philanthropic bodies and religious organizations than by the public authorities, which in the main have restricted themselves to making payments that help country parents to board their children in towns but do not meet more than a part of the total cost. They have therefore still tended to remain more readily accessible to children from the richer homes. Italy provides a good example of a country in which a complex system of scholarships has been built up through the voluntary efforts of private individuals, philanthropic foundations, local authorities, trade unions, professional associations, and commercial and industrial enterprises. For the most part these are open to competition by children who have shown high intellectual promise but who live in rural areas where no facilities for secondary schooling exist. Matching private generosity, the Government in recent years has allocated a considerable sum of money to the provision of boarding scholarships. In Ceylon a large number of special science scholarships are awarded annually on a competitive basis to pupils in schools that do not have adequate facilities for teaching science. The scholarships are tenable in central schools taking the pupils up to the standard of university entrance, and they provide the students with free board and lodging as well as free tuition.

Several of those countries that administer non-self-governing dependencies or that have the responsibility for the care of United Nations Trust Territories have been making similar provision at the secondary level for selected children from areas lacking educational facilities. In Western Samoa, for example, and in other islands of the South Pacific area, it is usual for such children to board with relatives who live in a town, and boarding bursaries are paid to the persons who have the children in their care. In some areas the children go to other countries. For example, the Australian Government has for some time provided scholarships and bursaries to enable selected children from the territories it administers to board in Australia while attending high school.

Provision of this nature can cope with only a small proportion of the children of secondary school age, and is not a permanent solution to the problem. One immediate advantage is that it sends back to their respective communities educated young people who will form the nucleus of a body of teachers and technical assistants and help to develop local facilities for education. In underdeveloped countries the provision of local secondary schools is the next task to be undertaken. In many predominantly rural countries, primary schools have initiated this phase by extending their courses upwards to offer higher primary education and even complete secondary education to their most able pupils; with increasing population, these primary school 'tops' then usually become separate secondary schools. In earlier times this process could be more satisfactorily organized than it can today, for before the rise of modern technological civilization the secondary school curriculum was mainly of a literary nature and neither teacher nor learner needed much equipment other than the teacher's own books. The difficulties of adequate provision for modern subjects are crippling the efforts of rural primary schools to supplement the education of their senior pupils. Such arrangements are worth studying carefully, however, as in spite of their inadequacies they still have a contribution to make in the most difficult areas.

Scotland is a notable example of a country which, very early in its history, made provision for a grammar school education to be given in the village school for even a handful of pupils if they showed themselves to be scholastically able,[1] and the influence of Scottish settlers in many of the British colonies could be seen in the attempts of village schools to provide a complete education at least for the intellectually able minority. In New Zealand, for example, what were called 'district high schools' increased rapidly in number from the beginning of the present century.[2] They were essentially graded primary schools for children up to the age of 13 or 14, which then provided secondary classes up to the university entrance examination level. Their curriculum was necessarily bookish, for the one or two secondary school teachers on the staff would almost certainly be university graduates in literary and humanistic subjects, and even if they were science graduates their teaching equipment would be of a rudimentary nature. Moreover, with the whole range of secondary work in their care, they would have little time to devote to the laboratory or the gardens. However, they were remarkably successful in bringing secondary education of the traditional type within the reach of most rural children. In some of the provinces of Canada, such as Ontario and Saskatchewan, a development similar to that in New Zealand took place; and in quite different circumstances, Bermuda has retained until the present day a form of complete primary and secondary school that in essentials goes back to all-age parish schools, very similar to the early Scottish schools, that were founded in the colony in the nineteenth century.

Other countries, like Austria, Ecuador, Finland and Uruguay, have provided higher continuation classes in some of their more isolated primary schools, but only rarely have attempts been made to give a complete course of secondary education in such circumstances.

Many different means have been adopted to alleviate the inadequacies of the small rural high school or primary school with secondary classes attached. Itinerant instructors of special subjects like agriculture, woodwork and cookery, have periodically visited such schools to take classes. Correspondence courses have been used to supplement the work of teachers in subjects of which they knew little, and under the supervision of their teachers the few pupils involved could undertake their own study. More recently the radio brought a new device to help the teacher. The inadequacies of such schools remained, however, and it awaited the evolution of modern transport to bring to rural children secondary schools as well equipped as those of the cities. Now, with the provision of secondary facilities suited to a wider range of the abilities than could be

1. Newman A. Wade, *Post-Primary Education in the Primary Schools of Scotland (1872–1936)*.
2. Alan H. Thom, *The District High Schools of New Zealand*, Wellington, New Zealand Council for Educational Research, 1950.

catered for by the 'literary' type of rural high school, there has occurred a vast increase in the proportion of country children taking advantage of secondary education.

The most important factor, therefore, in the expansion and improvement of the past 30 years, has been the improvement in ways of communication and means of transport. Good roads and modern techniques, by opening up areas of farmland and simplifying marketing have brought increased prosperity, allowing children to be freed from home labour for longer periods, and enabling them to go several miles by cart, bicycle, or motor car to a centrally placed secondary school. State monetary allowances to help pay for the maintenance of private means of conveyance and reduced fares on publicly owned vehicles were provided in several countries in the earlier part of the present century, but the provision of special school bus services is gradually superseding the more empirical arrangements. In the United States of America, where a widespread network of school buses was developed comparatively early, about one-third of all pupils, primary and secondary, rural and urban, now travel by school bus. In Australia, Canada, France, Japan, New Zealand, Norway, Poland and several other countries, school buses running daily to rural centres of secondary education are each year increasing the proportion of country children for whom a secondary education is as accessible as it is to town children.

At the same time there are many areas in the world where such facilities will long remain poor. Isolated villages in difficult terrain are found in countries as diverse as Albania, Italy, Turkey, and Viet-Nam, to take a few examples, and these will be difficult to serve by convenient means of transport. There are other hindrances, too. In some parts of Pakistan, for example, the provision of centralized educational facilities has to take account of the influence of ethnic, religious, and linguistic differences among neighbouring communities. In such circumstances, scholarships for potential leaders to attend secondary schools and institutions of higher learning elsewhere seems the most practical step that can be taken, and it is one that will help to change the attitudes of the different groups one towards the other as their leaders gain more knowledge and appreciation of the whole nation in which their people are called to play an effective part.

The unwillingness of small local communities to combine their efforts in order to be able to provide better educational facilities for their children is, of course, not confined to the type of local difficulty characteristic of underdeveloped countries. In the United States, where the responsibility for the provision of schools was originally vested in the small school district, local feeling often hindered the development of secondary education in rural areas. School districts might be too small and too poor to be able to establish and maintain secondary schools, yet at the same time they might be so determined to maintain their own identity that they would not amalgamate with others to create the larger and more effective districts. The general trend, however, has been towards the consolidation of school districts, the building of central schools, and the provision of school bus services. This trend has transformed the rural school and has brought secondary education to nearly every country child.

ACCESS OF GIRLS TO EDUCATION

One of the striking achievements of the present age has been the progress made by women towards social, political, and economic equality with men. Parallel with this has been the achievement of the right of access to schools and universities, the right to obtain certificates of school attainment and university degrees, and the right to enter professions requiring advanced education. At the present time the educational legislation of almost all countries of the world recognizes, either explicitly or implicitly, the right of both girls and boys to free and compulsory primary education, and only in rare instances is the duration of the compulsory period different for the two sexes. Equality of access to the non-compulsory secondary stages of education, too, is almost universally accepted as a right, and during the present century in all countries where secondary education systems have been growing steadily one important factor in their growth has been the increasing proportion of girls in attendance.

Nevertheless, there are still differences in the degree to which girls receive education beyond the compulsory stage. In a few areas such as the industrialized countries of Europe, the United States of America, and some of the older self-governing countries of the British Commonwealth such as Australia, Canada, and New Zealand, the number of girls enrolled in general secondary schools is approximately equal or even greater than the number of boys. On the other hand, in some of the underdeveloped regions of the Middle East, Asia, Africa, and South America, there are countries where the overwhelming majority of pupils in the general secondary schools are boys. There are no cases where extreme differences in the opposite direction are found. If we consider the position in respect to the vocational education of boys and girls at the secondary level in countries where separate schools exist for such training, there appears to be an even stronger tendency for more boys than girls to be enrolled. Even countries that have almost equal numbers in their general secondary schools tend to have more boys than girls enrolled for vocational training, although there are a few instances where the opposite is true; and in those countries with a relatively small number of girls in general secondary schools there is usually an even smaller proportion in the vocational establishments. If both these tendencies are taken into account it is clear that in terms of the world population, girls are still far from having an equal share of educational facilities at the secondary level, and at the level of university education the difference is even greater.

The main factors which tend to restrict the education of girls are social and economic ones that vary considerably from country to country. Opportunities for paid employment in occupations that call for a high level of general education or advanced technical training may be much fewer for women than for men. Unfavourable attitudes still exist in some countries concerning the practising of the learned professions by women, or their promotion to executive positions in industry and commerce. Furthermore, the prospect of marriage and the responsibilities of home-making cause many girls to reject the thought of preparing for a career that involves prolonged training, and leads them to drop out of school early to take up

interim employment. The economic position of their families, too, is an important element in the situation. Even where secondary education is free, or where the fees are quite low, it is difficult for the poorer families to maintain their children throughout the adolescent years, and the boys may be kept at school preparing for more highly paid employment while the girls leave school and go to work early.

On the other hand, it would appear that such factors are being counteracted by recent technical and economic changes that are having their repercussions everywhere. The need for trained human skills and developed general ability is increasing at a rapid rate, and is bringing such a demand for well-educated human beings that the resources of both sexes may have to be drawn on to the full. The second world war showed that women could do work hitherto thought possible only for men, and recent technological advances are increasingly calling on their services. This is true not only of the industrialized countries but also of many underdeveloped areas. In the latter the problem of an adequate supply of educated people is so acute, that since only the more accessible regions can be as yet provided with schools, it is recognized that those that can be maintained should educate as many able young people in their areas as possible, girls and boys alike, and that in many cases this can only be achieved by drawing upon the resources of both sexes.

POLICY AND ADMINISTRATION

The changes that are being brought about in education today are affecting the machinery of educational administration and even the policies of governments. Three aspects, in particular, are worth noting here. First, there is an increasing recognition that education, even at the secondary level, is a major responsibility of the public authorities; secondly, there is the realization that the old machinery of administration may be inadequate to its new tasks; and thirdly, with the growing appreciation of the developmental role played by expanding educational services in the economic life of a nation, there is an increasing tendency to consider the part to be played by education when economic development plans are being drawn up.

The increasing responsibility of governments

Among those countries of the world that have had well developed systems of education for a long time there have been great differences in opinion as to who should bear the responsibility for the founding and maintenance of schools. In Europe, since medieval times religious authorities have played an important part at all levels of education from the parish schools to the cathedral grammar schools and the universities, and secondary education owes much to the early work of the churches. They played an important role, too, in bringing the first conceptions of Western education to the rest of the world, for in the wake of all the great colonizing ventures of the European nations from the fifteenth century onwards missions were established, which, although their main purpose was to proselytize, devoted considerable effort to the promotion of education. During the sixteenth century, institutions of higher learning, including universities, were established in Latin America, and right up till the present time mission schools have continued to be founded in remote and underdeveloped parts of the world. Other organized groups of people such as guilds of merchants and artisans, municipal councils, philanthropic associations and scientific societies, also entered the field of education, catering for various needs as they were experienced by their members.

In the European countries themselves, however, and in those of their colonies in which the European settlers became numerous, the voluntary associations were unable to keep up with the demand for educational facilities caused by the social, political, and technological changes that science and industrialization, political nationalism and independence, brought with them.

In recent times, therefore, particularly from the beginning of the nineteenth century, the major responsibility for education has gravitated to the principal organs of government, and the greater part of the educational provision to be found today is made through public schools, that is, schools owned and controlled by statutory authorities representing and acting on behalf of all citizens of an area, not just of a section of them. France, Germany, and Russia were developing state secondary school systems at the beginning of the nineteenth century and one by one other countries followed their example. In Great Britain the central government did not enter the field of secondary education decisively until 1902, when it legislated to make city and county councils responsible for the provision of adequate facilities for secondary education throughout their areas. In the present century the activity of the government in education has been increasing everywhere, and in the newly created independent States and States experiencing a national resurgence the government responsibility for education is accepted. The basic reason underlying the rise of governments to the predominant position they now occupy in education is that they alone have been able to command the resources needed to create and sustain the extensive system systems needed for the maintenance and improvement of civilized communities. Even if the State does not itself provide all the educational services but recognizes the right of voluntary organizations such as churches to have their own schools, it usually takes the responsibility for seeing that these voluntary bodies achieve the standards it requires in buildings, in the training of teachers and in the curriculum, and in many cases it provides financial support.

In recent years, many different patterns of relationship have developed between governments and voluntary bodies, usually the churches, in the provision of educational facilities. At the one extreme there are countries like the U.S.S.R. and Czechoslovakia, where all schools belong to the State and no private schools are permitted. At the other extreme there are countries like the Netherlands, where Catholic, Protestant, and state school systems exist side by side, all maintained by the Government. Between these extremes there are various degrees of state encouragement, support, and control. In Burma, churches are free to set up schools but they receive no state assistance; in New Zealand no financial help is given for the salaries of

teachers or for the erection and maintenance of buildings, but there are many other forms of aid such as free textbooks, subsidies for teaching equipment, provision of access to state manual training centres, sharing of state school-bus systems, and so on. In many Latin-American countries and in many former European colonies in Africa and Asia where the modern education system had been started by churches, the church schools have been granted financial assistance, subject to governmental supervision of their work; and in France a law was passed in 1959 making it possible for financial assistance to be granted by the Government to the church schools. It is clear, however, that the main trend has been towards the State's acceptance of full responsibility for seeing that adequate educational facilities exist, and that the major provision for education today, when all levels and types of education are included, is being made by the State itself, through its own organs of government, both central and local.

An important factor helping to bring about this trend has been the rise in the cost of education in recent years, which has placed a great strain upon the resources of all voluntary bodies undertaking to provide schools. There have been several reasons for this rise. First, during the latter half of the nineteenth century and throughout the present century, there has been a growing need for technical education, and technical education with its expensive equipment has usually been beyond the power of the voluntary bodies to provide. Church authorities in most countries have found it difficult to provide adequately for science teaching or for arts and crafts, except in a small proportion of their secondary schools, and they have preferred to concentrate upon the literary and humanistic disciplines. In underdeveloped countries the gap between their immediate needs and the educational services supplied by private schools is now beginning to be felt seriously, and governments are taking the responsibility for the establishment of technical schools and trade training centres. Secondly, with the prolongation of schooling, the percentage of senior pupils in the secondary schools is steadily increasing, and senior pupils cost more to teach than juniors; they require more highly qualified staffs, a lower pupil-teacher ratio, and more expensive equipment and buildings. When only a few pupils attended secondary schools as compared with primary schools, the voluntary bodies could provide enough secondary schools for those children who wanted places in them; with the growth of universal secondary education they cannot keep up. Thirdly, there are the great increases in special educational services: school psychological services, educational and vocational guidance services, special schools for handicapped children, transport services, and a number of other expensive adjuncts to the modern school. Finally, there is the training of teachers. Although in some countries, such as England, there are many teacher training colleges controlled by churches, their contribution has been overshadowed by the great increase in public institutions set up to cope with the post-war rise in the school population.

It is the realization of the weight and significance of factors such as these that has led more and more countries in recent years to set out explicitly in their constitutions or fundamental laws on education the duty of the State towards the education ot its people. All countries give recognition to the need for education. Some, like Czechoslovakia, express it simply and directly in their constitutions as a right of citizenship: 'All citizens have the right to education'. The Islamic countries view it rather as a religious obligation to ensure that all human beings are educated. In whatever way the right is expressed, however, there is general agreement today that every person should have a free and compulsory primary education, and that all should have the opportunity of such higher education as they are capable of profiting from. But it is one thing to recognize a right; it is another to ensure that people get their rights, and this is where the modern State has taken its characteristic stand. In every country it is now recognized that it is a major function of government to guarantee the citizens their right to education. In some countries the State itself provides all educational services for its citizens. This is the case in Czechoslovakia, the U.S.S.R., and most of the other Communist countries. Elsewhere the State recognizes its obligation to ensure that children are educated, but does not set out to provide a complete educational service itself. The State may leave a wide field open for private action, and express its obligations as does the 1946 constitution of Ecuador: 'The education of children is primarily the responsibility and prerogative of their parents or of those representing them. The State shall ensure that such responsibility is discharged, and shall facilitate the exercise of that prerogative'. Or it may take the main responsibility for providing educational services, while at the same time leaving other bodies the right to make alternative arrangements if they wish. This is the position in the United Kingdom, the United States of America and most countries of the world today.

But whatever the different allocation of power and responsibility for the provision of educational facilities, the fundamental trend during the present century has been towards an explicit recognition that the final responsibility rests with the State to ensure that the educational needs of its citizens are met.

The locus of government action

The administration of modern States is almost invariably carried out by a complex network of local, regional and national authorities; it is a blend of centralized and decentralized power and responsibility. Especially is this so in respect to services which, like education, touch citizens directly and personally. The precise degree and nature of responsibility borne by the local and the national or regional authorities varies from country to country; and as the allocation of such powers has usually been based upon the political and economic needs of communities rather upon their educational needs, the provision of educational facilities has rarely benefited from a form of administration expressly shaped to serve educational purposes. A great deal of the energy of educators in recent years has gone into a struggle to make old machinery responsive to new needs, and one of the trends of the past few decades has been the search for that blend of local and central powers that best suits the present educational situation in a particular country. In this search, the newly developing States have been in a somewhat better position

to choose rationally than have the other States which entered the present era with firmly entrenched administrative structures. Among the older developed countries, two extremes of control may be seen, and it is instructive to study their characteristic advantages and disadvantages.

On the one hand there are States like Canada, the United Kingdom, and the United States of America where, throughout the modern era, local communities have borne great responsibility for the founding and maintenance of schools from money raised from their own local resources and for the control, direction, and supervision of the process of education by their own elected representatives on town and county councils, school boards and school committees. Such extreme decentralization has had many advantages: it has given flexibility to the development of educational services, enabling them to meet local needs as and when these have been clearly perceived; and it has led to the provision of a wide variety of educational services, the resulting emulation proving a stimulus to change and improvement. But it has also had grave defects, and in recent times these have grown to such serious proportions with the changed needs of education that the ultimate source of supply and control has been steadily vested in authorities representing wider and wider sections of the community, from the town to the county, from the county to the province, and from the province to the federal government.

Disparities in the wealth and consequent ability of different local districts to build schools and employ teachers led to the centralization of educational finance in New Zealand in 1877. In England and Wales it led to the measures which have been taken since 1902 to increase the amount of financial aid for secondary education given to local authorities by the central government and to develop the role of the latter in co-ordinating the efforts of local authorities. In the United States of America the support of the states to school districts has been increasing steadily in recent years, and in 1959 federal aid, which had been available for many years for the purpose of fostering vocational education, was extended to other educational programmes. The local areas controlling schools have also tended to merge into more powerful units. This process is very well illustrated by the movement for school district reorganization in the United States. There the state governments bear the main costs of education, but the local school districts, of which there may be several thousand in a state, decide on the raising of local money, the kind of buildings to be provided and their location, the employment of teachers, and the kind of educational provision to be made. The resources of the local school district, therefore, play a large part in determining the nature of the educational facilities made available to the children. Few school districts in the rural areas are capable of providing adequate secondary schools, and over the whole of the United States in the last 20 years there has been a steady reorganization of small districts into larger ones. The concept of a 'community school district' has developed in many states; this is a district comprising a small town or village and the neighbouring rural area for which the town is a sociological centre. In other states, the administrative county has become the wider unit. Whatever the form of reorganization, however, the general result of the abandonment of extremely decentralized control has been to improve the quality of the schools that could be provided.

On the other hand, there are European countries, like Belgium, France, Italy, and Spain, and some Asian States, which entered the present age with highly centralized administrative machinery, and this has enabled them to spread a system of education fairly evenly; but at the same time centralization has tended to inhibit or delay the development of local institutions suited to particular local conditions, and in some places has even led to the neglect of the less accessible rural areas. To remedy such deficiencies many of the centralized States have been trying in recent years to find ways of devolving some power and responsibility to municipalities and regions. This is an even more difficult task than the reverse process, for the smaller communities in a State that has been centralized for a long time do not have citizens with the experience of responsible corporate decision-making at the level required for the proper control of school systems.

Several useful examples of the devolution of powers are to be found in recent developments in France: experimentation with activity methods, with new techniques of orientation, and with freedom to devise new curricula, were carried out for several years in the *classes nouvelles* established by the Ministry of Education in many secondary schools from 1947 onwards; a comprehensive system of vocational and technical schools has been established by the municipality of Paris; considerable freedom is now being permitted to district committees to advise on the allocation of pupils to the different types of secondary school available in their areas, and the decision as to the number and kinds of new secondary schools to be provided in the different districts is now the responsibility of local commissions.

In countries that have only in recent years begun to organize modern education systems or even to establish themselves as States, there is a definite trend towards devising a system suited to their own particular circumstances and aims. Even where States at first may have borrowed heavily from an older country with which they had cultural or political ties, as in the case of former colonial territories now becoming independent, a pragmatic reconstruction of the organs of educational administration is going on, as they are increasingly finding themselves able to take account of their own circumstances and to free themselves from forms of administration handed down to them from other times and other places.

In these respects, the present years are years of experiment and transition, and it is too soon yet to discern whether there is any particular pattern of local and central control that has more than a provisional validity for educational administration.

CHAPTER VI

THE TRANSITION FROM PRIMARY TO SECONDARY SCHOOL

The trend to open up facilities for secondary education to all children in the community leads to a changed conception of primary and secondary education. In place of the idea that a system of elementary education is something complete in itself, provided for the masses of children who will go to work at a comparatively early age, while the secondary system, also complete in itself, is for those who will have continuous education right through the university years, the view arises that primary education is just the first phase of a continuous process, and that secondary education is the middle phase, to be followed by university education or advanced vocational training and adult education. As we have seen, this idea had been accepted in the United States of America by the first decade of the present century. It is true that only a small proportion of children did in fact complete the full course of primary and secondary education at that time, but this was not the result of any structural fault in the system itself, but rather of the limited nature of the curriculum and of socio-economic factors beyond the control of the school system. At the same time, educational administrators in England and certain of the British dominions overseas, such as Australia, Canada and New Zealand, had conceived the same ideal. Robert Morant wrote in the report of the British Board of Education for 1908/9: 'The idea that elementary and secondary schools represent not successive stages of education but alternative kinds of education meant for different social classes is deeply rooted, and may be said to have dominated practice until recently'.[1] This was written only a few years after the Education Act of 1902 had placed upon the local authorities the responsibility for ensuring provision at the secondary level for able pupils from the elementary schools. So far as practice went, the bridge had just begun to be built. In New Zealand the 1902 free place regulations were having the same effect. This new conception of the relation between primary and secondary education spread slowly but steadily, and since the second world war the articulation of primary with secondary education has occupied the attention of most countries of the world. There has developed the ideal of a continuous process of education that gradually changes as the child grows and becomes mentally more mature, and gradually differentiates as the child's interests take a more permanent form and differences in his aptitudes and ability manifest themselves and call for special attention.

All countries, even those that are starting from the beginning, have been hindered in their efforts to put this ideal into practice by the separation between elementary and secondary education that was found in the European cultures of the nineteenth century, and some of the most important educational events of the past 50 years are to be found in the efforts of the older school systems to solve three problems: first, how to make possible a just transfer from the one type of school to the other; secondly, how to effect a smooth transition from the one kind of education to the other; and thirdly, how to develop an integral view of education. The first of the three problems is concerned mainly with methods of selection and allocation, the others with curriculum, teaching methods, and school organization. This chapter, therefore, forms a connexion between the preceding chapter and the following one, and will overlap the topics dealt with specifically in each of the others.

The transitional stage in most countries is the period between 11 and 12 years of age and 14 and 15. It is during this period that the curricula and the teaching methods begin to change from what is regarded as essentially primary to what is characteristic of secondary education. The length of the basic primary school courses varies considerably throughout the world. In most countries children begin their primary schooling at 6 years of age, though in some they begin at 5 and in others at 7. For nearly all, however, the point of change is between 10 and 12, and the transitional period usually lasts until 14 or 15. In the more advanced countries the greater part of this period comes within the years of compulsory schooling, and it is likely to become compulsory in all countries during the next quarter century. It is the key period in the reorganization of many of the well-developed systems, especially in those that have different types of school at the junior secondary level; and as compulsory education is extended upwards in the less advanced countries, the problems of the transitional period will be faced by them too.

SELECTION FOR SECONDARY EDUCATION

In all countries that have tried to give the able child a chance to continue his education beyond the primary level

1. Great Britain, Board of Education, Report for 1908–9, pp. 31–2.

the problem of selection arises at an early stage: how to devise a valid means of assessing the scholastic abilities of the applicants for admission to the secondary schools. Where the secondary school was a direct continuation of the primary school and tuition was free, as it was in the United States as early as the beginning of this century, the matter was relatively simple—pupils were promoted if they had done satisfactory work in the upper grade of the primary school. Where a two-track system existed at the primary level, the matter was much more complex. The grammar school, the *lycée* or the *Gymnasium*, had always in effect been 'secondary' schools requiring some measure of preparatory education in their entrants and administering their own entrance examinations to satisfy themselves that applicants were able to meet their admission requirements. Often these were based upon a preparatory-school course that included Latin and other studies that the primary school pupil had not had an opportunity to learn. The majority of the entrants in the European schools paid fees, came from the middle classes of society, and received their primary education in fee-paying preparatory schools. When scholarships began to be provided to enable working-class children to obtain free secondary schooling, the entrance requirements of the secondary schools made it necessary for the candidates to obtain special coaching, and this was a difficult hurdle for the children of poor parents. In consequence of the democratic trend of modern times, the pre-secondary curricula of the special preparatory schools or departments were often made the same as those of the ordinary primary schools so that a common basis of knowledge could be presumed for all candidates, but in most countries the process of equalizing the conditions for candidates for entrance stopped at this point for many years. Indeed, the actual admission examinations varied considerably. They might be conducted by the principal or staff of the school that was admitting the pupils, they might be conducted by a committee comprising an inspector as well as teachers, and they might be oral or written or both. Dissatisfaction with the possibilities of unfairness inherent in this lack of uniformity was common, and many countries tried to devise more efficient methods of selection. While only the children of the well-to-do sought to enter the secondary schools the problem was not serious, for there were enough schools to take all the candidates who met the minimum requirements in scholastic attainment. The real difficulties have been caused in recent years by the increasing number of pupils who have sought to continue their education and have put pressure upon the entrance procedures of the selective schools. Many countries still retain methods of selection that have been little influenced by the findings of research; some, however, have constantly attempted to use the best methods known. At the present time many different approaches to the problem are being made and it will be useful to consider some of these.

The countries of the world may be grouped roughly into three categories according as (a) they restrict entrance to selective secondary schools by the use of tests and examinations that are essentially competitive in character; (b) they admit children on the basis of an examination designed simply to see whether they have mastered the primary school course; (c) they admit all who, in the opinion of their teachers, have satisfactorily completed the primary school course. In the first category are systems like those found in most Western European countries, many of their former colonies overseas, and many Latin-American countries. All of these provide a variety of secondary schools, some of which are more selective than others. In the second category are systems like those of most of the Eastern European countries, certain countries of the Middle East such as Iraq, Syria, Turkey, and a few elsewhere where, at the junior secondary stage, there is a unified school but one that admits only those children who have completed the scholastic requirements of the primary school. In the third category are systems like those of the United States and countries that have been influenced at various times by its practices, for example, China, Japan and Korea, certain of the British Dominions like Canada and New Zealand, and other countries like India and Sweden. In these countries the first stage of secondary education is unified and is open to all normal children who have spent a certain number of years in the primary school.

It is the countries in the first group that have had to face the most difficult problems in selection and they will be considered first. Their experience has influenced methods of making provision for secondary education throughout the world.

Systems with selection and allocation

In Great Britain, more than in most countries, persistent and varied efforts have been made throughout the present century to improve the methods used to select pupils for places in the secondary schools, and much research has been carried out, especially since 1944. Practices developed in Britain have spread to many other countries, especially the newly independent States in Africa and Asia that were formerly under British administration, and a brief outline of the main trends will be given here. These have immediate relevance to the problems of scholarship awards now being faced in countries still at the stage of having to select carefully a minority of their primary school pupils for continued education.

At first there was little uniformity in the methods used in Great Britain to decide which children in the primary schools of a district merited scholarships to attend the available grammar schools.[1] Many local authorities, therefore, devised district-wide examinations. The London County Council, for example, instituted in 1894 its Junior County Scholarship examination, which consisted of written tests in English and arithmetic, followed by supplementary tests in French, algebra, and natural science. In this way a means of assessment of scholastic attainments was developed that enabled the selection committee to base its decisions upon data that were comparable for all the children throughout the district. To the disappointment of many educators and members of the local education authorities, however, only a small proportion of the scholarships went to children of the poorer sections of the community. Research carried out by officers of the London

1. Flan Campbell, *Eleven-plus and all that; the Grammar School in a Changing Society*, London, Watts, 1956, p.96.

County Council showed that between 1893 and 1904 it was usually children from lower middle-class families —for example, children whose fathers were clerks, shopkeepers, or highly skilled artisans—who most often gained the scholarships. It was noted that few children from certain of the poorer working-class areas or from families of semi-skilled or unskilled workers ever received scholarships, while a high proportion of children from well-to-do suburbs did. The London County Council devoted much attention to the question of how to remedy this situation, and care was taken to ensure that it was not the result of schools in the poorer districts having less efficient teaching staffs; but these efforts brought about no significant change in the situation. The council then considered such proposals as allotting a definite quota of scholarships to pupils of the poorer schools even though these pupils might not obtain the highest marks in the examinations. Such proposals were based on the assumption that the best pupils in the poorer areas, although lower in actual school attainments than the best pupils from the more well-to-do social groups, had equal educational potentialities, which had been inhibited by their unfavourable environment. These proposals were not adopted, however, because they involved what seemed to be the injustice of excluding children of high attainments in favour of children known to be actually lower in attainment and only presumed to be higher in capacity.

In 1913 the appointment of an educational psychologist for the London area led to renewed efforts to solve the problem, and it was decided to experiment with the use of standardized intelligence tests to assess the 'innate intellectual capacity' of children irrespective of their actual scholastic attainment, which might have been unduly influenced by differences in their social and economic background. Some measure of success was achieved by the newer methods. Intelligence tests, though they too have since been shown to be affected by the cultural environment of the children, did reveal intellectual abilities that a poor home environment had not permitted to develop. With the use of such tests the London County Council found that the number and proportion of children of manual workers entering the grammar schools increased steadily.

At the same time research was being carried out into the weaknesses of existing methods of examination. The unreliability of interviews as a means of assessing candidates was made clear, and the great variation in the judgements of examiners in assessing even the same written work were convincingly demonstrated. Such results led to the development of a new type of examination tool, the standardized test of scholastic attainment. In the standardized test all children were asked the same questions, the questions were graded in an empirically determined order of difficulty, and the usual method of answering the questions was for the pupil to choose one of several alternatives already set out for him in the test paper. The answers were either right or wrong, so that marking of such papers could not be affected by fluctuations in the judgement of the examiners. This was in several respects an advance upon the earlier, less objective methods of examining, and during the 1930s and 1940s the majority of local authorities appear to have used some combination of standardized intelligence and scholastic attainment tests as part of their selection procedures.[1]

On the passing of the Education Act of 1944 the machinery of selection again came under very careful scrutiny by all the local authorities. Stimulated, too, by the experiences of personnel selection in the armed forces during the war, a number of research groups devoted themselves to problems of allocating children to different types of secondary school. For example, both the National Foundation for Educational Research in England and Wales, which was established at this time, and the Scottish Council for Research in Education, which had been in an existence for over a decade, carried out major investigations, and their reports have had far-reaching effects upon the work of the local authorities. Similar research has also been done in the university institutes of education. With the post-war influx of students from all parts of the world, British experience has markedly influenced the practices of countries like India and Pakistan, and former British territories in Africa and Asia.

In spite of the efforts made to improve grammar school selection in Great Britain, there is considerable dissatisfaction with the process. Researches have shown that even with the best procedures so far devised, a considerable proportion of the pupils selected for grammar schools may be expected to be less able than many who are rejected.[2] They have shown, too, that socio-economic influences on the intellectual development of young children make it very difficult in practice to devise tests that will distinguish potential educability from actual achievement. Even the ability to do intelligence tests is influenced by the environment of the child and is susceptible to coaching, while a poor environment will counteract to a considerable extent the influence of schooling. The British experience shows clearly that the problem of making effective provision for the education of children from culturally impoverished homes cannot be solved by the school alone, and that the full benefit of schooling cannot be expected to be reaped by the first generation of children to be offered extended educational opportunities.

It is difficult to gauge the success of the efforts already made to ensure that talents will be developed no matter in what section of society they occur. In the report of the Central Advisory Council on Education (England)[3] on the education of boys and girls between 15 and 18, it is stated that among the families of manual workers it was the exception for a child to stay at school after he was legally free to leave. The report quoted figures relating to National Service recruits to the Army and the Air Force, showing that while 51 per cent of the children of the professional or managerial class stayed at school until they were at least 17 years old, only 6 per cent of the children of semi-skilled and unskilled workers did so. The report showed, too, that many children of high intellectual ability were not receiving a full education, since 42 per cent of the National Service recruits who were in the top 10 per cent

1. A. F. Watts; D. A. Pidgeon; A. Yates, *Secondary School Entrance Examinations*, London, Newnes, 1952.
2. P. E. Vernon, ed., *Secondary School Selection*, London, Methuen 1957, p. 76.
3. Great Britain, Central Advisory Council for Education, *15 to 18* (Crowther Report), London, HMSO, 1959, Vol. 1, pp. 8–9.

in general intellectual ability had left school before they had reached the age of 17.

The problem of selection is radically transformed when, as happened in Great Britain in 1944, all forms of schooling for young adolescents come to be regarded as secondary education; for then the contributions of all these forms of schooling to the development of the young people of the nation are seen to be in some ways equal in importance, in the sense that each is intended to provide the maximum chance of development for a certain group of young people throughout their adolescent years. The different types of school have tended to lengthen their courses upwards and to seek parity in respect of leaving certificates. They have aspired to achieve a general equality of status, based upon their diversity, each having a distinctive task and each giving the appropriate kind of education to the pupils in its care. They have aimed, in consequence, at having pupils correctly allocated to them in terms of their distinctive abilities and aptitudes. The problem of selection for a single type of school has thus been transformed into one of allocating pupils to several different types. In England it was envisaged that there would be three main types of secondary school: the academic, or grammar school type, which would lead directly to the universities; the technical schools, which would lead to higher technological institutes; and the secondary modern schools. In Scotland there was a division into schools of two lengths, the five-year senior secondary schools and the three-year junior secondary schools.

The problem of allocation, however, has proved to be one of even greater difficulty than that of selection. In spite of persistent research in Great Britain in the years immediately prior to and after the 1944 reorganization, no examinations or batteries of tests have been devised that could classify the pupils at the age of 11 into the three distinct psychological types envisaged as the basis of the secondary school system. On the whole, the correlation between the abilities of children at that age proved to be high, indicating that the ones who showed high technical ability would be the same ones who showed high academic ability. The proportion of children whose level of ability was markedly different in these two fields was too small for their identification to help much with the general problem of allocation. On the other hand, the selection of children for the academic grammar school seemed fairly successful, and the tendency has been to rely mainly upon a simple division into grammar school and non-grammar school children. The secondary technical schools have not had the enrolment expected of them, and they have not increased in numbers in proportion to the growth of secondary education. Some local authorities have ceased to provide them; some have joined them to the grammar school, others to the modern school, so that a bi-partite rather than a tri-partite system has come into being in several areas.

The trend in Britain, arising out of a combination of scientific research and much experimentation on the part of local authorities, indicates that in the ordinary course of primary schooling the only abilities that can be measured with a reasonable degree of accuracy are those based upon the normal work of the school. These are mainly the powers of verbal and abstract reasoning. To arrive at measurements as valid in other fields, such as practical or technical achievement, children would have to be given equal opportunities for developing such abilities; in an ordinary primary school they do not have such opportunities and many of their potentialities cannot be accurately assessed. The basis of a diversified allocation, it is coming to be realized, is a broad education common to all children to enable a wide range of potentialities to develop. This conclusion is leading to the view that the period of common studies should be lengthened, and that the final separation into different types of school should be postponed at least until the senior stage of secondary education.

In consequence, Great Britain, France[1] and other countries are attempting to provide a broad common curriculum in the first year or two in all types of secondary school and to have the pupils carefully observed to see what abilities emerge that may make a change of school or course desirable. In practice, there are many difficulties to be overcome. The first is that the different types of school at the secondary level are distinctively different in their approach to education. The *lycée* and the grammar school, for example, have for generations worked to a six- or seven-year curriculum, starting mathematics and foreign languages early. As in the classical *Gymnasium* in the Federal Republic of Germany with its nine-year course or in the *ginnasio* and *liceo* and the *istituto magistrale* of Italy during the 1930s, few teachers believe that they should delay the beginning of their particular kind of education because a few children may have been wrongly allocated and may need to change schools. Nor, in general, have the grammar schools the facilities to provide a variety of practical subjects in order to see whether any of their pupils might be better served in schools with a technical bias. The modern school, on the other hand, will seldom have the academically and technically qualified staff necessary to provide grammar school or technical courses in order to discover and give preparatory teaching to children who should be transferred to these other schools. Nowhere does transfer from one type of school to another occur as frequently as would seem necessary to correct the proportion of known errors of selection, nor do the teachers in the modern schools wish such transfer to take place; for the sake of developing the prestige of their own schools they prefer to keep pupils of high ability and do the best they can for them. This leads to a convergence of the different types of school to a common pattern, as may be seen by studying the way in which the secondary and technical schools of New Zealand have each tended to evolve into a similar kind of multi-lateral or comprehensive school.

In Great Britain and France and in several other countries, dissatisfaction with methods of allocation based upon a single examination or set of tests has led to attempts to make use of the knowledge of the children acquired over the course of years by their primary school teachers. There are two main factors that make it difficult to reap the benefits of this knowledge. First, it is not easy to devise a valid and reliable method of making the assessments of one teacher comparable with those of another. Cumulative school records are recognized to be of value in giving

1. Roger Gal, *L'Orientation Scolaire*, 2nd ed. Paris, Presses Universitaires de France, 1955. 140 p.

educational guidance to children and their parents, and they are used in this way in several countries, e.g. Ceylon, Chile, the Federal Republic of Germany, and Japan, but they cannot easily be reduced to a simple index for the purposes of selection or allocation. The second factor, however, is even more difficult: it is the one already referred to, the need for a richer educational programme than the primary schools normally give, which would allow young people to try a variety of activities and thus reveal their aptitudes.

The countries that appear to be able to provide such variety at the first stage of secondary education are those, like Canada, Japan, the United States, and a few others, that have a unified and comprehensive junior high school whose special function is the exploration of aptitudes prior to the specialization of the senior stage. Moving in that direction, several local education authorities in Britain are considering ways of reducing the diversification of schools during the junior secondary stage. A few have decided to adopt the comprehensive school idea, as was done earlier by London and Middlesex. Some are providing only two types, a grammar-technical and a modern school. Some are considering multi-lateral or bi-lateral schools. In Leicestershire[1] a more radical solution is being sought by dividing the secondary period into two three-year cycles, with a common junior high school leading to differentiation at the senior stage; this is discussed at greater length in the section on the junior secondary period in selective systems (see below).

The British experience has been set out at some length because it has shown what can and what cannot be achieved in the allocation of children at the age of 11 and because the various methods tried over many years can all be found in use at present somewhere in the world. With a great deal of research and with persistent trying out of different methods, it has not been found possible to do what was envisaged by those who framed the 1944 Education Act, namely, to abolish selection by means of competitive examinations and to replace it by allocation based upon the assessment of aptitudes. As early as 1946 a committee set up by the National Union of Teachers reported that it was reluctantly compelled to conclude that the only criterion that could be relied upon was whether a child was suited or not for a grammar school education;[2] and in fact 10 years later the majority of local authorities were still using standardized tests of English language and arithmetic, together with a test of verbal reasoning, upon which to base their allocation; the grammar school places are filled, and the rest of the children go to a secondary modern school, except for a few who, with high general ability, elect the technical school.

Thus Great Britain still largely retains methods of selection based on the scholastic work done in the primary school. Where it has made the greatest advance, however, is in developing reliable and valid methods of testing and examining scholastic aptitude and ability. Few European countries that select by means of examination, or countries in other parts of the world that have been influenced more by various European methods other than British ones, have yet adopted such reliable methods of standardizing or normalizing the marks or assessments used for selection purposes. In France, for example, up till 1957 admission to all *lycées* and *collèges* was based upon the results of examinations which included dictation, the comprehension of a passage read, and arithmetic. It was felt that by current standards of objectivity in test construction and of reliability in marking, such an examination could not be regarded as efficient and could not maintain equal standards of difficulty even in the hands of a single examining commission. Pedagogical research carried out in France has shown that even in such an apparently objective matter as the marking of a problem in arithmetic done by pupils in their final year at the primary school, there may be a considerable variation in the marks given by examiners; using the traditional marking system of 0–20, examiners in some experiments have varied by as much as 14 marks in assessing the worth of the same answer.[1] To obtain a reliable assessment the test needs to be composed of many sums, scientifically graded in order of difficulty, and its marking system needs to be objective.

When, as in parts of Europe, a great deal of responsibility for filling the available places in the selective schools rests with the teachers themselves, the variability of standards throughout a given area is likely to be even greater. In an endeavour to lessen the errors of such methods of selection, a recent trend has been to consult parents to see what information on the child's development and aptitudes they have that is not revealed in the normal course of schooling and to see what educational and vocational ambitions are held by the pupil's family. Such methods could be a more useful adjunct to school results if the schools to which the pupils are to be allotted were believed to be equal in both the social and the educational sense; but when some types of school have greater prestige than others, parents, not unnaturally, want more children to attend them than can be accommodated and the final decision is thrust back upon the teachers. A method being tried in parts of the Federal Republic of Germany and elsewhere is to regard the first year or two in the secondary school as a period of probation. This is helpful in one way: if a child cannot do satisfactory work in the *Gymnasium* he can be placed in a school of a less academic type. The reverse process is seldom practicable, as there is still some differentiation between the curricula of the different types of school from the beginning and, as British research has shown, pupils in the average modern school do not receive the same stimulus to intellectual growth as those in the more academic school, and consequently not many are likely to be regarded as capable of rising above their first allocation. A practicable system of exchange during the first year or two appears to depend upon a common course of study, and this, as has been realized by reformers in France since the establishment of orientation classes by Jean Zay in 1937, and as has been shown by the experience of Italy, is difficult if the junior classes are attached to distinctively different types of school which impress their distinctiveness upon them.

1. Stewart C. Mason, *The Leicestershire Experiment*, London, Councils and Educational Press, 1957. 16 p.
2. National Union of Teachers, Consultative Committee on Transfer from Primary to Secondary School, *Report*, London, Evans, 1949.

1. Gaston Mialard, 'Comment augmenter l'objectivité des examens et des concours', *International Review of Education* (Hamburg), Vol. IV, No. 3, 1958, pp. 275–88.

The Swedish school reform, which has already been described, took account of similar findings on the hazards of early selection, and Sweden has taken the radical step of completely unifying the period of primary and junior secondary schooling. As early as 1937 studies of the value of the secondary school entrance examinations had shown that the relation between success in these examinations and success in secondary school was not high, and that a considerable number of the rejected candidates would have done better than a number of the accepted ones.[1] It was found, too, that the primary school teachers, who were able to rank their pupils in order of achievement with considerable reliability, reported that the high school entrance examination in Swedish and arithmetic was excluding many pupils whom they considered fit for secondary schooling and at the same time was admitting pupils they knew to be lower in scholastic ability. Even when careful marking instructions were introduced by the Board of Education and methods of normalizing the scores were used, the results were not satisfactory. In 1949 the external examinations were given up, and marks awarded by the primary school teachers themselves were used. An attempt was made to achieve comparability of assessment from teacher to teacher by basing the marks upon a normalized seven-point scale. It was found that the teachers' marking was just as accurate as that of the external examination, but in fact neither was satisfactory, and the question of whether differentiation at that age was wise or practicable came to the fore again.

In 1946 a School Commission had been set up to study possibilities of reforming the secondary school system in Sweden. In the light of English aspirations at the time, the commission was concerned to see whether children could be divided into theoretical and practical types at the end of the primary school period and whether differential provision could be made for them along such lines. The commission was responsible for initiating major researches into the nature of and the relation between theoretical and practical ability. Fundamental research then carried out showed, as had been found in Great Britain, that the majority of pupils were very similar in respect of their scores in theoretical and practical aptitude tests, and that only in a minority of cases did any considerable differentiation in these aptitudes occur. The general finding was the usual one, that differential aptitudes could not be surely discerned at this age, and that selection would inevitably become based on general scholastic ability. An important corollary of this finding which impressed the commission was that if pupils of high scholastic ability were allocated to the academic secondary schools, the majority of the most able practical pupils would in fact be included as well, and the technical schools or technical streams would be deprived of their most promising pupils. The commission considered that the social and educational consequences of such selection were harmful, and decided that the period of unified schooling should be lengthened to nine years, so that there would be a chance for careful observation and orientation in these years of early adolescence when abilities are beginning to show themselves more clearly.[1]

Systems basing entrance upon promotion practices

In several countries, notably those of Eastern Europe, where there is a unified single-track system until the end of the junior secondary period, that is until the age of 14 or 15, entrance to the junior secondary school is not automatic but is granted only to those pupils who have demonstrated a satisfactory knowledge of the minimum curriculum requirements of the primary school. Those who fail must spend another year in the primary school, and those who continue to show very poor achievement may be placed in special remedial classes or schools.

The conditions under which the promotion examinations must be given, the method of drawing up the examination questions, and the marking scales to be used, are usually prescribed in detail by the central education authority, although the actual conduct of the examination is left in the hands of the teachers themselves.

At the end of the junior secondary period, the examinations which give entrance to the senior secondary schools are usually carried out by a committee consisting of the teachers of the school, representatives of the education authorities and officers of the municipalities, or teachers from the senior secondary school to which the successful pupils will go.

The details of the examinations differ from country to country. As a concrete example, however, a method used in Rumania in recent years may be noted. Pupils in the fourth class of the primary school who had reached a satisfactory standard in all their subjects could sit for an examination which allowed them to enter the fifth class. The subjects examined were Rumanian or the language of one of the national minorities, and mathematics. The language test usually involved the dictation of a passage of 80 or 90 words taken from a reading book used by the class, and the test of mathematics comprised a problem and exercises based upon the curriculum for the year. The problems for the written test were chosen by the examining teacher and were written on examination cards, one question on each card, and the candidates drew by lot the questions they would have to answer. Examination methods of this kind involve a considerable element of chance, for it is difficult if not impossible to ensure that all the test cards are of equal difficulty. However, the final mark given is usually influenced by a consideration of a pupil's work throughout the year as well as by the result of the special examination.

The trend in these countries is towards abolishing promotion examinations, except at the end of the junior secondary period for admission to the senior stage, and promotion is being determined to an increasing extent by the teachers' judgement of the quality of the work done throughout the school year. Promotion still implies the maintenance of a minimum standard of achievement before

1. Fritz Wigforss, *The Entrance Examination in View of Later School Performances*, Stockholm, Norstedt & Söners, 1937.
Stellan Orrgård, *High School Entrance Tests and the Work of the Primary School*, Stockholm, Norstedt & Söners, 1937.
Olle Flodby, *Marking in the Swedish Elementary School*, 1940–1953. Stockholm, University of Stockholm, Institute of Education, 1955.

1. John Elmgren, *School and Psychology: a Report on the Research Work of the 1946 School Commission*, Stockholm, Essette, 1952.

the pupils pass on from one class to the next, and in consequence a proportion of pupils repeat classes and the age range in each class is considerable. The evidence of research in several countries, however, indicates that backward children ultimately reach higher levels of attainment if they are kept in classes with their fellow pupils of approximately the same age, and when shortages in buildings and teachers are overcome it is likely that there will be an increasing tendency to promote pupils from class to class in the junior secondary school without examinations and without insisting upon a fixed standard of attainment.

Conclusion

Those countries which have decided to regard the years between 11 or 12 and 14 or 15 as the first stage of secondary education but which have inherited a system in which children have traditionally been separated into different types of school at an early age, have all found difficulties in their attempts to allocate their pupils fairly to the different schools available. Many of their educators over the past 10 years have come to the conclusion that allocation should be based upon a period of orientation during which the pupils would not be irrevocably separated into different types of schooling even if they were in different types of school. In practice it has proved difficult to provide the varied curriculum required for the purposes of orientation, and it is widely believed that a common school is needed at the junior secondary stage. Sweden is independently developing an *enhetsskola* not unlike the schools of Czechoslovakia, Eastern Germany, the Soviet Union, and the Eastern European countries. In other places, notably Japan, a junior high school system similar to that of the United States of America has been or is being established. These approaches to the problem differ in several respects, but they have this in common: they make no attempt to allocate pupils to different kinds of secondary school at the age of 11 or 12, but rather, in the environment of a common junior secondary school, they attempt to provide a course of general education and to determine at the same time, by observation of the pupils' work, what will be the best kind of specialized training for each at the senior stage. Orientation and allocation problems are being dealt with in the context of the common school, and their experience throws a valuable light upon the possibilities of the common orientation period as compared with other methods of making the final differentiation of pupils into specialized courses or schools. The American junior high school and others like it were set up to meet the need for a smoother transition from primary to secondary school, so this problem will be considered next.

THE ARTICULATION OF PRIMARY AND SECONDARY EDUCATION

We have seen that in most European countries, and in countries influenced by Europe in the development of their systems of education, means of access from the primary to the secondary schools have been steadily established over the past 50 years. The question of access, however, is by no means the only problem that has arisen: problems of transition and articulation have also been causing concern and are far from being satisfactorily solved. The essence of such problems lies in the fact that in their origins and in their nineteenth century growth the primary school and the secondary school were conceived of as giving qualitatively different kinds of education, with different aims, different curricula, different teaching methods, and a different spirit. The division between them did not automatically close when the children from one type of school entered the classrooms of the other.

In the nineteenth century primary education was regarded almost everywhere as a means of training children of the lower classes to be obedient, honest, hardworking, literate workers. The elements of literacy, the main tenets of religion, the current precepts of morality, constituted its curriculum in the early stages. Gradually, with the progress of science, industry and commerce, and democratic government, the curriculum broadened, but the tendency of the times was to emphasize the acquisition of useful knowledge by the potential worker and citizen rather than to develop his ability to reason and pass judgement upon the problems of human life. Under the influence of the newly developing science of pedagogy, the art of instruction reached a high level. Basic facts were organized and presented methodically by teachers trained in the art of presentation, they were memorized by the pupils by the methods of drill, and they were tested and examined by inspectors. The teachers themselves were not well educated persons by the standards of their own times; usually they had had no more than a primary education, followed by an apprenticeship as pupil-teacher and some instruction in teaching methods at a normal school or teacher training college. An undue emphasis on the memorization of facts and upon formal rather than functional methods of instruction was inevitable in the circumstances of the times, and indeed it still appears to be so in the beginnings of any new educational system which starts from the basis of an illiterate population and a body of teachers who themselves have only the barest elements of modern knowledge. This is the situation in large areas of the world today, and the problems that are described here, in so far as they concern the articulation of primary and secondary education, may yet arise in several underdeveloped countries.

Some of the important pedagogical assumptions on which the nineteenth century approach was based were, first, that ideas implanted in the mind are the means of influencing the attitudes and behaviour of the human being; secondly, that it is possible to compile definitively a body of factual knowledge that every citizen should master; and thirdly, that this body of knowledge can be divided up into sections arranged in order of logical or psychological sequence so that they may be progressively mastered as the pupil passes through the school system. The effect of such assumptions and the educational practices based upon them was to develop in both teacher and pupil a tendency to revere basic facts and information, however little related they might be to their needs, and to fail to appreciate, and even perhaps to distrust, the play of ideas. The French termed this *l'esprit primaire*, the elementary school mind, as distinct from the mind that was trained by secondary and university education.

The concept of the trained mind was itself one that was influenced by the social separation between upper and lower classes in nineteenth century Europe. The upper classes were the effective rulers of their States; they alone had the means and the leisure to cultivate scholarship, philosophy, the sciences, and the arts. Educators of the time considered that they needed to have a sense of mission, whether national or international, as the spring of their political action; that they needed to be able to think about and solve problems of politics and human relations, as well as of economics, science, and technology; that they needed an appreciation of the growth of human culture, and of the role of a leisured class in cultivating the graces of life—in sum, that they needed to be aware of the sources and direction of civilization, at least of modern European civilization, and mentally alert enough to guide its future development. Their school curriculum had to be the whole sweep of civilization, and much of the curriculum of the post-renaissance grammar school was relevant to this. Young people started with learning the languages of Greece and Rome and later those modern languages that had a developed literature, and while at secondary school they began the study of ancient and modern culture which, typically, was the chief preoccupation of the early nineteenth century universities; they studied mathematics, not as a working tool but as a trainer of the reasoning and logical faculties, and at a later date the physical sciences. The secondary school and the university were regarded as a continuous process of education of the youth of the upper classes. The secondary school in fact was a grammar school, giving the key, first in languages then in sciences, to the ancient and modern civilizations.

Between this outlook and that of the primary school there was a deep and wide abyss. It was expressed in curriculum, in methods of teaching, and in attitudes. In curriculum the typical primary school subjects were reading in the mother-tongue, spelling, handwriting, routine commercial arithmetic, a miscellany of general knowledge, geographical, historical, and natural science facts, training of the co-ordination of hand and eye by means of representational drawing and manual work, singing, and religious teaching. The secondary school subjects were Greek, Latin, modern foreign languages, ancient and modern history, Euclid, algebra, higher arithmetic, natural and physical sciences. By the nineteenth century there were national differences to be seen in the views of the educators of the different countries of Europe, and these had their characteristic influence upon the curricula. The French, conscious of their country's central role in European culture, tended to emphasize the play of intelligence and ideas; the Germans emphasized thoroughness of philosophical and scientific scholarship; the British were very conscious of their role as a colonizing nation. These differences between the secondary schools were considerable, but they were less than the basic difference between elementary and secondary education.

Differences in methods of teaching cannot be quite so clearly demarcated. Much of the work of the secondary schools had to be conducted at the level of rote-memorizing, on account of the central position occupied by the learning of foreign languages and, later, of a large body of scientific knowledge. Yet, at least for those young people who continued their secondary education to the end, this basic learning opened up historical perspectives, realms of ideas and speculation, areas of feeling and sensibility, that involved very different methods of interplay between the mind of the teacher and the mind of the student than that which occurs when elementary factual knowledge is being taught and learned. At its best, particularly in the later years of school life, the teaching in the secondary schools was influenced by that spirit of restless inquiry, discussion of ideas, and thorough specialist scholarship that characterize good university teaching. The difference in results obtained by the two different schools was due in part to the fact that the elementary child terminated his education during those formative adolescent years when the secondary school pupil was still in the early stages of his education, thus the mind of the secondary school pupil was cultivated longer. That, however, was only part of the difference; the method of cultivation itself had some significantly different elements in it, not the least being the attitude of scholarly enthusiasm for their subjects that the best secondary school teachers had gained from their association with the universities.

The more distinctive the primary and the secondary schools, the more difficult was articulation between them when children began to pass from one to the other. The problem in general terms was how to change the curriculum, methods, discipline, and spirit of the teaching during those years when primary schooling was being completed and secondary school begun, in such a way that the first stage could lead naturally into the second. The problem had different facets according to whether it occurred in a system where there was a high degree of early differentiation between special types of school at the secondary level, as was the case in most of the larger European States, or whether it occurred in one relatively undifferentiated, as in the United States of America and some of the British dominions. It was in these latter systems that the problem first assumed serious proportions.

At an early date these countries had developed complete systems of primary schools, usually eight years in length and starting from the age of 5 or 6 years, and by the end of the nineteenth century the great majority of their children were completing the full primary school course and increasing numbers were going on to the high school. The high schools of the United States were still in many ways influenced by the European secondary school, especially in their preparatory function for the universities. Universities try to maintain international standards of scholarship and frame their admission requirements with this in view; and the European universities based their work upon what was taught in secondary school courses which were as long as nine years in Germany and seven years in France and England. Inevitably, then, an abrupt and rapid start had to be made with the traditional secondary subjects—foreign languages, mathematics and the physical sciences, in order that they could be brought up to university entrance level in four years. In New Zealand the position was essentially the same, although it had been arrived at by a slightly different road. New Zealand's first urban secondary schools had been founded on the model of the English 'public' schools. They took boys at

the age of 13 or 14, after they had already studied the rudiments of Latin and other secondary subjects in a preparatory school or department, and prepared them in three or four years for the university entrance examination. Thus their standards became firmly established. Later, the 'free place' system was instituted, which soon filled the secondary schools with pupils from the primary schools who had not had the advantage of special preparatory training, and for whom the change from primary to secondary was very abrupt. Eventually the preparatory departments of most schools were abolished, and the sudden change-over from primary to secondary school was experienced by all pupils alike.

An early attempt to bridge the gap between the two systems took place in the United States of America. There the situation at the beginning of the twentieth century was very different from that in most European countries. Structurally, the common school system had developed in accordance with the ideals of the founders of the Republic. There was no separation of children at the end of the fifth or sixth year of the primary school into different types of school with different purposes and different curricula. Instead, almost all children were attending the eight-year primary school from the age of 6 to 14, at which time most of them left school and the remainder entered the four-year high school. Functionally, however, the school system was divided into two distinct units—an eight-year primary school, similar to the school provided in Europe for the child who would not be continuing with secondary education, followed by four years of secondary schooling which commenced two to four years later than in Europe. The high school although open to all children who passed through the primary school, still very largely emphasized its role of preparing pupils for the university and higher education. The Committee of Ten, set up in 1892 by the National Education Association to consider how to obtain some uniformity among the variety of different approaches to secondary education, produced a report which influenced the secondary schools for another three decades, yet the curricula it recommended were highly academic. For example, it advised the following common core of subjects which all pupils should take: English, a foreign language, algebra, geometry, trigonometry, physics, chemistry, and ancient history. Moreover, it stated that every subject which was taught in a secondary school should be taught in the same way and to the same extent to every pupil for so long as he pursued it, no matter what his vocation was likely to be nor how long or how short his stay at school.

With so much importance being placed upon preparation for university entrance, it was inevitable that there should be a wide gap between the primary school and the high school. Several new subjects were started simultaneously and had to be brought to university entrance standard in only four years; in the large schools specialist teachers took each subject instead of there being one teacher for the whole class, as in the primary school; and the course to be followed had to be decided at the beginning of the child's high school life, with little or no opportunity for adequate experience upon which to base his choice.

During the latter half of the nineteenth century, in various parts of the United States, sporadic attempts had been made to organize separate schools for children in the last two classes of the primary school, so that they could obtain a broader education than that provided in the primary school and thus be better fitted for work or further education. The trend towards reorganization, however, did not become strongly marked until the twentieth century. It was precipitated by the report of another committee of the National Education Association, the Committee on the Six-Year Course of Study. This report, published in 1907, recommended that the 12 years of public schooling should be divided equally between primary and secondary education. The major advantages seen by the committee in beginning secondary education two years earlier were: first—foreign languages, sciences, and manual training could start at an earlier age by using the specialist teachers, laboratories, and equipment of the high schools; secondly, it would be possible to initiate pupils into the secondary school subjects more gradually, beginning foreign languages by the direct method, and starting mathematics and the sciences with much practical work as an introduction to theoretical bookwork. In this way, the abruptness of the transition from primary to secondary school could be mitigated. This extension of the secondary school down into the primary period was thought of not as a means of saving time but as a way of ensuring a better adaptation of the children to their new studies. At the same time children who would otherwise leave school prematurely might be encouraged by the ease of the transition to continue with their high school studies beyond the eighth grade.

Many school systems, then, began to be reorganized upon the basis of a six-year high school course. Some reorganized high schools were complete 6-year schools, others were three-year junior high schools followed by three-year senior high schools. Had the purpose of junior secondary education been merely to bridge the gap between primary and secondary schooling, there would have been little incentive to the formation of the separate junior high school; but in fact other functions developed which played a decisive part in its evolution. In the first place, the reorganization did tend to encourage pupils to stay at school for the extra year, to obtain three years of junior secondary education before going to work or before seeking some specialized trade training. These young people, in the main, were not academically minded and the university preparatory curriculum seemed little suited to their needs. The schools, therefore, gave attention to providing a more useful schooling for those pupils who were not likely to continue beyond the age of 15, and this meant an expansion of practical pre-vocational courses. In the second place, as some of these pupils continued their studies even further into the senior secondary period and the senior courses became more diversified, it became necessary to make provision for educational and vocational guidance at the junior stage.

In the next two decades the senior high schools regained the breadth that had characterized the earlier academies, and increasingly, too, they began to attract more and more young people. As this prolongation of schooling for all pupils occurred, it became all the more necessary to develop the guidance function of the junior high school rather than its terminal education function. Even where no separate junior high school was established, the junior

section of the complete high school came to have its distinctive organization in order to be free to carry out its distinctive functions.

The change from the 8-4 organization continued at a steady pace until the second world war and then, with the steep rise in secondary enrolments, proceeded much more quickly, so that now there are more pupils in the new school system than in the old. Although the change from primary to secondary education is now made at grade 7 almost everywhere in the United States, there is still a good deal of variety in the way in which the secondary period is organized. The six-year complete high school, divided into junior and senior divisions of three years each, appears to be most common, followed by the separate three-year junior and senior schools. In addition there exist 6-2-4, 6-2-5, 6-4-2 and 6-4-4 organizations, some of which appear to have grown up as the result of the difficulty in finding accommodation for the increasing school population and as a way of making maximum use of whatever buildings existed. The 6-3-3 type or the 6-6 type, however, appear to receive most support upon general pedagogical grounds.

It is generally considered that the emergence of the junior secondary period as a period of common schooling with its own distinctive quality has achieved the main purposes for which the reorganization was undertaken. It has provided a core of general education directed towards the development of the young adolescent as a person, and a variety of optional courses whose main purpose is exploratory, enabling the pupils to try out various possible avenues of future study or work and to choose wisely their more specialized senior high school courses. In these ways the gap between the primary and the secondary curriculum is being bridged, and at the same time the traditional secondary studies are being started earlier and by children who have had a chance to choose them on the basis of some real experience of their nature. The transition from primary teaching methods to those which are appropriate to the secondary level can also be made smoother for the pupil who passes through a junior secondary school or department; this will be referred to again in the relevant section of the chapter.

The changed educational situation in the United States at the present day has made obsolete one of the original purposes of the junior high school; in few cases is it now called upon to provide a terminal education for more than a small proportion of its pupils. With the steady lengthening of schooling it is becoming simply an intermediate stage between the primary school and the senior high school, and this appears to be the reason why the six-year high school has been increasing in recent years more rapidly than the separate junior high school.

The advantages of the six-year high school are of two kinds: First, it is easier to put into practice a continuous curriculum throughout the whole course of six-year secondary education if the junior and senior divisions form part of one school; secondly, in the smaller towns and in rural areas, the six-year school because of its larger size, will be able to provide school buildings, equipment, and a specialized teaching staff more economically. The greatest danger in the six-year school as seen by the junior secondary teachers themselves is that the pressure of the senior division will weaken their conception that the junior secondary pupil has distinctive needs because he is in a phase of transition in psychological and educational development. Specialist teachers in the senior high school want their subjects and methods to be started as early as possible.

With the gradual disappearance of the need to provide a terminal education for pupils leaving school at the age of 15 or 16, the curriculum of the junior high school is becoming more concerned with continuing a general cultural education than with giving an early introduction to vocational skills, and the process of orientation is being interpreted in terms of broad areas of human activities and educational disciplines rather than specific vocational preparation.

The junior high school elsewhere

In several countries of the world which in one way or another have been influenced by American practices during the past half-century, similar modifications of the educational system have been made in order to provide a better transition between primary and secondary school. In Canada, a similar system has evolved in certain of the provinces where the three-year junior high school provides a lower general secondary education for all pupils before they go on to general or vocational senior secondary schools, while in other provinces various experiments in reorganization of the primary school are taking place.

In New Zealand, attempts to reorganize the work of the 11–14-year-olds had been made in the latter part of the nineteenth century, but without any permanent results. In the 1920s attempts were renewed in two ways: sometimes the top two classes of the eight-year primary schools were transferred to the secondary school to form an attached junior high school; sometimes—and more often—these classes were established as a separate school. For some time there was little agreement on the proper length of the junior high school, two, three- and four-year courses all receiving some support. The question was further prejudiced by administrative divisions: there was a complete administrative separation between the education boards which controlled the primary schools and the boards of governors of the secondary schools, and the teaching service was similarly divided; none of the parties wished to give up any of their schools and therefore the length of the course could not be settled on purely educational grounds. After a period of slow growth it was recognized that the most practicable form of reorganization would be to develop a two-year intermediate school which would remain under the control of the primary education boards and would be staffed in the main by primary teachers. The school was left free to develop three- or four-year courses of a terminal nature for children of low scholastic ability who would not go on to the high schools. In practice this has seldom occurred, and the school has remained an intermediate unit between the primary school and the comprehensive high school. By being a centralized school, grouping together the last two classes of several local primary schools, the intermediate school has been able to provide facilities, equipment, and specialization in staffing which the local primary schools could not provide, and in

these ways to smooth the transition from the primary to the secondary stage and enable the pupils to enter the differentiated courses of the senior high school with less chance of being wrongly allocated or of choosing unwisely. As in the United States, the fact that the pupils almost all proceed to a comprehensive high school eliminates the terminal function of the intermediate school. Moreover, it obviates the need for selection for further education. Untrammelled by external selection examinations, the schools are free to adapt their work to their conception of both the common and the exploratory functions of education for young adolescents. For the majority of children they appear to have bridged the gap between primary and secondary schooling with a considerable measure of success, but they receive a great deal of criticism from secondary school teachers on the grounds that the scholastically able pupils still do not begin subjects like foreign languages and mathematics at an early enough age, that the beginnings of such subjects need to be undertaken by secondary school specialists, and that they cannot be properly undertaken by the present intermediate staffs who, in the main, are primary school teachers by training and experience; and they are often criticized by their own teachers for keeping their pupils for too short a time.

In most countries that have adopted the pattern of a comprehensive junior high school, this is followed by a differentiation into various types of senior high school rather than by a comprehensive senior high school. This is so in the Republic of China and in Japan, and it was recommended for the European population of the Union of South Africa by the Commission on Technical Education in a report published in 1948. Though little has yet been done to implement the commission's recommendation, the report is worth quoting as it sets out the problem very clearly. The school system in South Africa was initially a seven-year primary school, branching out into various kinds of secondary schools providing courses of varying lengths in commercial, technical, and general education. The commission was concerned to bring about a closer relation between general and vocational education at the secondary level, and to prevent too early a specialization of pupils in separate vocational schools. It proposed a complete reorganization of the system in such a way that after the primary school there would be a three-year junior high school for all children between the ages of 12 and 15. In the words of the commission: 'It would be a school for the junior adolescents designed precisely to meet the educational needs all junior adolescents have in common. Its major functions would be the provision of full-time fundamental general education and determination of the aptitudes, interests, and other personal qualities on the basis of which its charges have to make their study and career plans'.[1] In order to achieve these objectives the commission considered that the junior high school would have to provide a rich and varied curriculum that would allow all pupils to try out their aptitudes and their interests, and it noted that 'the new junior high school's biggest problem will thus be provision for individual differences, a problem which may at first sight seem to defy solution. The commission wishes to point out that adequate differentiation has always been and is still today secondary education's unsolved problem and that the throwing together of pupils of various levels of ability and scholastic achievement is not unknown in our school system'.[1]

The distinguishing feature of the junior high school is, indeed, its attempt to provide for the orientation of its pupils towards the various forms of education and vocation that branch out for them later, either in differentiated general and vocational schools or in comprehensive senior high schools. Orientation becomes not a sudden act that takes place at the point of transition, on the basis of hurried interviews or brief examinations, but a process that is continued throughout the junior secondary period in a school whose curriculum and organization are designed with guidance in view. Various methods are used, but all involve the keeping of cumulative educational records of the development of each pupil's abilities and interests, so that when the time comes for decisions to be made about the child's future, both the teachers and the parents will have information readily available on which wise decisions can be based. By discussions with the pupils themselves throughout the junior high school period, the staff, whether they are the general teachers or the special guidance counsellors, are able to help the pupils to play an important part in the choice of their own future education and occupation.

As the basis for obtaining information of value in orientation, the junior high school usually provides optional courses of many kinds, so that each pupil is able to test the degree of his ability and the permanence of his interests by actually trying several different subjects and activities, while at the same time continuing the fundamental studies that are common to all. In this way the junior high schools attempt to give guidance based upon the knowledge gained from a variety of activities, rather than upon the narrower criterion of the pupils' relative ability to learn the scholastic subjects of the general course. Along with the provision of a wider range of school activities there has been an attempt to assess the achievement of the pupils in such a way as to provide the basis for a precise evaluation of their relative strengths and weaknesses. The testing movement has enabled classroom teachers to call upon many reliable and accurate measuring devices to supplement their subjective impressions with more exact indications of their pupils' strengths and weaknesses.

The junior secondary period in selective systems

In most countries of the world today the years of early adolescence, from the age of 11 or 12 to 14 to 15, are considered to be the first stage of secondary schooling for all young people, rather than a period in which some children begin a long course of secondary education, some begin a short course of vocational training, and the majority terminate their primary education and go to work. In countries that followed the European tradition of early separation, the problem is how to bring about, by changes in curriculum and methods, a common approach

1. Union of South Africa, Commission on Technical Education, *Report*, Pretoria, Government Printer, 1948, p.275.

1. ibid., p.340.

to the general secondary education considered necessary for all young people, while retaining those aspects of the differentiated curricula that are useful and are not begun prematurely. In attempting such a reform the question arises whether a unified school is essential at the junior secondary level, or whether separate schools can be retained.

From the point of view merely of smooth articulation between the primary and secondary periods, the systems that select early do not appear to be so conscious of difficulties as are the countries that retain the common school throughout early adolescence. The shock of failure remains with those borderline pupils who had hoped in vain to enter the selective grammar school, *lycée*, *Gymnasium*, or similar school; but for those who are selected the actual change-over from the primary school to its successor is not severe, because each type of secondary school appears to have its own mode of education fairly well adapted to the abilities of the pupils who enter it. The most intelligent and scholastically inclined pupils entering the selective school at 10 or 11 are ready for wider experiences and more systematic studies than the primary school has provided, and as the course they are entering is intended to be a long one their studies in the new secondary subjects can be initiated without undue haste and pressure. In the same way, the less able pupils entering the middle school undertake a curriculum less academic than that of the most highly selective schools and beginning with fewer strange new subjects. The majority of the children entering secondary modern schools or their equivalent, or completing their education in 'complementary' or continuation classes attached to their primary schools, find that they are essentially continuing with a 'rounding off' of their primary school studies and thus for them, too, there is no severe problem of transition.

The most serious problems in the systems that select early are of a different nature. They are the problems of making a just allocation of the pupils among the different types of school or course and of providing them with the kind of education best suited to their needs. From both these directions there are pressures that seem likely to cause more and more systems to develop a common non-selective period of junior secondary schooling. It is increasingly realized, from the efforts to devise good allocation procedures, that a longer period of common educational opportunity is needed to provide variety and choice as a means of orientation. It is becoming clear, too, that socio-economic factors still operate strongly and may unduly influence educational choices made at an early age. For example, surveys recently carried out in France showed that a considerable proportion of children did not even sit for the examinations on which allocation to the *lycée* or the *collège* is made, and that these children were almost all from working-class families. It was considered that this waste of potential talent might be reduced if these young people had a period of further orientation in which to try themselves out at various secondary school studies. The opinion is increasingly held, too, that in the modern world all adolescents need a longer period of general education before entering the phase of differentiated training, and that there is more chance of this being well done in general secondary schools than in specialized vocational schools.

For both the above reasons it seems likely that further attempts will be made in Europe, in South America, and in the East, to devise some form of common schooling in the junior secondary period. For the majority of European systems, and indeed for the majority of systems throughout the world, this will involve a radical reorganization of the schools. In consequence, in so far as such reorganization is likely to be in the direction of creating a period of common junior secondary schooling, it is quite likely that the problem of transition from basic primary education to the curriculum of the senior secondary stage will arise in the future as it did earlier in the undifferentiated systems.

Reorganization itself is taking two main forms at the present time. On the one hand there is the extension upwards of the common primary school to include a junior secondary top. This is the method of the unified school; it is found in the seven- and eight-year incomplete secondary schools of the Union of Soviet Socialist Republics and similar systems and it is essentially the method that Sweden's nine-year unified school will follow. On the other hand, there is the junior high school and the junior-senior high school that developed in the United States and a few similar systems. This is the method that Japan has adopted and that some countries in the Middle East and Asia are developing, and it is finding advocates in several of the Western European countries.

Reorganization at the secondary level only appears likely to find most favour among those countries that have inherited complex secondary systems separate in origin and control from the primary systems, and that have not made any revolutionary break with their recent past. In Scotland, for example, the smaller urban centres often have only one secondary school, and in it the junior secondary stage of education is common to all children whatever the length of their course. In England, the number of comprehensive schools, multilateral schools, and bi-lateral schools is slowly increasing, and one county (Leicestershire) adopted in 1957 a plan that is in effect similar to the junior high school pattern. The essence of the Leicestershire plan is that in an area containing a grammar school and a number of secondary modern schools, all the children will enter a secondary modern school for their first three years of non-selective junior secondary education. At the end of this period, those pupils who intend to continue with their studies for several years will transfer to the grammar school, which in effect will become a senior high school with a three- or four-year course. The remaining pupils will stay at the junior school until they reach the minimum leaving age and will then end their schooling.

The Leicestershire method is intended to solve one of the problems of the comprehensive school that has caused much concern in Britain, and indeed in any country where a high degree of selection has been practised. It is considered that the grammar school, the *lycée*, and other similar types of selective schools should be of a size large enough to have several classes in their final year, in order to provide for the specialization that is required in preparation for the university. A comprehensive school would have to be very large indeed (1,500 to 2,000 pupils) if it were to have several classes of very able pupils pursuing highly academic courses within it. Schools of this size, however, are not regarded with favour in Great Britain,

and the horizontal division into junior and senior sections would reduce their size.

In Italy, a method of gradual unification has been adopted which may provide an example for systems that are still differentiated at the junior secondary level. In the first years of the twentieth century, Italy had a secondary school system that comprised a five-year *ginnasio* followed by a three-year *liceo* which led to the university; technical schools of two grades, a three-year lower school followed by a four-year upper school; three-year schools for the training of primary school teachers; a complementary school of three years; and classes for apprentices. The reform of 1923, initiated by Giovanni Gentile, replaced the teacher training school by an *istituto magistrale*, divided into lower and upper divisions; the three-year technical school was replaced by a four-year school specially designed to provide a general humanistic education to serve as the introduction to all types of higher technical institutes; many private vocational schools were placed under the supervision of the State and their curricula reorganized on a common basis; and a new type of upper general secondary school, the *liceo scientifico*, was founded. In 1932 a further unification took place, by which the complementary schools and the apprentice-training classes were converted into *scuole secondarie di avviamento professionale* or general secondary pre-vocational schools, and were given the task of providing continued general education and pre-vocational training for pupils up to the age of 14. The next step in unification took place in 1940, when the lower courses of the technical institute, the teacher training institute, and the *ginnasio* were combined into the three-year *scuola media*, a lower general secondary school, the purpose of which was to give its pupils a general education in the humanities and at the same time provide them with the opportunity to test their abilities and aptitudes so that they would be able to make a better choice of their future vocation and education.

All secondary schools had been intended to provide a common junior education, but in practice the lower course of each was greatly influenced by the nature of its upper school. Each prepared its junior pupils for the work of the upper school, with the result that it was not easy for a change of school to be effected if the pupil discovered that his original choice had not been wisely made. The 1940 reform has brought about a gradual simplification of the school system at the junior secondary level, so that, apart from a few special schools such as those of the fine arts, there are only two branches of education to choose from at the end of the five-year primary period.[1] The three-year courses in these two types of school are carefully articulated with the courses in the senior schools to which they lead, and for those children who continue to the appropriate senior schools the transition is made with relative ease if they have entered the right school and their abilities and interests have not shown any marked change. Difficulties occur, however, with the pupils whose allocation in the first place may not have been correct. The distinction made between the selected pupils of the *scuola media*, who are considered fit to prepare for the long course of senior secondary schooling in the *ginnasio* and *liceo*, and the majority of pupils who enter the *scuole secundario di avviamento professionale*, is regarded by many Italian educators as undesirable, for they consider that the pupils at entry are too young for their aptitudes and interests to have clearly manifested themselves. The problem of forming a common lower secondary school for all pupils is a difficult one, however, owing to the great importance attached to the long course of humanistic education in the *ginnasio* and *liceo* and the consequent anxiety lest the most able children might not receive an appropriate preparation in a unified junior secondary school.

The reduction of types of secondary school diminishes considerably the number of pupils who make a wrong choice or who are wrongly allocated at the end of the primary school period. Mistakes inevitably occur, however, and the interests and abilities of some pupils will change. Each type of school tries, therefore, to make some provision for the borderline pupils and thus prepare them for a possible change. With the growth of an educated population, more and more parents want their children to have as extended an education as possible, and there is a steady pressure upon the non-academic junior secondary school either to make provision for its pupils to continue in senior secondary schools or to extend its own courses upwards to the senior level. The latter method is frequently regarded as more satisfactory for the pupil, because transfer from one type of school to another is never easy, and in practice it takes place only occasionally. The latter method is also favoured by both parents and teachers, as it raises the esteem of the school to be permitted to prepare its pupils for the leaving certificate examinations. In the secondary modern schools of England, an increasing number of pupils are now having 'grammar school' courses offered to them, so that they can sit for the General Certificate of Education examination, and it appears that this method of reducing the distinction between different types of school is likely to become popular. In effect, too, it is a method of making a smoother transition from primary to academic secondary education for borderline children in a system that retains selection and differentiation.

Transition in the unified school

Many of the problems that present themselves in those school systems that are trying to bring about a smooth articulation between primary and secondary education appear to be avoided in countries like Denmark and Sweden, the Eastern European States, and the Soviet Union which have established a unified school system covering both the primary and the junior secondary stages. In the first place, from the point of view of the pupils themselves there is just one school through which all children progress from the age of 5 or 7 to the age of 14 or 15. Even to those pupils from rural areas who enter the junior secondary division after they have completed their earlier education in a village school, it will be clear that the new school they are coming to is not a separate secondary school, for the young children of its own district are still in attendance. In the second place, pupils growing up in the unified school will find less change in school customs,

1. In 1960, Bill No. 904 was placed before the Italian Senate, establishing a single unified lower secondary school which will replace the present *scuola media* and *scuola di avviamento professionale*.

regulations, and discipline as they pass from classes that were formerly thought of as primary to those that were formerly classified as secondary; and though they will have new teachers, these will all be part of the same staff and will be recognized as such by the pupils who will have seen them in the school buildings from time to time. In indirect ways such as these the child will be aware that he is growing up in one school and not passing from one type of school to another at the age of 11 or 12.

It is, however, quite possible, that in spite of these evidences of unity the formal programme of studies and the methods of teaching of one section of a school could be markedly different from those in another section. Being housed in the same school does not necessarily bring about a functional relation between the work of the different classes. This has to be deliberately striven for in the organization of the school.

In all the countries that have adopted the unified school through the primary and lower secondary stages, the trend has been towards a constant improvement in the articulation of the programmes of study, in the gradual introduction of new subjects, and in the adaptation of teaching methods to suit each stage of development of the different subjects. The Ministries of Education in many countries that are developing a unified school have made it one of the main functions of their departments of educational research to improve the curricula, methods and textbooks. Courses of study in any given subject are worked out in long, carefully planned sequences of several years, extending from the primary through the secondary stages, and divided up suitably for the different classes.

As an example of the carefully graduated introduction of new subjects of the curriculum, the present practice in Bulgarian general polytechnical secondary schools may be noted. In the first classes of the primary stage the major part of the time is spent on learning to read and write the Bulgarian language, and about half as much time is devoted to arithmetic. In addition there are singing, drawing, productive work experience, and physical education; handwriting is included in the language studies in the first three classes, and in the fourth class, the amount of time devoted to language is decreased to enable new studies such as geography, history and civics, biology and geology to be introduced. In the fifth class, which can be said to mark the beginning of the junior secondary period, the first foreign language, Russian, is begun; in the sixth class simple arithmetic is superseded by algebra and geometry, and physics begins; in the seventh class chemistry starts, and a Western European language is begun; and in the eighth class a one-year course in crop and stock management is provided. In the senior secondary period, which begins at the ninth class, the general production work period ceases but further additions are made to the programme: drawing merges into technical drawing and designing, trigonometry enters the mathematics syllabus; one-year courses in psychology and logic, in rural mechanization, and in the elements of machine operation are provided; a two-year course in shorthand begins; and additional music and drawing are provided as options. In the tenth class a beginning is made with specialized vocational training, both theory and practice; in the eleventh class, singing is dropped and practical electricity is taken; and in the twelfth class biology and geology are dropped in favour of astronomy, and a study is made of the elements of communist theory.

After the pupils have completed eight classes many of them go to specialized technicums, where general education is continued and the same principle of the gradual introduction of new subjects is applied to the specialized technological subjects that complement the general course.

The unified school systems give indications of a trend in curriculum organization that is likely to be followed in other systems, too, in order to achieve an efficient transition from elementary studies to those that have traditionally been regarded as secondary. In countries like the United States of America which have unified district control of all stages of schooling, it is increasingly common for the programme of studies in a given subject to be considered as a whole from the lowest to the highest class even though in terms of organization these classes are divided up into different schools at different stages. In countries where there are still distinctly different controlling authorities for primary and secondary schools, however, the situation is more difficult to cope with. Attempts at voluntary co-operation between the primary and the secondary teachers and the primary and secondary inspectors are being made in many countries through joint curriculum planning committees, and through local agreements and consultation between schools; but it is difficult to make sustained and comprehensive efforts at articulation by such means alone, and the results vary greatly in effectiveness.

Transition and teaching methods

The general trend towards giving all children the opportunity to complete at least the first stage of secondary education has involved something more than a mere change in nomenclature or terminology. The secondary education now being given to young people in the advanced classes of the primary school, the *cours complémentaires*, the junior high school, the secondary modern school and so on, is no longer the same as the old continued elementary education. In fact the quality of education in the primary schools has changed greatly in the more highly developed countries over that period, and the change has been in the direction of bringing primary school teaching methods nearer to what has been regarded as the intellectual ideal of the secondary school. This is true even though the secondary schools themselves may not have been successful in living up to their own ideal of cultivating in their pupils an active, searching intelligence, seeking to comprehend man and his culture and not merely to memorize facts of whose significance they are unaware. The changes in primary school methods have of course gone deeper than this, for they have been concerned with the development of the whole personality of the young child and not with his intellect alone, but it is on the intellectual side that the primary school spirit has come nearer to that of the traditional secondary ideal.

Much of the best pedagogy in the primary schools has been achieved when skilled teachers have been able to make their pupils' own interests the starting point of intelligent activities that lead to an understanding of matters that the pupils are concerned with and that

involve the acquisition of knowledge that it is important for them to have. But it is generally considered that the interest-centred approach has to be modified at the secondary level, where a more systematic organization of knowledge is called for. It may be noted in passing that in many countries today educators are concerned about the overloading of the secondary school curriculum, owing to the increasing amount that young people are expected to learn. Their anxiety has two main aspects: first, the mental strain placed upon the young people by the long hours of schooling and learning; secondly, the difficulty of avoiding an emphasis on memorization and the consequent neglect of the inquiring mind that wants to pursue interesting topics to their limit. However, even though the secondary schools may have been forced in recent years to over-emphasize systematized knowledge, it is generally considered that at the secondary stage systematization is called for, especially for the academically able pupils, and that a transition is necessary here between the relatively interest-centred pedagogy of the primary schools and the subject-centred pedagogy of the secondary schools.

In those countries that have had fairly advanced methods of training teachers for the primary school for many years, in which the entrants to the primary teaching profession have usually completed a full course of secondary education before entering the pedagogical institutes, and where modern knowledge of child psychology has been readily available, the use of activity methods and attempts to release the creative powers of the children in the course of school learning have, over the past two decades in particular, begun to influence the atmosphere of the junior secondary schools. In Belgium, France, Great Britain, North America and Switzerland, notable developments in the application of the psychology of creative activity to schooling have been made in the primary schools, and with the transformation of the upper primary classes into secondary schools the junior secondary schools themselves have been affected. Activity methods, such as those pioneered in the United States at the Chicago Laboratory School in the early years of this century, in England at the Perse School at the time of the first world war, by Decroly in Belgium, and in the *classes nouvelles* of France after the second world war, are increasingly being used within the organized subject-areas of the junior secondary school to smooth the transition from primary to secondary studies, as well as to give life and reality to these studies.

Several features of the *classes nouvelles* are worth noting in this context. First, in order to make an easier transition between the primary school where one teacher takes all subjects, and the secondary school where every teacher is a specialist and many new subjects are commenced, a grouping of subjects was often made, so that the pupil might have only three different teachers for the major intellectual subjects during the first two years. This is a method which is increasingly being used in many parts of the world. For example, one teacher may be responsible for the teaching of the native language and also the social studies such as history and geography; another teacher may take mathematics and the sciences; while a third may take the foreign languages. Secondly, several school periods each were set aside for individual directed activities instead of class lessons. By this means the teacher was able to spend a considerable amount of time giving individual attention to his pupils, and the pupils were taught how to study and investigate effectively on their own. In these periods, project-work and activities based on centres of interest, were carried out as well as the customary book-learning or working of exercises, and an incidental benefit was that the amount of homework could be reduced. Thirdly, in the ordinary school periods, a sustained attempt was made in many schools to break away from lecturing by the teacher and passive listening by the pupils, and from an excessive amount of textbook memorization. A variety of modern methods was used, such as the carrying out of small researches, the preparation of lecturettes, monographs, models and exhibitions, and dramatization by individual pupils and by small teams working together. In general, an effort was made to release the child's powers of creative activity, to direct these into the main fields of human culture, to show the unity of human culture, and yet at the same time to encourage each child to make a distinctive contribution by developing his own best talents in whatever subjects and through whatever media they might best express themselves.

The practices of the *classes nouvelles* provided a stimulus to all junior secondary classes, not only in France but in many other parts of the world, even after it was decided, for reasons of economy, that they could not be continued in their original form. For the adequate realization of activity methods, few countries at the present time have enough teachers to reduce the size of classes; and few classrooms are designed and equipped on the scale needed, but tend still to be places where children sit and listen and write. From many parts of the world today, indeed, comes a consistent criticism of secondary education that it still over-emphasizes memorization and neglects more active approaches to learning. However, it is a feature of new school design in many countries that classrooms are coming to be considered as study-work rooms and that schools, both at the primary and the secondary level, are being planned to enable a wide variety of activities to be carried out in them. In such ways, too, the tendency to close the gap between primary and secondary schooling can be seen.

The use of more active learning methods requires teachers who are well educated and not merely well trained. The experience of those who are creating educational systems in the underdeveloped areas of the world shows that a teacher with only a limited knowledge of his subject and of related subjects needs precise and explicit direction and is most efficient if he restricts himself to methods of formal instruction within the limits of his knowledge. To encourage and guide his pupils into more active methods of inquiry, a teacher needs a very deep knowledge of his own subject and also a broad knowledge of its relationships throughout the field of learning. If he has not both this breadth and depth, he will be unable to act as guide to his pupils, and their activities all too readily get lost in blind alleys. The trend towards a more active pedagogy, then, is intimately connected with the quality of the education and training of teachers, and thus varies greatly from area to area throughout the world today.

In educational systems that are still struggling to establish themselves, as in the new primary systems of the vast undeveloped areas of Asia and Africa, where

the basic problem is to obtain a supply of teachers just well enough educated themselves to be able to lead their people to the fundamentals of literacy, it is generally considered that the prime need of this generation is for effective instruction, limited in its scope and its objectives. The same situation appears to exist at the secondary level in systems like those of some of the Latin American countries, whose educators have repeatedly pointed out in recent years the need to advance beyond the methods of dictating and memorizing lecture-notes compiled by the teachers. But until sufficient buildings, textbooks, teaching materials and school equipment can be supplied, and until a large enough body of professionally-trained full-time teachers is available, such deficiencies will be difficult to overcome.

Teachers for the junior secondary school

The growth of the idea that all kinds of schools provided for the young adolescent are to be regarded as giving secondary education is transforming the nature, supply, and training of their teachers. However, in the field of teacher training the division between primary teachers and secondary teachers persists in many parts of the world and presents difficult problems, particularly where primary teachers are trained in institutions at secondary level and secondary teachers at higher level.

In countries like France and Great Britain where the young people from 11 to 15 attend different types of school, some of which were originally part of the primary system, some of the technical system and some of the traditional secondary system, the marked difference in the training of the teachers that characterized the earlier situation still persists. It is one of the factors in the refusal of the general public to accord to the new secondary schools that parity of status which educators see as necessary if parents are to accept willingly the allocation of their children to different schools on the basis of aptitude and ability. Efforts are being made to raise the qualifications of teachers in the secondary modern schools and to bring them closer to those that have been customary in the traditional secondary schools. As, however, the traditional secondary schools are themselves short of teachers owing to the great increase in their enrolment since the second world war, only slow progress is being made. Moreover, the problem is not simply one of staffing the modern schools or the technical schools with university graduates with the same qualifications as those that have traditionally staffed the grammar schools and the *lycées*. The kind of curriculum most suitable for the education of the majority of young adolescents, as distinct from the intellectual minority, may require different qualifications. These have yet, in fact, to be satisfactorily defined and appropriate training programmes established, and one of the functions now being fulfilled by the secondary modern schools in Great Britain is that of discovering by experience the kind of teachers and the kind of training needed for the education of adolescents of average ability.

It has already been mentioned that in countries like New Zealand, where secondary education in the past commenced at a relatively late age after eight years of primary schooling and where recent attempts have been made to create a common junior secondary period out of the last two years of primary schooling, most of the teachers in the intermediate schools are primary teachers, and this has had the effect of retarding the introduction of subjects like foreign languages, mathematics and physical sciences into the junior secondary classes. At the same time, when the secondary schools proper are comprehensive schools, the great increase in the number of children of average and below-average intellectual ability entering their lower forms has faced the staff with new problems of curriculum and teaching methods for which they have not been prepared. In an effort to cope with such problems many secondary schools have been recruting primary teachers to their staffs, and the constitution of secondary school staffs is in this way being changed.

It is noteworthy that in Sweden, where the experiment of the *enhetsskola* has been most carefully prepared for, special teacher training institutions have been established to determine appropriate methods of preparation for the work of the junior secondary stage and to ensure a supply of suitably trained teachers, so that the success of the reorganization will not be prejudiced by teachers unsympathetic towards it and unqualified to cope with its most difficult problems.

TOWARDS AN INTEGRAL EDUCATION

Throughout the world, over the past two decades in particular, the view has been increasingly accepted that education is a continuing process from childhood to adulthood, and that schooling should not be conceived of as comprising two radically different kinds of educational process, one primary and one secondary, for two different kinds of children, whether these different kinds of children be separated one from the other on socio-economic grounds or on the basis of their abilities and aptitudes. The terms 'primary schooling' and 'secondary schooling' are coming more and more to be considered as no longer referring to different entities, but rather to successive phases of a continuing process that cannot be sharply distinguished except arbitrarily and by doing violence to the real continuity of growth and education. In so far as school systems and scholastic methods do break the continuity of growth they are coming to be regarded as imperfect instruments of education.

Along with the growing acceptance of this integral view of education which leads to the abolition of the former sharp distinctions, is a growing acceptance also of the belief that all young people should receive as complete an education as it is possible for their communities to provide. The first stage in the acceptance of this belief is reached when it is realized that a nation loses much of its potential talent if it denies educational opportunity to the able young people of the poorer classes of the community; the final stage is reached when it is realized that a community is neglecting its human resources unless it gives to even its least able members the chance to continue to grow and develop as long as growth is possible. The corollary to such views is that communities try to develop a system of education that will be always available to all their members. That is a long term aim. In the meantime,

the provision of schooling for all children and young people up to the beginning of adulthood is an objective that only a few economically advanced countries are within sight of attaining, the provision of complete schooling for a proportion of the abler young people is being achieved by a considerable number of countries, while in most parts of the world the objective is still to bring the rudiments of literacy and a few years of basic schooling to the younger children.

Looking ahead to the goal of a longer period of schooling for all young people, the leaders of the underdeveloped areas are faced with two different patterns towards which many of the more advanced countries are tending. The first is that of a sequence of comprehensive schools, divided into separate sections, with a primary school followed by a junior high school and then by a senior high school; the second is that of a unified school from childhood to the end of early adolescence, followed by a diversification at the senior stage.

Each has done away with the former distinction between primary and secondary schools as belonging to different systems for different children; each provides education for all the children of a community; and each in a different way is developing an integral approach to the provision of education that blends together the primary phase and the secondary phase into one continuous process. There are, however, certain marked differences in the two approaches, and it is in understanding these differences that educators will be able to judge whether either of the two approaches is a suitable guide to the future development of their own system or whether new solutions must be sought.

The essential distinction between the two methods appears to reside in a different conception of the nature of the school at its most senior stages. The comprehensive senior high school aims at providing a complete education up to the age of 17 or 18 for all young people no matter how able or, within the limits of normality, how low in scholastic ability. It seeks a method of blending general education and vocational training within an institution where the basic aim is the cultivation of the whole human being not merely the training of a skilled worker. In pursuance of this aim it will not reject young people stage by stage because they do not reach certain standards of scholastic attainment. The system that has a selective senior secondary school, on the other hand, sets out to achieve a more limited objective: to develop a highly qualified pool of academic and technical talent by striving for high standards of scholarship throughout the school system, and by allowing young people who cannot reach these standards to leave the secondary school at the end of the junior phase and continue their education in different ways. It is not the conception of education that differs in the two systems so much as the conception of schooling. Each aims at a complete education for its young people, blending cultural and vocational elements. The diversified schools to which young people will go when they leave the general secondary school are no mere vocational training institutions but place a great emphasis upon general education at the same time.

In systems that differ in this way the nature of the schooling given at the junior secondary stage tends to differ also. Where the senior secondary school is mainly concerned with a scholastic minority, the junior secondary school also tends to be progressively more academic, and those pupils who are unable to keep up with its exacting standards will leave and enter different educational institutions. When the senior school is comprehensive, however, the junior high school tends to provide a wide range of alternative educational programmes, academic and non-academic, to enable its pupils to learn to choose wisely their future course of schooling from among the diverse offerings of the senior high school. In order to provide for a wide range of abilities and to offer a wide range of optional subjects, the comprehensive high school needs to have a large number of classes at each age level to be able economically to provide a large staff of specialist teachers and specialized teaching material. This would make it impractical to join the six classes of the primary school on to the six grades of a junior-senior high school; and indeed, one of the reasons why the junior and the senior high schools are often separate is that in this way the size of each school can be large enough for diversification without being too cumbersome.

CHAPTER VII

TRENDS IN THE SECONDARY SCHOOL CURRICULUM

Even more significant than the changes that have been taking place during the present century in the structure and organization of school systems are those concerned with the nature of the curricula designed for adolescents. For the essence of these changes is that they stem from an awareness of the need not merely to make more education and training available to all young people, but to provide an education which will develop in all young people, to the fullest extent of which they are capable, those qualities of character, personality, and intellect traditionally associated with the concept of a 'liberal education'. At the same time, the attempt to use the traditional curriculum, originally intended for children of the upper classes of European society, as the means of development of children from different social strata and with different backgrounds and interests, has led to a careful examination of the relation between the curriculum of a school and its aims. The result is that in many countries the opinion has become generally accepted that different curricula and methods of teaching may be needed with different children, even though the same general objectives may be aimed at. Finally, the rapid expansion of human knowledge and the rate of technological development demand a constant re-thinking of both the aims and the methods of education. In consequence of all these factors the original distinction between primary and secondary education, as connoting two qualitatively different types of education suited for different sections of the community, has now almost disappeared. Furthermore, the later view, that primary education is the education of children while secondary education is the education of the adolescent and that there is a marked qualitative difference between them, is giving way to the view that the process of education is a continuous one in which changes in curriculum and methods should occur gradually. Indeed, in countries that are developing the unified school the terms 'primary' and 'secondary' appear to have little value even administratively and seem to be dropping out of use.

THE CURRICULUM AND THE NEEDS OF AN EXPANDING ELITE

In the eighteenth century and the earlier part of the nineteenth, in those countries that had begun to develop modern school systems secondary education was still regarded as the means of cultivating the 'free' man, the man who, by virtue of the ownership of property or some other form of wealth, did not have to work for his living in the usual sense of the term, but was free to cultivate his talents and personality as thoroughly as possible in order to lead a full life and be fit for the responsibilities of high office in the service of the State. The distinction between the 'free' man and the worker tied to his occupation caused a separation between education for culture, which was the privilege of the upper classes, and training for a specific trade or manual occupation, which was the fate of the lower classes. In the Western countries, after the renaissance of Greek and Roman learning, the content of higher education was fundamentally the study of the literature, the fine arts, and the practical arts of the civilizations of classical antiquity. It was the essential function of the grammar school to teach the languages of Greece and Rome, which were seen to be the key to classical learning.

Yet as early as the seventeenth century and throughout the eighteenth century, the expansion of commerce and the great scientific developments that were taking place in the European nations were bringing a realization that the humanities alone, however permanent their essential virtues, were too narrow in scope to provide the education needed in the modern European civilization. Educational reformers pressed the claims of the newer scientific and technical knowledge, of modern foreign languages, and of commercial and economic studies. Gradually all these fields of learning came to be included in the work of the educational institutions that catered for the needs of the adolescent.

The status of the newer subjects was initially much lower than that of the classical studies. Their inclusion in the curriculum was largely dependent upon the growth of the commercial and industrial middle classes, who envisaged for their children studies that were more closely related to the practical affairs of their lives than was the classical curriculum. New types of schools were set up to teach the modern studies, but they had a hard struggle to gain the privilege of preparing pupils for higher education. In some countries, for example Germany, there was a proliferation of types of schools according as they taught Greek and Latin, or Latin and modern languages,

or modern languages and science, and so on, and at first these schools themselves formed a hierarchy of privilege. In England and North America, on the other hand, while the academies were at first founded to teach the newer studies, the older grammar schools themselves enlarged their curriculum and by providing classical 'sides' and modern 'sides' in the one institution avoided much of the struggle for institutional privilege that characterized countries where any new emphasis in curriculum was achieved by creating a new type of school. Nevertheless, the newer courses were seldom accepted as qualifying for entrance to the university, and in consequence they were often taken by pupils who were not considered to be of such high intellectual calibre as those on the classical side. The struggle for parity of status by courses that emphasized modern languages or the sciences rather than classical languages was strongly in evidence during the latter part of the nineteenth century in those countries of the West that were becoming industrialized, and by the beginning of the present century the content of secondary education was regarded almost everywhere as comprising the mother tongue and its literature, the Latin and/or the Greek language and literature, classical history, one or two modern foreign languages, mathematics, some of the natural and physical sciences, and some modern history and geography.

The emphasis placed upon these different subjects varied from country to country, and the variation appears to have been due to the operation of two major factors. The first was the extent of commercial and industrial development in the countries concerned, and the second was the extent to which secondary education was being made available to the lower sections of society. In the first place the classical elements of the curriculum, including not only languages, literature, and ancient history but also the classical mathematics, retained their strongest hold in the less industrialized countries, in which the main source of productive power was the manual labour of the majority of the population, in which there was a relatively small middle group of highly skilled professional and technical experts in either industry or the learned professions, and in which a small group of wealthy people lived by ownership of property and monopolized the highest offices of government. It is notable that in the countries of Europe where industrialism developed late the secondary curriculum has been slow to emphasize the sciences and, what is even more interesting, in countries that have developed as modern States from being unindustrialized colonies of European powers the growth of modern studies, too, has been slow. For example, in many Latin American States it is only in recent years that the secondary schools have begun to make serious attempts to overcome the inadequacies under which their teaching of the sciences has laboured. In India and Pakistan, too, and in other newly emerging independent States of Asia and Africa, where the children of richer families have in the past been sent to Europe to obtain their higher education, the secondary schools have emphasized linguistic studies until quite recent years. This has meant that their university graduates have tended to be trained for administrative responsibilities rather than for technological activities, and the pupils who have not gone beyond the high school have tended to be clerks and teachers. Now that these countries have an urgent need to improve their economies they find that they lack not only scientists and technologists but also administrators with technological and scientific backgrounds.

The second factor that had a profound effect upon the broadening of the secondary curriculum during the latter part of the nineteenth centuries was the gradual extension of secondary education to the children of the less well-to-do sections of the middle classes and to the ablest children of the working classes. Only in exceptional cases was it expected that these children would rise to high positions in their countries, because the influence of family and social background still played a very powerful role in preferment to high office, but they were intended to be prepared for the learned professions and for middle-level administrative positions in industry, commerce, and the public services. Subjects of more immediate utility than the classical languages were admitted into the curricula of secondary schools for the benefit of such pupils, and although these subjects were not at first accorded the prestige of the ancient ones, in the end they did allow the pupils to enter the universities, though not always to those of the highest social prestige nor to all the different branches of university study.

In most countries, however, the differences in the curricula for the different sections of secondary education were not great and a large proportion of the subjects taken was common to all types of secondary school or courses of study. In the less industrialized countries there was little differentiation until the last years of secondary education, and even in the United States of America, at least until the first decade of the present century, the requirements of university entrance tended to retain a large common element in the curriculum.

Fundamentally, the schools were still adhering to a common conception of the nature and purpose of secondary education; however much their curricula varied in detail, the common element was essentially the conception of a humane liberal education that derived from Aristotle. It was a conception that emphasized the mental life of man, especially in its intellectual aspects, as this was regarded as the highest of human characteristics and the one that could be developed only by man freed from the bondage of manual labour. The *artes liberales* of the Romans could be pursued only by 'free' men; in mediaeval times the seven liberal arts of the *trivium*, grammar, logic and rhetoric, and the *quadrivium*, arithmetic, geometry, music, and astronomy, were the basis of education; in modern times they became transformed into the characteristic European secondary school curriculum of the late nineteenth and early twentieth centuries.

This, of course, is not to say that the curriculum was the same in all the schools of Europe. There were distinctive national differences between the schools in spite of the common derivation of their secondary curricula, and within any country different schools emphasized different aspects of the curriculum. In Germany, for example, the schools that emphasized classical humanism were somewhat different in character from those that emphasized the life and spirit of German culture, though a large part of the curriculum was the same in both types of school. In consequence the distinctive qualities of the different elites

that were being produced by the various curricula were somewhat more sharply differentiated in Germany in the nineteenth century than they were in other European countries, where curriculum differentiation took place mainly within a common type of secondary school.

The process of expansion of elites took place rapidly in the United States of America during the latter part of the nineteenth century, but here, as in other countries there was a conflict between the nature of the universities and the needs of those children not intending to proceed to higher education. In 1892 the National Education Association set up the Committee of Ten on Secondary School Studies to consider some of the problems arising out of this conflict. Although the committee recognized that the secondary schools of the United States did not exist only for the purpose of preparing pupils to enter the universities, it still considered that they were restricted in their functions, which were seen to be 'to prepare for the duties of life that small proportion of all the children in the country—a proportion small in number, but very important to the welfare of the nation—who show themselves able to profit by an education prolonged to the eighteenth year, and whose parents are able to support them while they remain at school'.

The committee was conservative in its judgement as to the number of subjects that were suitable for the purpose of secondary education. Some specialization was seen to be necessary, and the committee was convinced that superficiality would result from an encyclopaedism that required the pupils to take a large number of subjects for short periods of time. This has to be interpreted in the light of the fact that the American high school of the period offered only a four-year course following upon eight years of elementary education. In order to have a practicable method of determining admission to the universities that would allow for the education of a variety of elites and at the same time bring about some uniformity in the standard of their scholarship, the committee recommended that different groups of subjects should be considered equivalent if they were studied for the same number of years and for the same number of periods per week. This suggestion was endorsed in 1899 by the Committee on College Entrance Requirements, which recognized the desirability of allowing considerable freedom to pupils to choose their subjects within the framework of studies deemed suitable for secondary schools but considered that certain common elements should be taken by all. It suggested that every candidate for university entrance should include four 'units' of foreign language study in his course (with no fewer than two units in any language), two units of mathematics, two of English, one of history, and one of science; he was free to choose the rest of his course from the subjects offered by his school. The 'unit' method came to be generally adopted. The Carnegie Foundation for the Advancement of Teaching used it as one method of evaluating the standard of work in the universities, and the foundation's definition, suggested in its annual report of 1906, that 'a unit is a course of five periods a week throughout an academic year' was generally accepted. Recognizing the arbitrary nature of such an attempt at equating the values of different studies, all the committees had advocated better standards of scholarship and training for secondary school teachers, and they had suggested that secondary school studies should be begun two years earlier so that they could last six years instead of four. The importance of this innovation is that it was a carefully considered attempt to organize the curriculum of secondary schools in such a way that great flexibility in the education of young people for different purposes and positions of importance in society could be achieved, and yet that comparable standards of intellect and scholarship could be maintained.

No other country has gone quite so far as the United States in developing a flexible curriculum adapted to the abilities and interests of its potential university students, yet all countries have been moving away from the rigid and undifferentiated curriculum which during a large part of the nineteenth century was considered to be necessary for the education of a nation's elite. At the present time there is still to be found a wide range of different approaches to the question in different parts of the world. In countries influenced by British educational practices, the earlier stages of the secondary school curriculum for children who are likely to go on to the university are similar, and a gradual differentiation takes place as certain subjects are dropped and the pupils concentrate upon a smaller number of subjects. This is a common pattern in countries as different as Australia, India, Ghana, New Zealand, Pakistan, and several other Asian and African territories. In some of the Western European countries a method of differentiation is adopted whereby different courses are provided which may lead, as in France, to different branches of the institutions of higher learning. In many countries, notably in the French- and Spanish-speaking ones, these courses retain the large number of subjects characteristic of the early secondary years, and the problem of overloading courses and overburdening students has been a worrying one for many years. In the Soviet Union and the Eastern European states generally, a very different approach has been made. The long hold of the classical languages upon the secondary school has been broken and a modern curriculum, largely the same for all pupils, has been instituted. With only some minor modifications according to individual wishes, the curriculum is very similar for all pupils up till the final years of the period of unified schooling; then, however, a diversification of types of school and work experience occurs.

A SECONDARY CURRICULUM FOR ALL

At the same time as the education of pupils in the traditional secondary schools has become more differentiated, a unifying process has been taking place in the education of the great majority of young people who in the past did not have access to secondary education. As we have already seen in an earlier chapter, the general tendency in most school systems was for a separation to be made, at the end of the period of childhood, between those pupils who embarked upon a long course of secondary education aimed at entrance to the university, those who stayed longer at the primary school to complete their elementary education at the age of 13 or 14, those who went to middle school for three or four years to prepare themselves for

minor clerical, commercial, or administrative work, and those who entered specialized trade-training establishments. The qualitative difference that originally existed between 'secondary education' and the rest was based upon a sharp distinction between the general development of the human being and the specialized training of the worker. Before the introduction of schemes for daytime supplementary schooling of apprentices, the difference could be seen in its extreme form in the broad education received by a secondary school pupil and the narrow on-the-job training received by the young person who was apprenticed to a trade.

In the present century it has come to be realized that it is desirable to provide for all young people a deliberately planned educative environment throughout their early adolescence. But the catch phrase 'secondary education for all' means much more than merely 'some kind of education for all adolescents'. Indeed, it has never meant simply that all young people from the age of 11 or 12 should have just any kind of schooling; rather it has meant that that quality of education traditionally regarded as 'secondary' should, as far as possible, be made available to all children from whatever background they come and whatever their degree of ability. At the same time the original conception of secondary education has had to be modified in the process of democratization, so that in fact a new interpretation of secondary education is coming into being, influenced by both the 'cultural' conception of general education and the 'vocational' conception of specific training.

Any attempt to analyse and summarize these trends is made difficult by reason of the fact that two very different approaches to the problem have been going on simultaneously over the past fifty years, the first mainly in the United States, the second in most other countries, and it is only in recent years that their convergence is making it possible to see the outlines of a generally accepted solution to the problem of curriculum organization.

In the European countries and those countries that followed closely the European educational practices, the education of adolescents was divided among many different kinds of schooling, ranging from very short courses of specialized trade-training to long courses of general education. In a pre-industrial society where the need for a supply of relatively unskilled human labour is great, a large proportion of the young people must leave school and go to work as soon as their work can be productive; a country at an early stage of industrialism needs, too, a steady supply of labour that can be quickly trained for semi-skilled work. With the further development of industry and commerce, however, the kind of workers required are not those who have quickly and early developed specialized skills, but those who have more flexible minds, who are better educated in general, and who are thus able to remain adaptable in the face of changing industrial processes and more complicated machines. In consequence, in all countries which, by the early decades of the present century, had developed highly differentiated school systems for different kinds of workers—technical schools, trade schools, middle schools of various types, upper elementary schools, and so on—there has recently been a tendency to lengthen the courses, not by enlarging the specifically vocational elements in the curriculum but by developing a broad general curriculum as the basis upon which vocational specialization is built.

In attempting to provide for the general education of children in the specialized vocational schools, teachers early came to the opinion that the essential values claimed for secondary education, as traditionally conceived, were relevant to the needs of all children and, further, that a large part of the traditional secondary curriculum could be adapted in such a way as to provide a good means of educational development for children of varying abilities. As early as 1912, the annual report of the British Board of Education stated that there was 'undoubtedly a growing conviction that the value of secondary education . . . is not limited to children of exceptional ability, nor is to be estimated solely by the difference which it makes to their worldly prospects. . . . It is more generally felt that . . . the standards of mental and physical development which a good secondary school maintains, and the diffusion of those habits which are formed and strengthened by a corporate school life, are ends desirable in themselves'.

As the century proceeded, more and more elements of general education were included in the curriculum, first in upper elementary schooling and the continuation schools and then in the technical schools and the trade schools. In some countries, for example New Zealand, the technical high schools very early began to provide curricula that were similar in many respects to those of the general secondary schools, while at the same time permitting more advanced specialization in technical options. In Great Britain since 1944 there has been an increasing tendency in the secondary modern schools to include courses very similar to some of those provided in the grammar schools, and the view is generally held that, at least up till the age of 15, the differences between the education of children in the grammar schools and those in the modern and technical schools should be differences not of the subjects taken but of the methods of teaching, the approach made to the subjects, and the kind of materials selected within the subjects for teaching purposes. In France, too, a sustained effort has been made in recent years to ensure that pupils in all types of post-primary school are given a good general education. Recent reforms planned in France are based upon the belief that the evolution of modern technology requires a high general education, both literary and scientific, in as many young people as possible. Wartime experience in many countries showed that people with a higher general education were able to adapt themselves more quickly to new manual techniques than could the more narrowly specialized workers, and the rapidity of changes in the modern world calls for greater and greater adaptability.

The need for a better general education for all adolescents entering a world of automation and atomic power was very well expressed in the *Exposé des motifs* that accompanied the *Projet de loi* placed before the French National Assembly on 1 August 1956.[1] The *exposé* states that the extraordinary rise that has taken place in the proportion of pupils who now stay at school beyond the

1. *Projet de loi portant prolongation de la scolarité obligatoire et réforme de l'enseignement public; projet déposé sur le bureau de l'Assemblée Nationale le 1er Août 1956*, Paris, SEVPEN, 1956, p. 4.

period of compulsory schooling is linked very largely to a general phenomenon noted in all countries whose civilization is comparable to that of France; it corresponds to a fundamental change in contemporary economy due to technological progress. According to statements familiar to economists today, the constant increase in returns from individual work in industry and agriculture tends to diminish the need for manual labour, first within the 'primary' sector and then within the 'secondary' sector; and at the same time it constantly stimulates the development of the 'tertiary' sector. It is reported that in the last century 80 per cent of all Frenchmen were employed in agriculture, 10 per cent in industry and 10 per cent in the tertiary sector, while now 30 per cent are in agriculture, 35 per cent in industry and 35 per cent in tertiary occupations.[1]

Attempts that have been made to foresee the future evolution of the economy of the European nations, for example by studying the changes which have already taken place in the more highly industrialized centres, indicate that in the future an economically well-developed country will be likely to find more than half of its working population in the tertiary services (commerce, administration, liberal professions, transport, health and social services, newspapers, arts, leisure, etc.). This evolution will inevitably cause young rural people to prepare for urban activities that will enlarge as rural occupations diminish. At the same time, the non-technical or semi-technical activities will offer more careers: more teachers, research workers, clerks, agents, secretaries, lawyers, doctors, will be required. More and more workers who in the past needed only an elementary education are being employed in posts which require a longer period of general education, and this is an irreversible trend. Similarly, technological progress is reducing the need for skilled labourers and greatly increasing the demand for highly qualified engineers and technicians. The conclusion which emerged from this analysis was that in view of the changes in industry that are likely to take place, France will have less need for narrowly specialized workers but an increasing need of people with a high general development who can adapt themselves to changing circumstances.

A very different method of giving a common secondary education to all children at the junior secondary stage is being made by States like Sweden and the Eastern European countries that have adopted a unified school up to the age of 14 or 15. With only slight variations the same subjects are taken by all children and, except for the omission of the classical languages, these subjects are substantially those that have usually been regarded as comprising a secondary curriculum. The unified school has, indeed, achieved what the various curriculum changes of other countries are gradually leading to, namely, a curriculum for the junior secondary period which is basically similar in so far as subjects are concerned for all children. In the second stage of secondary education, however, the situation is different, for here a diversification of schools takes place and specialization is emphasized. At the same time efforts are being made to supplement the specialized training with continued general education.

During the period of forty or fifty years over which some of the European countries have been attempting to unify the separate types of secondary education, a different tendency—and in its early phase almost an opposite tendency—was at work in the United States of America and in some of the British overseas dominions. By the beginning of the century the comprehensive public high school open to all pupils had become the accepted means of secondary education in the United States, but the drop-out rate was high. Although this was partly due to the difficulty experienced by some parents in maintaining their children at school during adolescence, the principal factor was considered to be the nature of the traditional secondary school curriculum, which was criticized on several grounds. First, it was considered no longer to satisfy the needs and develop the abilities of the great majority of pupils who were entering the high school; secondly, it did not seem to provide for all pupils the means of 'training the mind' which had been one of the defences of the traditional pattern of subjects; and thirdly, it seemed to have little relevance to the task of helping pupils to understand the modern world. The response of the schools to such criticisms took various forms. Most commonly it was characterized by an expansion of the number of subjects and courses offered. Such courses varied widely, from those designed to give specific vocational training in industry and commerce to those designed to help young people deal with their problems of personal adjustment. Attempts were made on a vast scale to meet what appeared to be the personal needs of the pupils and the local needs of the school districts. It is probably true to say that the high schools of no other country had ever given their pupils so much freedom of choice in the subjects they studied and in the patterning of their courses of study; and a counter-trend has been developing over the past two decades towards a more closely knit patterning of programmes so that in each pupil's school life there will be a continuing group of fundamental subjects supplemented by electives. Many other countries have been influenced by the experience of the United States and, especially in the English-speaking countries, the trend over the past four decades has been to develop a curriculum pattern based upon the idea of a compulsory group of studies of universal significance taken by all pupils, at least in the first cycle of secondary education, together with optional subjects or groups of subjects based upon the educational needs and vocational possibilities of the individual pupil. The extent of this provision of elective subjects and courses of course varies greatly according to the size of schools, the resources of the different school systems and the complexity of the society in which the schools are found.

But whatever the method by which the different school systems of the world are attempting to provide some secondary education for all their children, certain fundamental questions are being forced on their notice. They must decide what are the aims and purposes of secondary education today, and then find the means of carrying them out. This involves consideration of such problems as: (a) the nature of the fundamental common studies to be provided for all pupils; (b) the extent, nature, and timing

1. ibid. See also: Carl Arneson, 'Structure économique et réforme scolaire dans les pays évolués', *International Review of Education* (Hamburg), Vol. III, No. 2, 1957, pp. 74–5.

of differentiation of secondary school studies according to the differences in the abilities, aptitudes, and interests of the pupils—a problem closely related to that of combining the cultural and vocational elements in education; (c) the closer relationship of schooling to the life of the community in which the pupil will live and to the needs of the present day; (d) the best ways of organizing the curriculum.

THE CHANGING AIMS OF SECONDARY EDUCATION

Over the past few decades all countries have shown that they recognize that the great changes in modern society call for a radical rethinking of the aims of education, especially for young people between the ages of 11 and 18. Among the more important of the factors influencing this trend are the scientific and technological revolution and the coming of automation, and the democratic revolution, which is increasing the responsibilities of citizens towards the conduct of national and international affairs.

The appreciation of changes of such magnitude as these has brought about, in a remarkably short space of time, a fundamental re-valuing of the human being and a changed view of what constitutes an appropriate education. In essence, what has happened is that all human beings are now seen as needing and deserving both the kind of general education that used to be termed 'liberal' and the opportunity of developing specific 'vocational' skills.

This re-thinking of aims has been going on simultaneously, at several different levels. At the philosophical level, John Dewey in *Democracy and Education* (1916) made an incisive analysis of the traditional antithesis between the cultural 'liberal' education of the well-to-do section of earlier societies and the narrow vocational training considered fit for the working classes, and pointed the way to a synthesis of these values in a conception of education that would fit all human beings to be at once men and workers in a democratic society. Furthermore, he developed the thesis that mental growth is a personal reconstruction of those aspects of a culture directly related to the needs of the growing child, and is not achieved by the rote-learning of systematized bodies of subject-matter unrelated to his needs. At the same time, committees of practical educators such as the National Education Association's Commission on the Reorganization of Secondary Education were developing a comprehensive set of aims for the guidance of those who, in the schools, had to devise curricula suited to the new conditions. The report on *Cardinal Principles of Secondary Education 1918* set out the most general aims of education in the following statement: '(1) The purpose of democracy is so to organize society that each member may develop his personality primarily through activities designed for the well-being of his fellow members and of society as a whole. (2) Education in a democracy, both within and without the school, should develop in each individual the knowledge, interests, ideals, habits, and powers whereby he will find his place and use that place to shape both himself and society toward ever nobler ends.'

As a means of achieving these ends it was considered that the curriculum of the secondary school should be constructed in such a way that it helped every pupil to conserve his health, develop a command of the fundamental scholastic processes, play his part as a worthy member of his home, prepare himself for a vocation, enable him to take his place in society as a citizen, give him the means of constructively using his leisure and develop his character. Such statements, which in essence were re-definitions and enlargements of the traditional concept of a liberal education in terms of a democratic society, have had a profound effect upon the thinking of educators everywhere, and in most countries of the world in recent years the statements of the aims of secondary education have been conceived in broad terms such as these.

Since the second world war practically all educational authorities have taken the view that earlier conceptions of secondary education were too narrow, that they overemphasized the intellectual aspects of the human personality to the neglect of social, aesthetic, moral, and ethical values, and that they gave too little attention to the everyday needs of the growing adolescent. Typical of the broader view of secondary education now developing is the following official statement of aims from Bolivia: '(a) To preserve and develop the physical and spiritual health of young people. (b) To guide them in the intensive study of the basic subjects and in the use of methods of self-education. (c) To perfect their cultural training and the full development of their personality. (d) To prepare them to play their part in life and engage in productive work. (e) To develop in them a sense of responsibility as individuals and as members of a society. (f) To provide them, through a vocational guidance service, with a programme of studies adapted to their individual abilities and propensities. (g) To inculcate in them a respect for democratic principles, and guide them in putting these principles into practice, thereby preparing them for the conscious exercise of citizenship.'

Similarly, in the Report of the Commission on National Education published by the Ministry of Education in Pakistan in 1960, we find the following detailed statement: 'We consider that in order to fulfil the aims of secondary education in Pakistan, the appropriate education authorities should take the necessary steps to ensure that teaching practice, the content of teacher training and the construction of curricula and time-tables are such as to bring about the full development of the child (a) as an individual, (b) as a citizen, (c) as a worker, and (d) as a patriot. Secondary education can realize these aims if it is directed towards the following objectives:

'(a) *Development of the individual.* (i) To foster in children the spirit of inquiry and independent thought and the ability to apply their knowledge to real life situations. (ii) To relate all teaching to the needs and interests of the adolescent. (iii) So to design teaching and the organization of school activities as to develop the qualities of leadership. (iv) To develop the aesthetic sense and an appreciation of cultural values among children. (v) Through games, sports, and physical education to cultivate in children a liking for and skill in physical activity and the enjoyment of sports.

'(b) *Development of the citizen.* (i) To rear children in the habits of industry, self-discipline and honesty. (ii) To provide full facilities for technical, scientific and other vocational education as preparation for further professional

education or qualification for a career. (iii) To provide the services of educational and vocational guidance and thus direct children towards the most appropriate courses and subsequent careers.

'(c) *Development of the patriot.* (i) To provide a form of education which has its roots in the national culture and in Islamic values. (ii) To nurture a pride in the nation, an understanding of its history and aspirations, and a willingness to serve it. (iii) To create an appreciation of the universal brotherhood of man and a spirit of international understanding.'

The final aim set out in this statement, viz., the development of the patriot, may serve as a reminder that beneath the apparent similarity of aims stated by different countries there are in fact considerable differences. The similarities are to be found at the formal level of generalization: that is to say, in all countries it is now stated that secondary education shall be concerned not merely with the acquisition of knowledge and the development of the intellect of the pupils but also with other aspects of their personality, such as their moral, aesthetic, emotional, and physical development. However, beneath the formal consensus, there may be great disparity of views between countries as to what sort of citizen is the ideal, what particular aesthetic values, standards of judgement, moral principles, etc., are to be fostered.

Countries differ also in the degree to which the implications of their aims are made explicit, and in particular there is a marked difference in this respect between those states that are still influenced by the scholastic traditions of European liberalism and those that are consciously setting out to develop a unified philosophy of life. In the liberal States a plurality of values is accepted in many areas of life, and the Ministries of Education seldom make explicit statements as to the details of belief, attitudes, standards of judgement and so on that are considered desirable. Teachers are expected not to over-emphasize one point of view, but to help their pupils to develop their own outlook in a world of conflicting values. Textbooks are seldom prescribed by the central educational authorities, and even when they are supplied free the individual districts and schools have some latitude in choosing the ones they will use. In a like manner the actual content of the syllabuses of instruction is usually regarded as suggestive rather than mandatory, and is presented in brief outline; the effective syllabus has to be constructed day by day by the classroom teachers. In the countries that do not subscribe to liberalism in this sense, several of the principal areas of life and thought are studied in relation to a unified value-system. States differ most sharply in the fields of politics, economics, philosophy, and religion, but similar differences may occur also in the appreciation of art and literature.

The stating of aims is a different thing from finding the means of putting them into practice, and in many countries there is a gap between the comprehensive aims set out in educational laws and regulations and the actual methods of the schools, which remain bound by older practices, by rigid curriculum prescriptions, by shortages of suitable books and other teaching materials, by an absence of facilities for aesthetic and practical education, by an unenlightened body of teachers, and so on. Many countries have frankly recognized these defects over recent years and are making what efforts they can to correct them. To such countries the aims they set themselves may represent an ideal not to be achieved for a long time to come, but they are an ideal that can serve at once as a guide to their efforts at improvement and as a measuring stick to assess their progress towards their goal. It is true, too, that when statements of aim are couched in terms of high generality they may not appear to be of great practical help to those who are concerned with the planning of the school curriculum in its everyday detail, and that from the one set of highly generalized aims differing approaches to the construction of a curriculum may be deduced. But such reservations as these do not alter the significant fact that the detailed planning of curricula is now being carried out everywhere in the light of aims and objectives thought of as applicable to all young people and as embracing all sides of their being. In some countries, such as Great Britain, the detailed elaboration of curricula is left largely to the individual schools themselves and it is at this level that the search for appropriate curricula is going on. In other countries, Czechoslovakia and the U.S.S.R. for example, research institutes have been charged with the specific task of developing, testing, and revising syllabuses, with the help of experimental schools in order to bring about a closer relation between aim and practice, and on the results of the work of these institutes new syllabuses are likely to be prepared for use in all the schools of the nation. Whatever the means adopted, all countries are undergoing an intense period of curriculum re-appraisal and reconstruction, the major tendencies of which are only now becoming clear.

UNITY AND DIVERSITY IN THE CURRICULUM

The attempts being made in some countries to base the secondary curriculum upon an assessment of the differing needs and interests of the young people, so that an integration will be achieved between the individual's motives for learning and the systematized body of knowledge and values in which much of the heritage of his culture is preserved, raise the question of the relationship between studies that should be common to all pupils, and studies in which some individual freedom of choice is allowed or in which a considerable degree of differentiation of programme takes place. The problem has two aspects: deciding which elements of the curriculum are to be provided for all pupils and which are to be regarded as more suitable for individual specialization; and deciding when and in what manner the process of differentiation should take place.

The common curriculum

Early attempts to solve the first aspect of the problem took the form of trying to provide, within the diverse types of school catering for young people in their early teens, a certain amount of instruction in some of the subjects of the academic secondary course. Usually these were the study of the mother tongue, mathematics, and science, and for a few of the more academically inclined pupils a modern foreign language. At a later stage, how-

ever, particularly as the number of pupils continuing with their schooling beyond the primary stage increased, certain inadequacies in this approach began to appear. In particular, it was found that syllabuses of instruction drawn up expressly for children following the traditional academic course were not well suited to pupils who were likely to be taking only a short course of instruction in preparation for work. The problem had to be looked at more closely, and this involved a consideration of the means of achieving the cultural values that general education aims at. The result has been a general acceptance of the view that these values are not inherent in or the sole prerogative of certain studies or disciplines such as those of the traditional curriculum, but can be achieved in various ways. All over the world the practical problem of the schools is being seen as that of finding ways appropriate to their culture, their times, and their pupils.

This process of reconstruction appears to pass through the following stages. First, attention is turned from the traditional curriculum as such to a consideration of the kind of human being it is desired that education should develop. Secondly, the educational means of achieving such ends is considered, and this leads to the framing of new curricula. For example, one result of such thinking has been the growth of a belief that a large part of the values claimed for the traditional liberal education can be achieved through the use of modern rather than classical languages and literatures, and even vernacular languages where these are well developed and have a considerable literature. Furthermore, a consideration of the relationship between the work of the school and the influence of the home and the cultural environment of the pupils has led to a realization that in the first stages of democratization the secondary school needs to provide a broader experience for its pupils than it did when they came mainly from the higher sections of a society, and when the school could often leave to the home the cultivation of the fine arts, concentrating its attention rather upon the sustained education of the intellect. In the same way many aspects of behaviour—manners, social customs, and so on—could also be left to the home. However, the secondary school in a society that is becoming democratic but whose working people have not yet had the chance to raise their own cultural level to that of the most cultivated sections of their society, has the task of supplementing the home in a wide range of activities. During the second quarter of the present century significant developments in music and the arts were initiated in many school systems, more especially at the primary and junior secondary level, and in recent years there has been a trend towards developing such subjects to a higher level in the later stages of the secondary school course, sometimes as voluntary optional activities, sometimes as part of the common cultural programme.

A report published in 1959 by the Central Advisory Council for Education (England) on the educational needs of young people from 15 to 18 years of age, saw this point as still relevant in the educational problems of England.[1] It noted that the great majority of children whose full-time education extended beyond the age of 15 were the first generation in their particular families ever to attend a grammar school; and this fact alone had important implications for the proper approach to be adopted to the children and their parents, the subjects to be taught, and the methods of teaching that were most likely to be successful. This is a situation in which more and more countries will be finding themselves in the course of the next decade.

Under the influence of such conditions the basic compulsory curriculum of secondary schools all over the world has come to include the following subjects: the mother tongue and its literature, mathematics, some of the natural and physical sciences, history and geography, music, drawing and physical education. In different countries other compulsory subjects are also included in the common programme, for example a foreign language at the junior secondary stage, especially among the many Asian and African peoples whose mother tongue is still inadequate for the needs of modern science and technology, and also in those European countries which need a world-language to supplement their own. The general result of the process appears to be that a world-wide pattern of a 'modern humanities' curriculum is coming into being which is distinctively different from the ancient humanities course that was for so long the vehicle for the liberal education of European children.

There has been some resistance to this trend. The introduction of subjects like art, music, manual training and physical education into the curriculum of secondary schools is often opposed by the teachers of the traditional subjects. There is also resistance on the part of educated parents in whose minds the traditional curriculum is still associated with prestige and status. This can be seen very clearly in some of the Asian countries which were long under the control of European powers and whose people have often resisted the modernization of the traditional European curricula of their European-type secondary schools.

Moreover, simply to replace old studies by new ones does not solve the basic problem. The attempt to define the values to be achieved and then to find the most appropriate means of achieving them was inevitably influenced by the traditional academic outlook of the educators themselves, and the first attempts at devising new curricula were almost exclusively restricted to the consideration of the subjects to be included in the curriculum and the topics to be included in the prescriptions for the various subjects. This was easier to do than to consider methods of teaching these subjects and the fundamental problem of how organized subject-matter can be used to develop the minds of young people.

In the United States of America, the deficiencies in the usual approach to the teaching of secondary school subjects received early recognition. The 'life-adjustment' movement of the late 1940s and early 1950s was based upon the view that, while the secondary schools were providing fairly well for the 20 per cent of young people who were preparing to go to college and university and also for the 20 per cent who had decided upon specific vocations and were learning vocational skills, the majority of young people still uncommitted in respect of future education and vocation were getting too little value from the general aspects of their education and tended to leave as soon

1. Great Britain, Central Advisory Council for Education, *15 to 18* (The Crowther report). London, HMSO, 1959, 2 vols.

as they could, dissatisfied with their education and unprepared for entering the outside world. The annual report of the U.S. Office of Education for 1952 posed sharply the problem of a community that wanted to keep all its young people at full-time schools until the age of 17 or 18, but which had not found the appropriate methods of education. 'For these young Americans secondary education must have objectives designed to meet their particular needs. Young people vary greatly in their abilities and in their capacities to learn. All of them, however, are capable of development as valuable members of society. A narrow academic education, far from helping all youth to mature properly, often causes social maladjustment, thwarts the desire to learn, and creates attitudes of failure and resignation detrimental to youth and to society as a whole. The large number of youth who leave high school before graduation is an indication that for them we have failed to establish a suitable education.'

The Commission for Life Adjustment Education for Youth, in its report on *Vitalizing Secondary Education*,[1] gave careful consideration to the question of the educational means to be adopted to deal with the problem, and came to the conclusion that what was needed was not so much a new curriculum as a new point of view with respect to the organization of teaching material, methods of teaching, and the relationship between pupils and teachers. It is suggested that the direct experience and the problems of the pupils themselves, both in and out of school, should provide the introduction to and the principle of organization of the systematized subject-matter that has usually been regarded as the curriculum, and that has been so often worked through logically but with little regard to its relevance to the needs and interests of the pupils. It may be noted that this is an illustration of John Dewey's views on the real transmission of culture. Mere verbal memorizing of organized facts unrelated to the purposes of the learner is likely to be transitory in nature, having little educative influence.

The development of what is termed the 'core curriculum' is considered to be a promising advance.[2] The aim of the core curriculum is to provide a course of 'common learning', or a common body of educational experience organized around the personal and social problems of the pupils. From the systematized knowledge reposing in textbooks, reports, and other resources, the learner seeks what is relevant to the problem in hand and sifts and integrates it in his own mind in the process of trying to find a solution. The experience he gains in solving problems that have immediate meaning for him is expected to help him to learn ways of meeting his future problems. This approach is similar to the case-study method that has been used in many fields of university teaching in recent years. It may indicate a means by which the traditional secondary school courses for the most able intellects may achieve what they have always claimed as their goal—the training of the inquiring mind rather than the loading of the memory with inert facts—and it is being considered carefully in several countries which are grappling with the problem of providing a general secondary education for pupils of only average academic ability. It may also prove to be relevant to the question of 'overloading'.

Recognizing that the desire to start work in the adult world is one of the prime motives of the adolescent, many countries are making sustained efforts to provide real work experience for the pupils and to enrich the meaning and deepen educational content of such work experience by relating to it appropriate aspects of the school curriculum such as literature, the social studies, and science.

Radical changes in the organization of subject-matter have required changes also in the arrangement of school time-tables and the allocation of teachers. The customary division of the school day into periods of from 45 minutes to an hour, each with a specialized lesson given by a specialist teacher, is being modified in many countries. Longer blocks of time, up to half a day in length, for example, have been found better when analysis of a problem, searching for relevant data, note-taking, report-writing and consideration of results, take place as a continuous sequence of learning experience. Moreover, with the breaking down of barriers between subjects, teachers have had to go beyond their own fields of specialization, and it is becoming a frequent practice to have one teacher in charge of two or more subjects that are closely related in their relevance to important problems for study.

In the United States of America, in certain of the British Commonwealth countries, and in several others, the problem of finding the right approach to the common curriculum for pupils of average intellectual ability has to be worked out in the context of the comprehensive high school. It is a context that has its own difficulties, perhaps the chief of which has been the tendency inherited from the traditional secondary school to treat all children as if they were academically inclined and intellectually above average. On the other hand, the efforts now being made to find a proper approach to the common curriculum for average pupils may, within the context of the comprehensive school, have a considerable influence on curriculum construction for the children of higher ability as well. In other countries the problem is being faced in separate secondary schools provided for the average pupils who are not regarded as likely candidates for entrance to the universities and who, therefore, have not gained places in the selective academic secondary schools. The separate school has its own distinct advantages and disadvantages in this respect. In Great Britain, for example, it has generally been thought that the secondary modern school which came into being in 1944 would, by its very separateness, be able to make a distinctive contribution to the development of the curriculum for average pupils. As stated in *The New Secondary Education*, a booklet published by the Ministry of Education in 1947: 'The aim of the modern school is to provide a good all-round secondary education, not focused primarily on the traditional subjects of the school curriculum, but developing out of the interests of the children. Through its appeal to their interests it will stimulate their ability to learn and will teach them to pursue quality in thought, expression and craftsmanship. It will interpret the modern world to them and give them a preparation for life in the widest sense, including a full use of leisure. It will aim at getting the most out of every

1. U.S. Office of Education, Washington, D.C., 1951.
2. Roland C. Faunce and Nelson L. Bossing, *Developing the Core Curriculum*, 2nd ed., Eaglewood Cliffs, N.J.I., Prentice-Hall, 1958, p. 54.

pupil that he is capable of, at making him adaptable and at teaching him to do a job properly and thoroughly and not to be satisfied with bad workmanship, and to be exact in what he says and does. Freedom and flexibility are of its essence and are indeed its great opportunity.'

The work of the secondary modern schools in Britain is still in its formative stages, and a wide variety of approaches is to be found. To develop a suitable general curriculum for the average child is undeniably their central task, and in this their experience, like that of the United States' efforts to do the same thing, is of significance to all countries embarking upon an attempt to provide a good general education for all pupils. Many of the secondary modern schools, too, are successfully providing courses leading to the General Certificate of Education for those of their pupils who are relatively high in academic ability. This is a group which, by the hazards of the selective process and the unpredictable changes that can occur in the mental growth of children, comprises young people who appear to be just as capable of benefiting from a grammar school education as many of those who were selected instead.

It will be clear from the foregoing references to the attempts being made in some countries to provide a good general secondary education for all pupils that, although from the point of view of the subjects taught there is a large common element in all the different approaches to the problem, there is also a great diversity in respect to the actual content of the subjects provided, the way the curriculum is organized, and the methods of teaching and learning being used. These vary not only from country to country but also from one type of school to another, and from one classroom to another within the same school. In recent years the most significant variations in approach appear to be those that have arisen out of the consideration of the needs of the large majority of pupils for whom neither the academic curriculum that leads to the university nor the specific trade training that leads to industry seems to be suitable. This is the group of young people who will in all probability enter those sections of their country's economy that will be undergoing the most rapid and far-reaching changes with the development of modern technology, namely, the multifarious positions of minor administrative responsibility which grow in importance as the need for manual labour diminishes. The educational problem in such circumstances is that of combining breadth of understanding of the world with mental flexibility and resilience rather than that of developing more specific vocational skills during the period of formal schooling. It is in this context that the significance of the world-wide trend to emphasize the general aspects of secondary education can best be appreciated.

Relating education more closely to work

A further important enlargement of the conception of the common elements that should form part of the curriculum of all young people has received much emphasis in the Eastern European countries since 1958 with the reforms that have been designed to relate the schools more closely to daily life and to provide their pupils with a realistic introduction to productive work. One of the serious inadequacies of the traditional academic curriculum of the secondary school that has been recognized by many educationists throughout the present century has been its tendency to neglect the practical aptitudes of young people. While handicrafts of various kinds have formed part of the primary school curriculum of almost all countries over the past half-century, in most parts of the world the general secondary schools have made little provision for such activities.

In countries where the technical schools and trade schools were sharply differentiated from the academic secondary schools, the movement to give a good general education to all pupils brought about a better balance in the non-academic than in the academic schools, for the former were more easily able to add academic elements to their technical curricula than the latter could add technical elements to theirs. On the other hand, in countries where comprehensive secondary schools developed, it has been usual for the academically able pupils to have a curriculum so full of pre-university studies that there has seldom been time for manual subjects as well, except possibly some drawing and handicrafts in the junior secondary years.

Since the 1930s there has been an increasing tendency in many countries for some woodwork or metalwork to be introduced into the junior secondary curriculum for boys and for some appropriate practical work (e.g. dressmaking) to be included for girls; but except where such subjects formed part of specialized vocational courses provided for non-academic pupils their development tended to cease at a rudimentary level. The hindrances to the provision of a better balance between the verbal and the manual elements in development have been diverse and strong. The chief of these in countries of the European tradition has been simply the weight of the existing subjects, and the feeling on the part of teachers that to introduce new subjects would lead either to lower standards or to an overloading of the pupils. In these circumstances, where such subjects were not directly related to the university entrance examinations, they received very little encouragement from the teachers of the traditional disciplines. Furthermore, in all countries where school rolls have been increasing rapidly, the cost of making adequate provision of both buildings and equipment for good manual work has been a strong deterrent, especially in areas like some of the South American states which have long suffered from a serious shortage of proper school buildings and equipment even for traditional purposes. Added to these drawbacks, in some countries—several South and East Asian countries provide ready examples—there has been a strong prejudice against manual occupations among important sections of the community. In such cases, even when the secondary schools have tried to make a better provision for such subjects, either as part of the general education of all their pupils or as part of the more specialized vocational training of some of their pupils, they have seldom received support or encouragement from the community and have rarely felt that they had succeeded in their aims.

The efforts now being made in the Soviet Union and other Eastern European countries to provide polytechnical education at all levels and to initiate all senior pupils into the actual processes of production, form the most ambitious attempt that has ever been made on a national scale to integrate the verbal and the manual elements in the

personal development of all pupils and to relate closely the activities of the school with the activities of everyday life. In so far as the primary stage is concerned the change is not so great, for primary schools almost everywhere have been including art and handicrafts in their curriculum for many years. At the junior secondary stage, the change represents a generalizing, for all pupils, of opportunities for learning basic manual skills that are in most countries restricted either to the first year or two of the course or to the non-academic pupils. During both these stages the pupils' schooling is to be brought more closely into touch with outside work by means of community service such as the care of school buildings, public gardens, and so on.

At the senior secondary stage the most fundamental development is taking place, for here, instead of the academically inclined pupils giving up manual activities entirely, as occurs in most countries, they will be spending the equivalent of at least one day a week in actual production-training in factories and similar enterprises or on farms, under the supervision of the technical personnel of the enterprises themselves. At each stage, therefore, an integration is being sought between the development of manual abilities through educative activities and the participation in socially useful labour. The pupils will continue to develop their vocational skills throughout the whole course of their school lives, opportunities will be given them to make an increasingly valuable contribution to the economic life of their country while they are still at school, and it is intended that wages should be earned in accordance with the development of the pupils' productive efficiency. In such ways as these the transition from school to full-time work should be more smoothly effected.

It is instructive to examine the trend towards the development of a 'general and polytechnical education' more closely. The basic ideas are, first, that the divorce between the theoretical and practical aspects of life, and the division of educational systems in such a way that some young people are given a mainly general cultural education while others are given a mainly vocational training, are a result of the early division of societies into classes; secondly, that in a democratic society each citizen must be both well educated in general and well trained in a specific vocational skill; and thirdly, that the schools in a democratic society need to find an appropriate way of providing a curriculum that harmoniously blends both the cultural and vocational, and the theoretical and practical activities in their curriculum. The educational implications of such ideas for schools and school systems were being seriously explored in a general manner in the early years of the present century by Marxist thinkers such as Lenin and Lunacharsky on the one hand, and by non-Marxists such as Dewey on the other, and isolated attempts were made by individual educators in several countries to conduct schools upon such advanced principles. It was not until the founding of the Soviet State, however, that a wide-scale attempt was made to realize such ideas in practice through a public education system.

The junior secondary curriculum was conceived of as being an harmonious continuation of the activities of the primary grades of the unified labour school and, as part of the seven-year school, it was thought of as providing a general and polytechnical education for all rather than a narrowly academic course aimed at preparing a minority for pre-university studies at the senior secondary stage. The main emphasis in the curriculum was: to impart a definite body of theoretical knowledge derived from the fundamental academic disciplines of modern European civilization, to give an understanding of the nature of the Soviet State, and to give a practical introduction to the work of a socialist society. Within 10 years after the Revolution efforts were being intensified to link up schools with factories and farms and to develop pedagogical methods that would use the economic activity of an area as the school's practical laboratory.

During the next decade less emphasis was placed on general polytechnical education and, in an attempt to raise the level of scholarship, the schools reverted rather to the traditional European method of systematically organized subject-disciplines. As Mr. Khrushchev was to point out in 1958 in his memorandum on 'Strengthening the ties of the school with life, and further developing the system of public education', 'Our schools of secondary education suffer from the fact that we have taken over very much from the pre-revolutionary *gymnasiums* whose purpose it was to give their pupils a certain amount of abstract knowledge sufficient for university matriculation'. During the second world war the idea of polytechnical education was revived, and when the destruction caused by the war had been repaired the country was ready for a further advance in scientific and technological development and in education. The directives adopted in 1952 by the Nineteenth Congress of the Communist Party of the Soviet Union for the guidance of the 1951–55 development plan envisaged the transition from seven-year schooling to universal ten-year schooling, and it was clearly seen that a curriculum suitable for all young people needed to be more closely related to the main types of productive work than was the existing academic curriculum. The relevant section of the directives reads as follows: 'With the aim of further increasing the socialist educational effect of public schools and guaranteeing to students completing secondary school the conditions for a free choice of occupation, polytechnical instruction should be introduced in the secondary schools and measures necessary for shifting to general polytechnical education should be undertaken.'

This stimulated a great deal of discussion upon the meaning of polytechnical education and on the best means of developing an appropriate curriculum. All the Soviet Republics began to revise their syllabuses. The theoretical subjects were carefully pruned of outmoded material of little practical value, increases were made in the time allotted to laboratory work in the sciences, a course on the fundamentals of production, combining both theoretical study and practical activities, was devised, school agricultural plots were developed, workshops were provided for woodwork, metalwork, and similar fundamental crafts; and in the final two years of secondary education the studies of the school were supplemented by participation in the work of factories and farms.

But the simple juxtaposition of three or four hours per week of practical work alongside the theoretical studies which occupied the greater part of school time did not have the success desired. Young people in increasing numbers

were graduating from the 10-year schools with neither a taste for practical work nor an adequate knowledge of productive processes.

Under the direction of the Academy of Pedagogical Sciences of the R.S.F.S.R. a great deal of experimentation was carried out, in 50 experimental schools, with curricula and methods of school organization which would ensure that the senior secondary pupils would really learn a trade and become familiar with conditions in industry or agriculture before they graduated. In some urban experimental schools a weekly programme of three days' study and three days' work was developed, and in rural schools a seasonal distribution of study and work was tried. To ensure that standards of scholarship were not lowered and that pupils were not unduly overloaded, the length of study was extended to 11 or even 12 years. Such experimentation appears to have been regarded as successful, for some of the changes that have been introduced since 1958 appear to be along the lines of the work done in the experimental schools.

Mr. Khrushchev's criticism of the general secondary schools in the U.S.S.R. was very similar to criticisms that have been made in almost every country in the world when enrolments have increased to such an extent that the schools should no longer be attempting to prepare the majority of their pupils for entrance to the university. But traditions are tenacious. In his memorandum, already referred to, Mr. Khrushchev made the following trenchant criticism of secondary schooling: 'We still have a sharp distinction drawn between manual work and mental work, and there still remains a situation, inherited from the past, in which preference is given to a certain section of young people who, as it were, must without fail be enrolled in higher educational establishments and not go into factories or collective farms. As for the remainder, they have "not made the grade" and have "shown no abilities". And it is they who must go to work. This is fundamentally wrong and runs counter to our teaching and our aspirations.'

Proceeding to outline positive objectives, the memorandum continued: 'The schools must produce people with an all-round education, who know the fundamentals of science and are at the same time able to do systematic physical work; they must instil in the young people a desire to be useful to society, to take an active part in the production of the values society needs.' Then followed tentative suggestions of different ways in which these objectives could be realized.

In November 1958 appeared a joint statement by the Communist Party of the Soviet Union and the Council of Ministers of the U.S.S.R. which set out a detailed series of theses upon the strengthening of the ties of the school with life, and in December 1958 the Supreme Soviet enacted a new fundamental law on education which was based upon these theses. The reorganization, to take place by the 1964/65 school year, is as follows. The basic compulsory school is an eight-year 'general education, labour, and polytechnical school' for children between 7 and 15 years of age. Its work is divided into two cycles of four years, the latter being the first stage of secondary education. The extra year that has been added to the old seven-year school is intended to allow for the new polytechnical studies —school workshops, participation in productive work, field excursions, and so on—without unduly overloading the pupils.

After the completion of the eight-year course, a great diversity of educational provision is to occur. The November theses stated that 'the point of departure for the reorganization of the schools was the idea that all school children without exception should take part in socially useful labour at enterprises, collective farms, and other places of work. Difficult problems will have to be solved if numbers of young people between 15 and 18 years of age are to enter production and at the same time receive both specialized training and further general education, and the education law provided for several approaches to this task. Some young people will enter the specialized secondary educational establishments, the technicums, and will be prepared to fill intermediate positions in industry, commerce and agriculture, and in medical, educational, and cultural occupations. Others will continue for three years in the senior stage of the secondary schools proper, but the latter will be transformed into the 'secondary general education, labour, and polytechnical schools with production training'. These pupils will devote two-thirds of their time to general subjects and the rest to vocational training and productive work; leavers obtain a general school certificate and a trade qualification. These schools may be attached to the eight-year school, thus forming an eleven-year unit, or they may be separate. The greater proportion of the young people leaving the eight-year school, however, will enter full-time employment and, after a period of specific vocational training, they will have the opportunity of completing their general secondary education by means of evening classes, correspondence courses, or part-time day schools. It is intended to make provision for releasing serious students from their work for two or three days a week to help them pursue their studies.

It is too soon yet to see which of these various methods of attempting to integrate intellectual and practical activities into a better-balanced and more comprehensive general education is most effective, and which method of combining a general cultural education with specific vocational preparation brings the best results. It seems likely, however, that this experiment will, in one way or another, markedly influence the theory and practice of secondary education throughout the world.

THE DIFFERENTIATION OF THE CURRICULUM

One of the most difficult of the problems that are now being raised by the trend towards providing a good general secondary education for all, concerns the proper balance to be aimed at between the general and the specialized elements in each pupil's education. The main aspects of this problem are: what subjects should be regarded as constituting the specialized elements in the school's curriculum, at what stage of the pupil's educational development should such subjects be studied, and what is the relationship between the organization of school systems and the provision of a suitable curriculum.

Vocational differentiation

A factor that has alway had great influence in determining the nature of specialization at the secondary level has been

the relationship of schooling to vocation, and the actual subjects taught to young people, as well as the age at which they have been taught, have varied from society to society and from time to time in accordance with the economic and political situation of the countries concerned. The length of training required to produce effective workers in the different sections of a country's economy has influenced not only the time at which specialized training is given but also the length of general education that has been provided for young people entering different occupations.

In societies that are only at the early stages of industrialization the first aim of the school system is to provide the majority of children with a basic education in literacy, so that after they enter productive activity they will be better fitted to be taught improved techniques on the job. A minority will learn trades or will undergo specialized technical and commercial training in technical schools, trade schools, schools of commerce and so on, on completion of their primary schooling, and will enter middle-grade employment in their early teens. Another small group will continue with a general scholastic education leading to the university and to schools of higher technology; and, in effect, even this general scholastic education constitutes a vocational specialization in a society which cannot provide a long course of scholastic education for all young people. Whether the different types of specialized preparation are given in one school or whether, as is more usual, they are given in different kinds of school, the tendency during this phase of development is for the pupils to begin their specialized training immediately after their primary schooling. The majority of those who undertake some such form of post-primary training take only short courses, which tend to emphasize immediately useful knowledge and vocational skills. Further training for the specific work being undertaken is usually received on the job and also at part-time schools and classes out of working hours. This tendency to leave school at an early age after a short period of special post-primary training is still the general rule in the majority of underdeveloped areas.

In the more highly industrialized countries, on the other hand, the trend over the past 30 years has been towards delaying the age of entry of young people into employment so that they are better educated, more mature, more adaptable, and thus better fitted for the conditions of complex and rapidly changing technology. The development of specific vocational skills tends to be delayed more and more. For example, it is not uncommon now in the more advanced countries for young people to begin such subjects as book-keeping, shorthand and typewriting as late as 15 or 16, after completion of the period of junior secondary education, and to enter employment after only a year's special study, whereas earlier in the century they would have begun a two-year course at the age of 12 or 13 and would have entered employment with little general secondary education. Over the past few decades educationists in most countries have come to the opinion that several of the special vocational skills can be learned with greater economy of time and effort if their beginning is delayed until a later age than used to be customary, and the tendency is to do this and to devote most of the young person's secondary school course to general studies.

At the same time, as has been pointed out in the preceding section, the conception of general studies has become enlarged to include manual activities, art, and other subjects which once would have been regarded as vocational skills suitable only for those young people who were preparing to use them in their daily work. Generally speaking, educators now hold the view that the cultural or general educational value of a study depends upon the extent of its relation to other disciplines and aspects of life, because it is by virtue of this relation that a study can enlarge and illuminate the experience of the learner. With the trend towards a longer secondary education for all, educators have been striving in the early stages of schooling to approach the usual school disciplines less and less from the point of view of their value as specialized skills and more and more from the point of view of their general cultural value. This tendency has been at work in respect of all secondary school subjects over the past few decades, and it has greatly changed the nature of subjects like drawing and manual training that used to be conceived very narrowly.

The process of generalizing elements of education that were once regarded simply as vocational skills can be very clearly seen in the recent history of polytechnical education in the Soviet Union. The basic reason for the recent development of a 'polytechnical' curriculum is the effort to link the school with life. In effect an increasing number of students now attend school where, some years ago they would have been receiving specialized training in industrial enterprises. They now receive more general instruction in manual and mechanical activities in their school workshops where the emphasis is on the general principles of industrial production, the use and care of tools and machines of various types, and the development of a range of basic skills, rather than upon training related narrowly and directly to immediate production. At the senior stage, too, either in employment or in the secondary polytechnical school, a balance of theoretical and practical production training is designed to give the trainees a broad experience of the particular industry they are attached to and to develop in them a wide range of the basic skills required, rather than a too premature and narrow specialization in the interest of immediate productivity.

The same tendency can be seen in many other fields of vocational training besides those that lead to industry and commerce. For example, for the training of primary school teachers at the beginning of this century many countries had pedagogical institutes or middle schools which young people entered after completing their primary schooling, and these institutes combined general secondary studies with special pedagogical subjects. The general tendency over the past few decades has been to develop a common curriculum in the first cycle of all such special schools, and then to merge their junior sections with the lower general secondary schools or middle schools, as was done in Italy in 1940. Although in certain countries there are still teacher-training schools which take children from the end of the primary period, such institutions usually train teachers only for the nursery schools and the lower grades of the elementary schools.

Everywhere, then, the trend is towards the delaying of training in vocational skills until after the completion of

the junior period of secondary schooling at about the age of 15 or 16. At the same time there are considerable differences between countries in the extent and timing of the differentiation of courses in the junior secondary stage. Differentiation is common but it tends to be less and less based upon immediate vocational considerations.

Differentiation within general education

The general tendency over the past half-century has been for a steady but slow growth of differentiation to take place within the curriculum of the general secondary schools throughout the world. The earliest and most extreme case is that of the comprehensive high school. Although the high school in the United States was an institution much narrower in function than the academy which it superseded, it offered a greater variety of courses to its pupils than did any other secondary school. Its major function still was to prepare young people for college and university, but these institutions themselves presented a wide variety of courses and accepted entrants with a variety of qualifications, so their entrance requirements never had quite the same limiting effect upon the curricula of the high schools as was apparent in other countries. Such, indeed, was the variety of subjects and curricula offered, that one of the tasks of the Committee of Ten, appointed in 1892, was to consider 'the general subject of uniformity in school programmes and in requirements for admission to college'. The committee recommended that four basic curricula should be offered, namely (a) the classical, comprising Latin, Greek, German or French, English, mathematics, physical sciences, geography and history; (b) the Latin-scientific, which substituted additional sciences for Greek; (c) the modern languages course, which omitted both Latin and Greek but included two modern languages and the additional sciences of the Latin-scientific course; and finally, (d) the English course, which included one foreign language, either ancient or modern, together with the additional sciences. It did not seek to impose a uniform curriculum upon the schools, and indeed it recognized that such an attempt could not succeed, but it sought to bring about some uniformity in the basic requirements of what it considered to be a good general education. These basic requirements were a certain minimum length of time spent in the sequential study of those subjects which it considered to be of pre-eminent educational value. These were the subjects proposed for its four recommended courses. In addition, since the recommended courses did not occupy the full school week, time had been left for whatever additional subjects the different schools might offer and their pupils elect to study. Furthermore, the committee made no attempt to define the actual syllabuses of instruction in the different subjects, but was content to give a basic structure to their curriculum. Although it did not include commercial, industrial and trade subjects in its four basic college entrance curricula, it recognized that the needs of young people not intending to go on to college and university would also have to be cared for by the high schools, and it stated that if necessary it would be easy for schools to substitute such vocational subjects for some of the sciences taken in the third and fourth years of the 'English' type curriculum. The committee was still so far from thinking that any but intelligent pupils should enter the high schools that it declared that every subject taught in a secondary school should be taught in the same way and to the same extent to every pupil, no matter what the probable destination of the pupil might be or at what point his education might cease.

During the next two decades several other national committees considered the structure of the curriculum, and gradually the so-called 'unit system' was evolved whereby structural unity was given to all high school courses that aimed at satisfying college entrance requirements and yet great flexibility was retained in fitting courses to the needs of the individual pupils. A 'unit' was considered to represent a year's study in any subject in a secondary school, provided that it constituted approximately a quarter of a full year's work. It represented between three and four hours of work per week, continued throughout the school year. At the same time as the unit system was being adopted there was a gradual reaction against the limitation of courses suggested by the Committee of Ten and a gradual fusing of the concept of units of study with the idea of greater flexibility in the actual choice of subjects in the curriculum. The tendencies of the period were crystallized in the report of the Committee of Nine on the Articulation of High School and College, appointed in 1910. The committee recommended that college entrance should require fifteen units, three of which should be English, one social science, and one natural science. Furthermore, it considered that each pupil should complete one other 'major' subject of three units in addition to English, and a minor subject of two units. It suggested that of the total fifteen units not less than eleven should consist of English, a foreign language, mathematics, social science, and natural science; and the remaining four units should be used for additional academic work or any other kind of work that best suited the interests of the individual pupil. The recommendations of the Committee of Nine set the pattern for the high school curriculum that, with minor modifications, has been followed in practice ever since. The freedom allowed to the schools in providing subjects to fit local demands and individual needs has been fully used over the past four decades in an attempt to make the comprehensive high school a suitable institution to provide for the education of all young people up to the age of 17 or 18, no matter what their abilities and interests might be.

In practice, about half of a pupil's curriculum consists of required subjects that all pupils take, and the other half consists of electives that serve immediate interests or future vocational needs. Since the different local school systems are free to change their curricula at will, and since the pupils are free to choose their options, the curricula of the high schools are extremely sensitive to changing conceptions of educational needs. Change and revision are taking place all the time, and they are brought about not only by the deliberate planned action of educational policy makers but also by the year-to-year action of the pupils in the course of choosing their optional subjects.

In recent years there has been a tendency on the part of educationists to seek to diminish the scope of electives and to introduce a closer patterning of subjects and a renewed emphasis upon the more academic subjects. J. B. Conant's

proposals, in *The American High School Today*, to make education intellectually more demanding for the intellectually gifted children, envisage a greater concentration upon English, social studies, foreign languages, mathematics, and sciences, and less time for the variety of electives outside the purely academic field. In line with Conant, many other educators have been pointing out that with the development of other agencies of general education in the twentieth century, such as the radio, television, cinema, the press and the wide range of voluntary associations, the school is no longer called upon to bear the heavy responsibility for the provision of non-academic subjects that it did in the latter part of the nineteenth and the beginning of the twentieth centuries, and that it should now leave more to such agencies and concentrate its tasks upon the academic sphere. This point of view does not go unchallenged by those who hold fast to the desirability of making wide provision for the differences in ability and interests of the pupils, even among the intellectual minority, and at present there is a continuing and lively controversy upon the responsibility of the schools towards the academic and non-academic aspects of education. It is too soon yet to see what will be the practical upshot of the conflict of views.

The diversity of curriculum developed in the high schools of the United States was partly stimulated by the emergence of the high school as a comprehensive school. In few other countries of the world did similar conditions exist, and in none has precisely the same sort of curriculum development taken place. In the majority of countries a separation of pupils into different types of school still takes place, either between 11 and 13, as in the majority of systems that have continued the traditional European pattern of a six-year primary school followed by a diversity of post-primary schools, or about 14 or 15 in the countries that have adopted the pattern of a basic seven- or eight-year unified primary and junior secondary school, followed by differentiation at the senior stage. One of the effects of such differentiation appears to have been that the curricula within the different types of school have remained much less flexible and more firmly patterned than have similar curricula in the less specialized institution. The nine-year German secondary schools up to the 1930s provide an example of differentiation of types of school combined with inflexibility of curriculum within any one type. The demands for new courses of study to supplement those of the *Gymnasium* and *Realgymnasium* had led to the development of seven or eight different types of school, differing mainly in the pattern of the foreign language courses offered: the *Gymnasium* provided Latin, Greek, and a modern language, the *Realgymnasium* Latin and two modern languages, the *Oberrealschule* two modern languages, and so on. From the pupil's point of view a choice of schools was offered, but once the school was chosen the curriculum followed automatically with no alternatives or electives. In much the same way the various secondary schools of Italy also had their set curricula followed by all pupils alike. In France, where there was no such distinction as in Italy between the classical *liceo* and the scientific *liceo*, the *collèges* and *lycées* provided for some differentiation of courses from the first year onwards. In the first two years there were Latin and non-Latin branches; from the third year, Greek and non-Greek courses, and in later years there was further specialization in preparation for one or other of the different *baccalauréats*.

The basic difference between the European and the United States system of differentiation lies in the way in which a course of study is determined. The European pattern is essentially one in which courses are framed for different purposes by the educational authorities, usually by the Ministries of Education, and the schools have to provide such courses in the manner presented; the pupils and their parents may be able to exercise some choice, but the choice is between ready-made courses which the school itself has little power to modify. The United States pattern, however, is one in which each school system, and to some extent each school, is free to offer what it considers best; and each pupil can follow an individually designed course comprising common elements together with optional elective subjects grouped in the way that appears best suited to his needs. Orientation and counselling in the two systems differs greatly in consequence. In the former, it is usually a question of orienting a child towards the most suitable of existing courses; in the latter it is more often a question of devising a course uniquely suited to the abilities, aptitudes and interests of each pupil.

These differences in the nature of the general secondary school curriculum have had a considerable influence upon the form and functions of the curriculum at the junior secondary level. In the junior high school of the United States a variety of subjects and courses is made available in the first two years in order to help the pupil make a wise choice of the subjects he will study over the subsequent four years. In the first years of the junior secondary school in the European-type systems the emphasis tends to be placed upon providing a broad introduction to all the main academic disciplines, and the final choice of courses from a limited number of possibilities is determined by the relative success of the pupils in the comparable studies of the junior period.

In the majority of European countries, and in countries like those of Latin America which in the main derive their curricula from the European tradition, the major changes over the past three decades have been taking place in the later years of the secondary school course, in those years in which definite preparation is being made for the school-leaving certificate and for the university entrance qualification. Here the tendency has been towards a diversification in the kind of course that will qualify for the certificate awarded, and even in countries which, like many in Latin America, provide for very little differentiation during the earlier years of secondary schooling, the present tendency is to allow a considerable branching of courses in the last year or two.

In between the United States and the European methods of curriculum organization are countries which, like Great Britain, have long provided a substantial core of common studies for all secondary pupils but have also allowed considerable diversification beyond the common requirements. Consultative committees in New Zealand in 1944, in South Africa in 1949, in New South Wales in 1957, in Pakistan in 1959, and in several other countries during the past decade, have supported this conception, recommending that each pupil's course should be a blend of (a) a substantial common element, comprising the mother tongue

and its literature, social studies, mathematics, natural and physical sciences, music, fine arts, handicrafts and physical education, and (b) a group of optional subjects, chosen to suit the vocational aspirations or current interests of the pupils. A common trend is to be seen in all of these countries in the emphasis being placed upon the desirability of continuing the study of the main academic subjects for several years whether they are in the common core or in the list of options. One- and two-year courses such as used to be common in the United States are not regarded as adequate for subjects of substantial academic value, even though they may be suitable for subjects intended to attain limited short-range objectives.

Difficulties in curriculum differentiation

The main driving force behind the movement for differentiation of curriculum, as distinct from differentiation of actual schools, appears to have been the practical experience of the teachers, who have found that the traditional academic curriculum was not suited to the needs of children of only average ability. With the increase in the number of young people from the primary schools who continued into the secondary schools, came an increasing concern with the problem of pupils who could not learn as rapidly as their class-mates, who failed in the end-of-year examinations, who were being forced to repeat classes, who apparently found little of interest or value in their schooling, and who left the secondary school prematurely and discouraged.

In seeking a diversification of courses, suited to the varying interests and capacities of the pupils, the teachers themselves have usually been well ahead of their communities, which have tended to cling to the traditional elements of the secondary school curriculum. In countries as different in circumstances and background as Ethiopia, Ghana, India, Iran and New Zealand, to take a few examples only, resistance has often been felt when attempts have been made to direct pupils from the traditional academic courses into courses emphasizing agriculture, handicrafts, industrial arts, and other fields regarded as more useful to the pupils, in the light of their level of ability, and to the needs of their community.

There are several motives behind the tendency to resist differentiation, of which two in particular have frequently been reported by various countries. The first is related to the role traditionally played by secondary education as a means of selection and training of an elite that would enter those occupations of a community that have prestige and status. When the first phase of democratizing secondary education occurs, the most intelligent young pupils of the lower-status groups in a community are able to use the secondary schools as social and vocational ladders to rise out of their class. The secondary school course is seen to be a means of social mobility for the minority of lower-class pupils who are able to complete it. Such expectations of getting on persist long after the second phase of democratization is under way, though at this stage so many of the population are embarking upon a secondary education that few will in fact be able to effect an entry to the higher positions in the community. It is during this difficult phase in social development that the educators report the need for making differential provision for young people of diverse abilities for whom the traditional academic course does not appear to be suitable and for whom there will be no openings in the professions or the higher administrative positions to which, formerly, nearly all secondary school graduates proceeded. It is in this phase, too, that parents and pupils continue to choose the academic courses, hoping that they will be able to attain the *baccalauréat*, pass the matriculation examination, or gain whatever certificate is the sanction of a completed academic curriculum. It is at this point that the community begins to suffer from the problem of unemployed graduates who have expected better employment than in fact is available and who have not been suitably educated for the work their community can offer them.

The problem appears to diminish in importance as more and more people complete a secondary education, for by then it becomes clear to the community that the secondary schools are no longer narrow ladders for the advancement of a fortunate minority but are part of the broad and universal facilities providing the basic education needed by all citizens no matter what their abilities or what their position in society is likely to be. This phase has now substantially been reached in the United States, and it is being rapidly approached in certain of the British Commonwealth countries. It will be many years before most European countries have an adult population the majority of whom have attended a secondary school, and for vast areas of the world a much longer time will be needed. In the meantime many countries are likely to experience in the near future the same problems of differentiation either at the beginning of the junior secondary stage or when the senior stage begins.

During the transitional phase, the acceptability of differentiated courses and of secondary schooling itself by the pupils of average ability appears to be influenced considerably by the nature of the leaving certificates offered by the school system. When only certain academic courses in the school curriculum can lead to the graduation certificate, these courses exercise an attraction upon pupils for whom they are not really suitable. But when graduation requirements are based upon the satisfactory completion of whatever course a pupil follows, as is found in the United States, an attainable goal is presented to most pupils and they are free to think realistically about the most suitable course for them to follow. To a lesser degree the School Certificate examination of New Zealand, which can be sat for in a wide variety of subjects and which is usually taken when the pupil is about 16 years old, has also brought the different courses of New Zealand's comprehensive high schools nearer to parity of esteem; and in Great Britain, the possibility that the more intelligent pupils of the secondary modern schools will be able to prepare for the General Certificate of Education in some of their subjects has also reconciled many people to their children's inability to gain places in the selective grammar schools. In the Soviet Union, too, every effort is being made to ensure that the pupils who go into diversified schools at the senior secondary stage will be able to prepare for entrance to higher educational institutions. Such educational arrangements as these make it possible for different secondary school courses to be perceived by the

community as equal in value in the sense that each of them is suited to the needs of the pupils who are following it. This is a trend which appears, however, to be dependent ultimately upon a considerable measure of egalitarianism in the social or economic structure of a community; for if the degree of prestige of occupations and positions in society varies greatly, the educational courses leading to these different positions can hardly fail to share their prestige.

The second factor frequently reported as hindering the differentiation of courses is a purely educational one. It is the belief that the traditional academic curriculum is a superior means of education for all normal pupils than most of the new subjects that have found their way into the secondary schools in recent years. At the beginning of the present century the doctrine of transfer of training in its original simple form was still believed in, and the traditional subjects of the European grammar schools were regarded as possessing the inherent power of training the mind and disciplining the mental faculties. However, this is no longer the ground upon which claims for the value of these subjects are generally made. Rather what is emphasized today is their power to give meaning to human experience by passing on the cultural heritage of mankind. This belief in the humane value of the academic subjects is implicit in most current statements of the aims of secondary education, and with it goes the further belief that such values are important for all human beings, whatever their level of intellectual ability, and that all human being can derive benefit from the traditional subjects, at least to some extent.

Few teachers who hold this point of view would seem to believe that precisely the same learning material is equally suited to all pupils. What they do believe, however, is that within the major fields of human experience—literature, the fine arts, natural and physical science, mathematics, music, the social sciences, and so on—there is humanizing material for all people, though the actual content of the courses and the methods of teaching used should be varied by the teacher to suit the abilities, interests, and level of maturity of his particular pupils.

Both of these sources of resistance to differentiation have played an important part in the evolution of the secondary school curriculum, and both operate to some degree in all countries at the present time; and while the present practices in most countries allow for considerable diversification of courses throughout the whole period of secondary education, the tendency is towards emphasizing the common elements and delaying major subject differentiation until later and later in the child's school life.

School organization and the curriculum

The structure of school systems has a profound effect upon the organization of the curriculum. For example, if the nine-year course of the traditional German *Gymnasium* is compared with the four-year course of, say, a Canadian high school, it is not difficult to see how this difference in structure influences the content of the subjects taken, their progression, and the methods of teaching employed. Within the different countries, too, different branches of the educational system have different structures. The long-course *Gymnasium* and *lycée* have operated parallel to the short-course middle school and the even shorter continuation school, and as attempts have been made to co-ordinate the work of these branches, the differences that exist between their organization and structure have influenced the resulting arrangements.

The nature of the problems caused by the attempt to bring some unity into systems where early diversification took place can be illustrated by considering the influence of the short-course European middle school upon the curriculum of the long-course secondary school. While these two institutions were patronized by different classes in society and little attempt was made to see that the right pupils (as judged by scholastic ability) went to the right schools, the two institutions could develop their own appropriate curricula independently. The full secondary school planned a long, carefully graded sequence of studies leading to the university entrance qualification, while the middle school planned a shorter course with equal care that it could be adequately completed in the time available. With the growth of the democratic movement, provision had to be made for the transfer of pupils from the middle school if, on completing its studies, they were deemed to be of sufficient ability to justify their continuing at the full secondary school. In such cases transfer is seldom easy to effect in practice, mainly because the pupils have not been studying the same curriculum as that provided in the schools to which they should be transferred. Such differences, in fact, have been great enough to deter both pupils and educational authorities from making transfers, except in outstanding cases. In consequence of difficulties like these, attempts have been made to relate the curricula of the different types of school more closely together. This tendency, which can be seen in all European countries over the past three decades, becomes apparent at that point in the development of any educational system at which a serious attempt is made to allocate pupils to schools on the basis of their own ability and to reduce the influence of their parents' social position. It applies to some degree also to the allocation of pupils to different courses within the one type of school.

Attempts at co-ordination, however, cause serious problems in the organization of the curriculum of any one school, and over the years considerable friction has arisen between the different types of school, for in practice what is often required is the postponement in the full secondary school of some study such as Latin till after the period when any late-comers from other schools might want to enter and perhaps take the classical course. On the other hand, the short-course school will also be faced with difficulties if it attempts to make provision in its curriculum for subjects that can with difficulty be justified unless they are to be pursued for as long as they would be in a full secondary school.

In an attempt to remedy this situation educators in many parts of the world have tended, during the past 20 or 30 years, to try to reconstruct the secondary school curriculum in such a way that it forms two cycles. The first cycle is one in which the curriculum consists mainly of the common studies that all young people will be pursuing, no matter in what type of school they are to be found, while the second cycle is to provide for the

final differentiation of studies required in preparation for entrance to a specific vocation or to a higher vocational training institution. In general the tendency has been to consider that the first cycle should reach from the beginning of the secondary period till the time of the minimum school leaving age, for example, the Langevin Commission in France (1947) recommended a four-year *cycle d'orientation* followed by a three-year *cycle de détermination*. A two-cycle structure was also recommended by an Inter-American Seminar held in Chile in 1954–55, and many of the Latin American States have introduced this system, although the length of each cycle varies from country to country. The Eastern European States have been adopting a four-year period of junior secondary education, and so have several other countries, such as Egypt. In Great Britain, and in many countries whose educational systems have been influenced by British schools, the effective pattern is that of a five-year period leading up to the General Certificate of Education, followed by one or two years of pre-university preparation.

It should be noted that the structure of the curriculum does not necessarily correspond with the administrative division of the school system itself, even though it may be influenced by administrative arrangements. In most countries the two cycles of secondary education are given within the one school; in other cases the two curriculum cycles may be out of step with the administrative structure. For example, although the 3-3 system of separate junior high school and senior high school is common in the United States, there has been in recent years a tendency towards completing the orientation period in the first two years of the junior high school and regarding the third year as belonging to the senior high school period from the point of view of curriculum structure, thus in effect giving a four-year sequence of senior high school studies. Similarly in New Zealand, where there has been occurring a gradual reorganization over the past 40 years whereby the last two classes of the eight-year primary school have been converted into centralized intermediate schools, the current tendency in the intermediate schools themselves is to try to bridge the gap that separates them from the high schools by the formation of local committees of intermediate and secondary teachers to seek ways and means of bringing about a closer sequential connexion between the curricula of the two types of school.

In recent years a further tendency has become marked in many school systems, and it is one that is blurring the earlier distinction between the first and second cycles. This is the tendency to use only the first year or two of the first cycle for orientation purposes. In England, France, the United States, and many parts of Latin America and Asia, the first two years are tending to take on a quality of their own largely derived from the function of orientation which has become important in countries which provide for some differentiation during the first cycle of secondary education. The distinctive nature of the orientation period, however, is tending to cause a splitting up of the first cycle into two parts, the latter of which is becoming more closely related to the curriculum of the senior stage of the general secondary curriculum. At the same time few countries other than those of Eastern Europe have retained the whole of the long first cycle as a period of common undifferentiated education as it was envisaged, for example in the report of the Langevin Commission. In general the opinion of the specialist teachers in the secondary school has been that pupils who have an aptitude for their subjects should begin them as early as possible. The foreign languages, both ancient and modern, are disciplines in which this point of view has been very cogently expressed and in practice this has led to some differentiation between the more and the less academic children from the very beginning of their secondary schooling.

The beginning of a foreign language, is indeed, just one illustration of the general problem of planning a long course of study for a sequential discipline in a system that is aiming to provide secondary education for all young people. Teachers generally agree that the major subjects of an academic secondary school curriculum need to be pursued for many years if they are to be learned thoroughly enough to be of lasting value to the learner. It is by no means easy to reconcile this need with the need to provide a good general education for other pupils in a shorter time, which is what the secondary modern type of school attempts to do and what the modern courses of the general secondary school also attempt to do. There is a growing tendency now in many school systems to consider that the sharp distinction between the period of 'orientation' and the period of 'determination' that was made by some of the earlier reformers was somewhat unrealistic in so far as it implied that determination should not take place until the period of orientation was concluded. That would leave the commencement of some studies till later than their teachers think is wise. A solution that is being adopted more and more generally is that all the major groups of sequential disciplines should be attempted by all pupils in the earlier phase of their secondary schooling, and that determination should proceed at a later stage by the retention of strong subjects and the abandoning of weak subjects. While this may appear at first sight to be a negative method of orientation, it in fact implies that the best way for a pupil to discover an aptitude is to try himself out at the activity in question over a reasonably long period of time. It implies too, that realistic guidance needs to be closely related to the actual educational provision available in the subsequent period of schooling. Moreover, in this way no time is lost by those pupils who show that they are capable of profiting from a long course of study in any given subject.

A further modification to the two-cycle method of organizing the curriculum is being brought about by the realization that pupils show differences in the rate of learning, and that some can complete the work set out for a given cycle in much less time than is taken by the average pupils. In countries which leave teachers free to construct their own curricula and organize their own schools without much central control this has often led to the grouping of pupils into different classes, 'streams', or 'sets', in accordance with their general scholastic ability or with their aptitude for special subjects. Such differentiated classes then proceed at different rates. The fast-learning classes may even complete the syllabuses for the school leaving certificate a year or two earlier than the average and then proceed to advanced studies.

The general effect of all such modifications of the cyclic

organization of curricula seems to be that in fact the cyclic form of organization is gradually being superseded, and in its place a unified but progressively differentiating curriculum is being evolved. In those school systems which make a break between the primary and the secondary periods at the age of approximately 11 years, the six- or seven-year period of secondary education appears once more to be becoming unified as it was in the nineteenth century; but the new unification is broader and more flexibly organized to suit the wide range of pupils that the present-day secondary schools care for.

THE OVER-LOADED CURRICULUM

One of the most persistent problems that have been faced by secondary schools during the past 30 years is the problem of the overloading of the courses of study and the overburdening of the pupils. This problem has been most commonly found in the academic secondary school or in the more academic courses of the comprehensive schools, and it is closely related to problems of preparation for the examinations that permit entry to the universities and other selective institutions of advanced education. The essence of the complaints is that the pupils are burdened with too much intellectual work and that the strain of prolonged study, combined with anxiety lest they fail in their examinations, has a deleterious effect upon their physical and mental health. Furthermore, many teachers maintain that numbers of intelligent young people are being given a distaste for learning instead of a love for it, and that this leads to a waste of academic talent. The problem has become more apparent in recent years with the increase in the secondary school population, for what was once a situation affecting only a few thousand pupils is now the concern of hundreds of thousands, and by its sheer magnitude the problem has begun to attract widespread public attention.

It is far from being a recent problem, however. Indeed its appearance on the educational scene runs closely parallel with the introduction of the sciences and other modern studies into the secondary school curriculum during the latter part of the nineteenth century, and with the extension of secondary education to the more intelligent young people of the working classes. The effect of the first of these factors was to bring into the curriculum of the secondary schools not only additional subjects but also subjects in which the growth of knowledge was proceeding at such a rapid pace that their syllabuses tended to become heavily loaded. The effect of the second factor was to introduce elements of urgency, seriousness, competition, and pressure to achieve academic distinction and scholarships for higher education that were largely absent from the secondary schools when they were reserved for a well-to-do minority of the population.

Already in the decade after the first world war attempts were being made to understand and deal with the problem in countries whose secondary education systems were developing in the European tradition. On the one hand the growth of knowledge was reflected in an increase in the difficulty of the requirements for entry to the universities, which determined to a large extent the academic curricula of the secondary schools; on the other hand, in a reaction against this, attempts were being made to prune the syllabuses to their essentials, to adopt more 'active' methods of learning, to reduce the amount of bookish memorization that was common in the secondary schools, and to pay more attention to other aspects of the personality than intellect. In many countries during the 1920s and 1930s such attempts were being made. In Brazil, for example, curriculum reforms adopted in 1931 were introduced by the Minister of Education in the following words: 'Much of the plan assigns to secondary schools the task of building up a system of habits, attitudes, and behaviour instead of loading the mind with knowledge and information that is the finished product with which educational industry usually seeks to form the stock of its clients. The education of man will never be achieved through a system of passive receptivity by which the intelligence of youth becomes degraded in the secondary schools.' But to work out in practice the conception of education implied in such statements is far from easy, and it is seldom claimed that in this respect organized academic education in the secondary schools generally has undergone very profound changes in methods and spirit over the intervening years.

It is now generally recognized that attempts to deal effectively and realistically with overloading call for a thorough understanding of the nature of the problem on the part of administrators, clarity of aims in the devising of syllabuses and textbooks, and a better understanding by teachers of the relationship between educational methods and educational outcomes. Recent attempts to grapple with the problem have emphasized its complexity and the wide variety of causative factors at work, not all of them the same in different countries. In the first place, in some countries it is the sheer number of subjects taken each year of the secondary school course that sets the problem. In the United States high school, which is regarded as singularly free from overloading and indeed is sometimes criticized for the opposite fault, the number of substantial academic subjects carried by a pupil in the course of a year may be as few as four, while in the schools of most countries it will be more and in many countries double that number. In part, the reason for the larger number taken rests upon the belief that substantial academic subjects need to be studied continuously and progressively over a long period of years in order to obtain their full educative value. Hence, while the United States pupil may take a foreign language or mathematics for only two years in order to obtain the necessary minimum of units to satisfy college admission requirements, in other countries the pupil will usually continue such subjects throughout the period of secondary schooling and will probably sit for an external examination based upon the presumption of four or five years' sequential study. The cumulative nature of the study itself introduces, moreover, an element of strain that is not present in shorter courses.

In some countries a pressing need for foreign language study is the cause of much of the trouble. When the mother tongue of a people is not a language widely used throughout the world, it is regarded as essential that the academic pupils of the secondary schools learn at least one and often two modern foreign languages thoroughly, so that they can read, write and speak the foreign tongue. In many

parts of Asia and Africa the situation is even more difficult. The mother tongue may be a dialect used by a very small number of people in the country, in which case a regional language may also have to be learnt; the regional language in its turn may be one in which adequate textbooks on mathematics, the sciences and technologies are not available, and much of the content of the secondary school curriculum will thus have to be learned through the medium of English, French, or some other language that has a well-developed literature and an adequate supply of modern teaching materials.

Conditions like these raise problems for which no easy solution can be conceived that could be applied within the education system alone without calling for sociological changes as well. Many of the reasons for overburdening, however, fall strictly within the pedagogical field and the solution is within the means of educators. The first of these is the effect of the growth of knowledge, which has caused syllabuses to become broader and more heavily burdened with factual information. During the second world war a great deal of experience was gained of how the traditional school syllabuses in mathematics and the sciences could be reduced to essentials, and how, by the use of visual aids such as films, filmstrips, and working models, abstruse conceptions, processes, and relationships could be effectively demonstrated, with a consequent increase in understanding and economy of time in learning. The post-war revision of syllabuses and textbooks in many countries has been influenced by such findings. In mathematics, for example, formal theorem learning in geometry has been reduced in amount, and mathematical notions once dealt with geometrically are now often treated more simply by means of algebra. Logarithms are used from an early stage to reduce the work of computing that used to be carried to unnecessary lengths in the past for the sake of the mental training it was deemed to give. There has, indeed, been a marked swing away from syllabuses that were based upon the 'disciplinary' value of a subject to syllabuses designed for practical utilitarian ends. In the Soviet Union, for example, the curriculum in mathematics and the sciences is constantly scrutinized to ensure that only essentials are taught. More progress appears to have been made in the schools generally in the revision of syllabuses than in the improvement of methods of teaching. Criticism in many countries indicates that the provision of adequate facilities for practical work in science and mathematics has not kept pace with the needs of the schools, and that even where cheap and readily improvised models and apparatus would be satisfactory, teachers still rely too much on verbal and bookish methods.

Two other major changes have also been suggested in recent studies of the overburdening of syllabuses: the first is the grouping of related disciplines, and the second is the adoption of the 'centre of interest' method of learning. These two approaches are in some respects closely related, though the emphasis in the former is upon the subject-matter itself and its organization, while the emphasis in the latter is upon the interests and learning methods of the pupils.

Examples of the grouping of subjects are to be found in the natural and physical sciences and in the social studies. The conception underlying the idea of teaching 'general science' rather than the separate sciences of chemistry, physics, zoology, botany, etc., is that the pupils' understanding of the methods of scientific thought and experiment should begin with the investigation of some of the phenomena of everyday life, and that only at a later stage should a partition of the universe into the fields of the separate scientific disciplines be made. In this way the relevance of scientific methods to the problems and purposes of scientific investigation would be more readily apparent to the learner, and the body of factual information acquired would be integrated into larger and more meaningful areas of knowledge and would thereby be more easily assimilated. In a similar way the organization of subjects like history, geography, civics, politics into the study of a complete human civilization would bring a unity and meaning to their learning that young people do not readily find when the separate subjects are narrowly conceived. In Great Britain and the United States, and in several of the countries whose education is susceptible to their influence, many attempts have been made in the past 15 to 20 years to remodel syllabuses along such lines as these. Considerable success has been reported by teachers whose children are following the less academic courses. The courses of the highly intelligent children, however, appear to have been so much influenced by the fragmenting tendency of subject-organized external examinations that in practice their curricula in general science and social studies have often been simply the study of the usual separate subjects with merely a change of name in the school time-table. In many countries it is agreed that a more understanding approach to the problem is dependent upon the production of better textbooks and reference materials and upon the better training of teachers.

Better materials and better teachers are also indispensable in any attempt to organize a curriculum around the interests and problems of the pupils, for the teacher needs breadth of knowledge and an understanding of the relationship between different subjects in order that he may be able to guide his pupils well beyond the first stages of curiosity-satisfying investigation and far enough into the problems being studied for them to appreciate the ultimate need for systematic scholarship. Again, because of the difficulties involved in any sustained attempt to apply such methods of curriculum organization, more general success has so far been achieved with classes of children of average or lower ability than with the scholastically able. So far, no country would consider that it was using such methods successfully to solve the problem of academic overloading.

In most countries where the problem has assumed serious dimensions the general view among educators is that one of the main causes is the domination of the secondary school curriculum by external examinations and the prescriptions of work laid down for them. Prescriptions are never more than outlines of the subject-field to be covered; and in the attempt to see that no corner is left untouched so that every possible examination question is prepared for, the teachers are often forced to an accumulation of detail that they realize to be pedagogically unsound but that seems unavoidable. Over the past 30 years, persistent criticism has been directed at the effects of external examinations upon secondary school syllabuses, teaching

methods, and pupils, and some countries have ceased to use them as a means of evaluating the work of their pupils either for the award of leaving certificates or for the granting of university entrance qualifications. However, even an internal examination or assessment of the work of pupils by their own teachers does not eliminate the pressure and strain on the pupils that occur when they are working to gain entrance to some higher institution, knowing that only a certain number of places will be available for a large number of candidates. This is the fundamental situation for young people following academic secondary school courses in almost all countries of the world today, and in these circumstances the pressure for better achievement that is felt by the large proportion of pupils who know themselves to be 'borderline' candidates is not likely to be eased by changes in methods of selection alone. The causes of competitive overloading lie so deep that some educational sociologists have suggested they will be removed only by social changes such as the growth of a more egalitarian social structure and a consequent extension of provision for higher education.

CONCLUSION

The foregoing outline of some of the main directions of change in the curriculum of the secondary schools during the past 40 or 50 years is necessarily incomplete, and being highly generalized it does scant justice to the complexity of the educational scene. Its purpose, and indeed the purpose of this whole study, is to seek for underlying trends that give meaning to the host of discrete facts that a world survey of education made at any one point in time presents us with. However, the outline that has been sketched will have made it clear that there has never before been a period of history when such momentous educational changes were taking place throughout the world in such a short space of time. Either directly or indirectly the continuing curriculum changes are an expression of two characteristic tendencies of the age: first, the desire on the part of communities to fulfil through their schools the promise of modern scientific and technological achievement to lay the material foundations of better living conditions for all; secondly, the will to develop a democratic human society dedicated to the fullest possible development of every individual.

These two tendencies have acted and reacted one upon the other. The advances of science have required the growth of new elites, a wider and more democratic basis of recruitment to their ranks, and new educational programmes suited to the modern world. The expanding democratic provision of secondary education in its turn has brought a new realization of the educability of children of all classes of the community and has led to a broader conception of the educational needs of all young people. More democratic principles of differentiation have come into being. Instead of the children of different social classes being provided with different curricula from an early age—humane, general education for the higher groups, specific vocational training for the lower groups—the newer aims have been to provide both a humane general education and a specialized vocational training for all, according to their natural endowments and personal interests. The cardinal problem in the construction of secondary school curricula today is how best to ensure these two things: first, that every young person will be well developed in the common learnings that everyone needs in a democratic society; and second, that at the same time every young person is helped to achieve his fullest development in those things that he is naturally best at.

Seen from the most general point of view the major curriculum movement of the present age is towards a synthesis of this kind; but some countries are much further along the way than others, and at each stage of development the elements of the curriculum are different and reach a different balance. What is suitable at one time and place may not be right at another. For an appreciation of the present state of the curriculum in any country it is necessary to remember this fact, just as for an understanding of a country's difficulties and efforts at improvement it is helpful to perceive the general direction of change throughout the world. The particular gives content to the general, and the general enriches the meaning of the particular. An understanding of each is needed by those charged with the task of directing educational change.

CHAPTER VIII

SECONDARY EDUCATION PERIODICALS

The following is a comprehensive list of secondary education periodicals drawn up from information available at the Secretariat of Unesco. It includes periodicals devoted to secondary education in general, periodicals concerning vocational and technical education at the secondary level, and periodicals devoted to the teaching of special subjects at the secondary level. The latter may overlap with the primary or higher education levels. For a few countries which have no periodicals falling within these three categories, journals which frequently publish articles on education at the secondary level have been given. The language of the periodicals is the national language of the country, unless indicated otherwise. The information given is as follows:

Title.
Publisher and address or address for subscriptions if different from publisher.
Number of issues per year.
Date founded.

INTERNATIONAL

Boletín iberoamericano de cultura técnica. Oficina de Educación Iberoamericana, Instituto Iberoamericano de Investigaciones y Enseñanzas Técnicas, Departamento de Información y Publicaciones, Avenida de los Reyes Católicos, Ciudad Universitaria, Madrid, Spain. 1. 1957.

Contact. International Federation of Foreign Language Teachers/Fédération internationale des professeurs de langues vivantes. Editions J. M. Meulenhoff, Amsterdam, Netherlands. Irregular. 1957. In English and French.

Education through art. International Society of Education through Art/Société internationale d'éducation artistique/Internationaler Verein für Erziehung durch Kunst, Kanaalweg 64, Scheveningen, Netherlands. 2. 1958. Articles in English, French or German.

FIEP bulletin. Fédération internationale d'éducation physique. Mme Ann-Mari Ivarsson, Sandgatan 14, Lund, Sweden. 2. 1930. In French.

International bulletin of secondary education/Bulletin international de l'enseignement secondaire officiel. International Federation of Secondary Teachers/Fédération internationale des professeurs de l'enseignement secondaire officiel. Secretary General/Secrétaire général: Mr. A. W. S. Hutchings, 29 Gordon Square, London, W.C.1. 2. 1921. In English and French.

International journal of health education. Revue internationale d'éducation de la santé. International Union for Health Education of the Public/Union internationale pour l'éducation sanitaire de la population, 3 rue Viollier, Genève, Switzerland. 4. 1958. Separate editions in English and French.

International review for business education/Revista internacional para la enseñanza comercial/Revue internationale pour l'enseignement commercial/Rivista internazionale per la cultura comerciale/Internationale Zeitschrift für kaufmännisches Bildungswesen. S. Schaffner, 59 Kirchlistrasse, St. Gall, Switzerland. 2. 1926. In English, French, German, Italian and Spanish.

Nordisk matematisk tidskrift. Matematisk Institutt, Blindern, Oslo, Norway. 4. 1953. In Danish, Norwegian and Swedish. Published by 10 different mathematical associations in Denmark, Finland, Iceland, Norway and Sweden.

ARGENTINA

Cátedra y vida. En torno a los problemas de la enseñanza media. Diaz Vélez 4038, 1º B, Buenos Aires. 12. 1956.

AUSTRALIA

The Australian mathematics teacher. The Mathematical Association, New South Wales Branch, c/o Sydney Teachers' College, University Grounds, Newton, N.S.W. 3. 1945.

Australian science teachers' journal. Australian Science Teachers' Association, c/o Sydney Teachers' College, University Grounds, Newton, N.S.W. 3. 1955.

Babel. Journal of the Modern Language Teachers' Associations of Victoria, South Australia and Western Australia. University of Melbourne, New Arts Building, Carlton N.3, Victoria. 3. 1956.

Esprit and Geist. Department of Education, Sydney, N.S.W. 1958.

Physical education journal. Australian Physical Education Association, c/o Physical Education Department, University of Melbourne, Carlton N.3, Victoria. 4.

AUSTRIA

Der Mittelschullehrer. Verband der österreichischen Mittelschullehrer, Schottenbastei 7, Wien I. 12. 1954.

Der Mittelschullehrer und die Mittelschule. Sektion Mittelschul-

lehrer in der Gewerkschaft der öffentlich Bediensteten, Lackierergasse 7, Wien IX. 12. 1952.

Naturwissenschaft und Unterricht. Offizielles Organ des Vereines zur Förderung des physikalischen und chemischen Unterrichtes. Hippolyt Verlag Gesellschaft, Beatrixgasse 32, Wien III. 12.

Weg in die Wirtschaft. Gewerkschaft der öffentlich Bediensteten, Bundessektion 14, und Verband der Lehrerschaft an berufsbildenden Lehranstalten, Währingerstrasse 59, Wien IX. 10.

Zentralblatt der technischen und gewerblichen Lehranstalten sowie der Lehranstalten für hauswirtschaftliche, gewerbliche und soziale Frauenberufe. Bundesministerium für Unterricht, Generaldirektion für das berufsbildende Schulwesen, Abteilung 17, Minoritenplatz 4, Wien I. 6. 1949.

BELGIUM

L'athénée. Bulletin de la Fédération de l'enseignement moyen officiel du degré supérieur de Belgique, athénées et lycées royaux et communaux. Mlle Jeanne Muyters, Lycée de jeunes filles de Liège, 16 rue Laurent de Koninck, Liège. 5. 1956 – 45e année.

Bulletin de la Société belge des professeurs de français. Imprimerie Clarté, Herstal. 4. 1952.

Écoles et professions/School en beroep. Ministère de l'instruction publique/Ministerie van Openbaar Onderwijs, Service de l'orientation professionnelle/Dienst voor Beroepsoriëntering, 89 rue Ducale, Bruxelles. 6. In Flemish and French.

L'éducation physique. Cours normaux d'éducation physique et Association des professeurs d'éducation physique du Hainaut, 38, rue Warmonceau, Montigny-sur-Sambre. 12. 1956 - 9e année.

Les études classiques. J. van Ooteghem, 59 rue de Bruxelles, Namur. 4. 1932.

La géographie/De aardrijkskunde. Bulletin de la Fédération belge des géographes, professeurs de l'enseignement moyen, normal et technique/Tijdschrift van de Belgische Federatie van Geografen, Leraars bij het Middelbaar, Normaal en Technisch Onderwijs. Universiteitstraat 14, Gent. 4. 1948. In Flemish and French.

Geschiedenis in het onderwijs. Orgaan der Leraars Geschiedenis Officieel Middelbaar en Normaalonderwijs. Ontwikkeling, Leeuwerikstraat 41, Antwerpen. 5. 1956.

La gymnastique éducative/De opvoedende gymnastiek. Bulletin de la Fédération belge de gymnastique éducative/Tijdschrift van de Belgische Federatie voor Opvoedende Gymnastiek. 4-6. 1926. In Flemish and French.

Histoire et enseignement. Geschiedenis en onderwijs. Bulletin de la Fédération belge des professeurs d'histoire. Bulletin van de Belgische Federatie der Leraars in de Geschiedenis. M. Bauwelaerts, 2 Place Cardinal Mercier, Louvain. 1. irregular. 1951. Separate editions in Flemish and French.

Humanités chrétiennes. Organe de la Fédération nationale de l'enseignement moyen catholique. 76 rue du Trône, Ixelles. 5. 1958.

Mathematica et paedagogica. Société belge de professeurs de mathématiques. L. Jéronnez, 57 rue d'Hurtebise, Binche. 4. 1953. In Flemish and French.

Mathésis. Recueil mathématique à l'usage des écoles spéciales et des établissements d'instruction moyenne. J. Duculot, Gembloux; Gauthier-Villars, Paris. 12. 1881.

Muziekopvoeding. Orgaan der Beweging voor Muziekopvoeding. Sekretariaat voor Muziekopvoeding, Aartsbisschoppelijke Normaalschool, Onder de Toren 13, Mechelen. 3. 1955.

Nova et Vetera. Nationaal Verbond voor Katholiek Middelbaar Onderwijs, Brusselse Steenweg 10, Londerzeel. 4. 1922.

Revue analytique d'éducation physique. Séminaire d'éducation physique, 33 boulevard de la Sauvenière, Liège. 3. 1958.

Revue de l'éducation physique. Tijdschrift voor lichamelijke opvoeding. Organe de la Ligue belge de l'éducation physique et des groupements de professeurs d'éducation physique. Orgaan van de Belgische Bond voor Lichamelijke Opvoeding. 219 rue des Wallons, Liège. 4. 1907. Separate editions in Flemish and French.

Revue des langues vivantes/Tijdschrift voor levende talen. Éditions Marcel Didier, 14 rue des Comédiens, Bruxelles. 6. 1934. In English, Flemish, French and German.

De tekengids. 728 Houba de Strooperlaan, Brussel II. 4. 1949.

Tijdschrift voor opvoedkunde. N.V. Standaard-Boekhandel, Huidevettersstraat 57-59, Antwerpen. 6. 1955. Also published in the Netherlands.

Velewe. Biologie-Chemie-Fysica. Orgaan van de Vereniging van Leraars in de Wetenschappen. A. Blonde, Prins Albertlaan 14, De Panne. 5. 1952.

BOLIVIA

Boletín de física y química. Servicio Cooperativo Interamericano de Educación, Centro para el Mejoramiento de la Instrucción de las Ciencias, División Industrial, La Paz.

BRAZIL

Boletim da C.B.A.I. Comisão Brasileiro-Americana de Educação Industrial, rua Marechal Câmara 350, 8º andar, Rio de Janeiro. 12. 1947.

Boletim de educação física. Ministério da Educação e Cultura, Divisão de Educação Física, Rua da Imprensa 16, Rio de Janeiro. Irregular. 1941.

E.B.S.A. Editôra do Brasil S/A, 128 avenida Rio Branco 15º andar, Rio de Janeiro. 12. 1947.

Escola secundária. Ministério da Educação e Cultura, Diretoria do Ensino Secundário, Campanha de Aperfeiçoamento e Difusão do Ensino Secundário, 15º andar, Rio de Janeiro. 4. 1957.

Revista de educação física. Departamento de Desportos do Exército e Escola de Educação Física do Exército, Urca, Rio de Janeiro. 4. 1932.

Revista SENAC. Serviço Nacional de Aprendizagem Comercial, Rua da Candelária 9, 8º andar, Rio de Janeiro. Irregular.

Revista SENAI. Serviço Nacional de Aprendizagem Industrial, rua Araujo Pôrto Alegre 70, 11º andar, Rio de Janeiro. 4. 1946.

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Nauka i technika za mladežata. Dăržavno Izdatelstvo, Sofija.

BYELORUSSIAN SOVIET SOCIALIST REPUBLIC

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The Canadian modern language review. Ontario Modern Language Teachers' Association, 194 Dawlish Avenue, Toronto 12. 4. 1944.

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Saskatchewan recreation. Department of Education, Fitness and Recreation Division, Government Administration Building, Regina. 3. 1948.
Technique pour tous/Popular technique. Ministère du bien-être Social et de la jeunesse / Department of Social Welfare and Youth, Québec. 10.

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Renovación. Dirección General de Educación Secundaria, Sección Perfeccionamiento y Experimentación, San Antonio 427, Oficina 203, Santiago. Irregular. 1946.
Revista chilena de educación física. Instituto de Educación Física y Técnica, Facultad de Filosofía y Educación, Universidad de Chile, Santiago. 4. 1934.

COLOMBIA

Revista colombiana de educación. Instituto Colombiano de Investigación Pedagógica, Calle 20, nº 8-18, Oficina 801, Bogotá. 1959.

CZECHOSLOVAKIA

Slovenský jazyk a literatura v škole. Slovenské Pedagogické Nakladatel'stvo, Sásinkova ulica 5, Bratislava. 10. 1955.
Teorie a praxe tělesné výchovy. Československý svaz tělesné výchovy, Praha. 12. 1953.

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Cizí jazyky ve škole. 10. 1957.
Dějepis ve škole. 10. 1954.
Hudební výchova. 6. 1953.
Literatura ve škole. 10. 1953.
Matematika ve škole. 10. 1951.
Odborná škola. 10. 1954.
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Rozhledy matematiko – fysikální. 10. 1922.
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Tělovýchovný zpravodaj. 12. 1955.
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Sløjdbladet. Askov Skolesløjd, Zeltnersvej 7, Silkeborg. 4. 1902.
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Ammattikasvatus/Yrkesutbildning. Suomen Ammattillisten Koulujen Oppettajayhdistys, Stuurenkatu 18, Helsinki. 9. 1945. In Finnish and Swedish.
Kisakenttä. Suomen Naisten Liikuntakasvatusliitto, Ilmarinkatu 10 B, Helsinki. 20. 1910.
Kouluvoimistelu ja-urheilu. Suomen Voimistelunopettejaliitto ja Kansakoulunuorison liikuntakasvatusliitto, Munkkiniemi Puistotie 14 B 31, Helsinki. 4. 1935.
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FRANCE

L'agrégation. Société des agrégés de l'Université. P. Bennezon, 4, square Vauban, Viroflay, Seine-et-Oise. 12. 1917.
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Bulletin de l'Union des physiciens. Association des professeurs de sciences physiques des lycées et collèges classiques, modernes et techniques de France, 44, boulevard Saint-Michel, Paris-6e. 12. 1905.
Bulletin de la Société des professeurs d'histoire et de géographie de l'enseignement public. 18, rue de Liège, Paris-9e. 4. 1910.
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Le cours industriel. Éditions Foucher, 128, rue de Rivoli, Paris-1er. 12. 1941.
La documentation par l'image. Fernand Nathan, 18, rue Monsieur-le-Prince, Paris-6e. 12. 1933.
Éducation et théâtre. Direction générale de la jeunesse et de sports, 9, rue de Hanovre, Paris-2e. 6. 1950.
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L'éducation ménagère. Éditions Lanore, 12, rue Oudinot, Paris-7e. 6. 1939.
L'éducation musicale. 36, rue Pierre-Nicole, Paris-5e. 10. 1945.
L'éducation physique. Fédération française d'éducation physique, 2, rue de Valois, Paris-1er. 4. 1902.
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I.N.S. Revue des techniques sportives et des applications pédagogiques. Éditions arcadiennes, 1, rue Pergolèse, Paris-16e. 6. 1947.
L'information géographique. Pour l'enseignement. J. B. Baillière et fils, 19, rue Hautefeuille, Paris-6e. 6. 1936.
L'information historique. Pour l'enseignement. J. B. Baillière et fils, 19, rue Hautefeuille, Paris-6e. 1938.
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THE EDUCATIONAL SYSTEM

Islam is the official religion of Afghanistan, and the Islamic faith makes it incumbent upon all men and women to receive education. Thus Article XX of the Afghan Constitution provides for free and compulsory primary education for every boy and girl in the country, without racial or other discrimination. Similarly, Article XXII of the Constitution lays down that all educational institutions shall be administered and controlled by the State. All schools, whether primary, secondary, vocational or at university level, are therefore under the direct supervision of the Government and their expenses are paid out of the state budget.

The structure of the Afghan school system is shown in the diagram on page 163. Secondary education begins after the end of the primary course and covers a period of 3 to 6 years, depending upon the type of school. Vocational and non-vocational secondary schools which give 3-year post-primary courses are called 'middle schools'. The *lycees* and the '12-grade vocational schools' offer 6-year courses (grades 7 to 12) in such subjects as technology, religion, agriculture or general academic subjects leading to the baccalaureate.

THE DEVELOPMENT OF SECONDARY EDUCATION

A modern school system was introduced into Afghanistan at the beginning of the twentieth century. The administration of that time, realizing the importance of modern education for the solution of contemporary problems, successively established primary, middle and secondary schools, and also a primary teacher training school at lower secondary (middle school) level. However, since the number of Afghan teachers was insufficient, teachers and advisers were also recruited from India and Turkey; modern subjects were taught by foreign teachers, and other subjects by Afghan teachers.

Since the majority of the teachers were of Indian extraction, the schools were run on the pattern of Islamic schools in India. English was the principal foreign language and during a short period Turkish and Urdu were also taught. Secondary education was divided into two stages. After passing out of the primary school, which then had 5 classes or grades, the students enrolled in the first middle grade. The middle school term lasted 3 years and the second stage another 3. The first 2 years of the second stage were the equivalent of the intermediate standard in India, and the last or preparatory year was intended to prepare students for various vocations.

In 1919 Afghanistan attained her independence and with it a new era of education began. The establishment of diplomatic relations with foreign countries was followed in some cases by bilateral cultural agreements. A team of French teachers was recruited in France and the Esteklal Lycée was established on the pattern of a French *lycée*. Similarly a school was established on the German pattern and a team of German teachers was engaged. The establishment of these two *lycées* gave great impetus to the introduction of modern principles of education and proved useful for the later establishment of secondary schools on the same models.

Side by side with academic secondary schools, vocational schools at the lower secondary level were also established; these included such training schools as the School of Administrators, the School of Office Management, the School of Agriculture, etc. The School of Arts and Crafts was set up as a secondary vocational school with departments of bricklaying, painting and drawing, carpet weaving and other trades. The vocational schools gradually rose to full secondary status and came to be recognized as *lycées*. The course at the teacher training schools was also extended to the level of grade 12. The Faculties of Science and Letters, which were at first rather like teacher training high schools, became institutions of higher education and began to train secondary school teachers. In 1942 general reforms were instituted in secondary schools. In the light of past experience the Ministry of Education drew up a co-ordinated teaching programme and produced manuals on teaching and examinations for all secondary schools.

Secondary education, whether general or vocational, is not compulsory, but it is completely free and students are even supplied study materials free of cost. Admission to secondary schools is conditional upon graduation from the primary stage with above average marks. Students are accepted in secondary schools at the age of 13. In order to help capable students in places where secondary school education is not available, the Government has established a generous system of scholarships which enable such students to continue their studies, free board and lodging being provided them by the State; the scholarships are renewable each year provided that the beneficiaries pass their examinations. Since all schools are run by the Ministry of Education, all units of the programme are prepared in accordance with government rules and regulations. The budget and programme of the Ministry of Education are approved by the National Assembly every year.

Administration

Secondary schools are divided into distinct categories, vocational and non-vocational, and come respectively under the Department of Vocational Education and the Department of Secondary Education. The main duties of these Departments are the framing of general policies regarding the schools they control, preparation of curricula and timetables, selection and supervision of reading material, execution of programmes, supervision of examinations and awarding certificates.

Proposals made by the Departments which do not involve radical or far-reaching changes in the system of education are approved by the Council of the Ministry of Education. The Ministry Council meets once a week and is composed of the Departmental Heads of the Ministry up to the rank of Director-General; the Minister acts as chairman and all orders passed by the Council must bear his signature. But proposed changes of far-reaching importance for the system of education, teaching programmes and policies, must go, for a final decision, before the most important educational body, the High Council of Education, whose decision is legally binding throughout the country. The High Council is composed of a number of high-ranking officials of the Ministry of Education as permanent members, and certain highly qualified scholars and educationists of long association with educational matters in the country. The latter are elected to the Council for a period of 3 years. The Council meets only when convened to consider a particular educational problem.

The Textbook Department of the Ministry is the sole body entrusted with the task of preparing and procuring school textbooks and arranging for their publication. Textbooks are written and compiled by specialists with the assistance of capable teachers fully conversant with the capacities and needs of students. Each book is submitted to a panel of teachers and experts for an opinion as to its conformity with the teaching programme and its suitability for the students of the standard for which it is intended. A substantial amount of money is earmarked for this purpose in the general budget of the Ministry of Education and textbooks are placed at the disposal of all schoolchildren in Afghanistan, each year, in both primary and secondary schools.

Each vocational or general secondary school is headed by a director or an acting director who is responsible for the conduct of all administrative and professional matters, e.g., supervision of teachers, implementation of the teaching programmes, supervision of the administrative staff, control of students' activities within the school, and control of expenditures and the school budget as far as lies within his jurisdiction.

To help him perform these duties he has one or more headmasters under him, according to the number of students in the school. Thus in a large school providing education at different levels the students at each particular level are supervised by one headmaster who is responsible to the director of the school, who is in turn responsible to the various departments of the Ministry of Education.

The duties of school principals in the provinces differ little from those of directors in the capital, except that they approach the Central Departments of the Ministry through the Provincial Directorates of Education which are their immediate superiors. The Directorates have been given the necessary powers to deal with most of the administrative and instructional problems arising in the schools under their jurisdiction and such problems as lie beyond their prerogatives and powers are submitted to the appropriate Department of the Ministry of Education.

Proposals made by any school administration for improvements in school administration and instruction are forwarded to the appropriate Department of Education after being passed by the council of teachers of the school. If the matter is beyond the power of the Department of Education to settle, it is placed before the Council of the Ministry of Education.

Supervision and inspection. This is carried out by inspectors attached to the Department of Inspection and also by members of the Departments of Secondary and Vocational Education. Both inspectors and the other officials who visit schools are selected from among the most capable teachers or experienced administrative officials and undergo special courses of training. Some school inspectors work under the direct supervision of the Central Inspection Department, others work at the central headquarters and also in the provinces under the supervision of the Provincial Directorates of Education.

The Ministry occasionally delegates central school inspectors to visit the provinces and report their findings to the Council of Education or the Educational Board.

Finance. All schools are fully supported by the Government and no financial assistance is received from individuals, parents, religious organizations, or other bodies. At the beginning of the fiscal year each school is informed of the budget allocated to it for the year. The directors are empowered to disburse money for salaries of teachers and administrative staff, stipends paid to boarding students, and certain other expenditures. There are however certain items which, though included in the school budget, cannot be dealt with without previous sanction from the higher authorities, thus the main budget for teaching materials

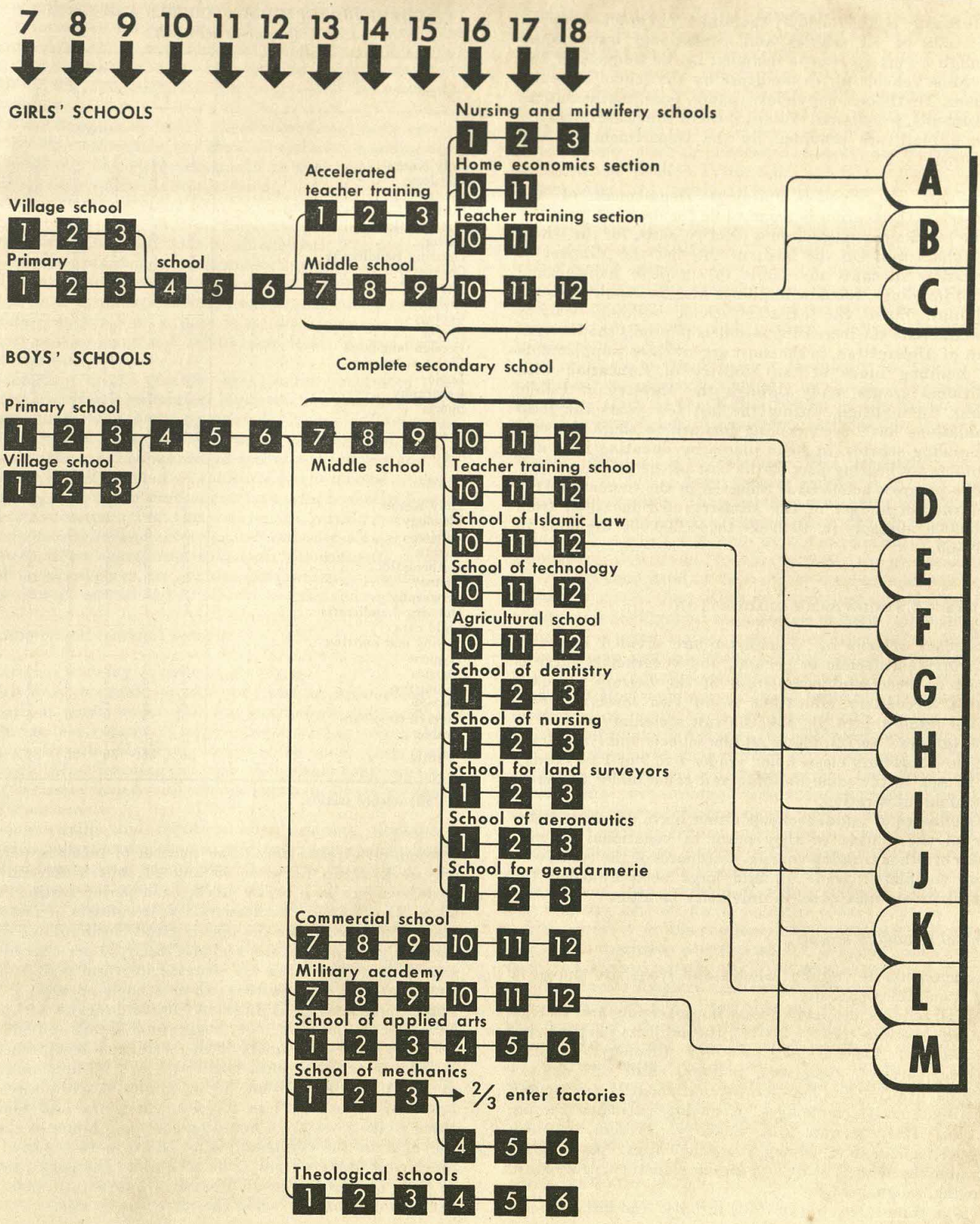
GLOSSARY

NOTE. In the accompanying diagram the schools at secondary level whose courses begin with the numbers 7 or 10, follow on directly from the 6-year primary school or the 9-year primary plus middle school course respectively; those whose courses begin with the number 1 may be entered by older pupils with the appropriate educational qualification. The diagram does not show a number of specialized middle schools, including the correspondence school.

teacher training school (boys): in the final year there are separate sections for intending primary and middle school teachers.

HIGHER EDUCATION

A. Women's Faculty of Arts.
B. Women's Faculty of Science.
C. Women's Faculty of Medicine.
D. Faculty of Medicine.
E. Faculty of Law.
F. Faculty of Science.
G. Faculty of Arts.
H. Faculty of Islamic Law.
I. Faculty of Engineering and Agriculture.
J. Faculty of Philosophy.
K. Faculty of Pharmacy.
L. Police College.
M. Military Academy.


7 8 9 10 11 12 13 14 15 16 17 18
GIRLS' SCHOOLS
Nursing and midwifery schools
1 2 3
Home economics section
10 11
Teacher training section
10 11
Accelerated teacher training
1 2 3
Village school
1 2 3
Primary school
1 2 3 4 5 6
Middle school
7 8 9
10 11 12
A
B
C
Complete secondary school
BOYS' SCHOOLS
Primary school
1 2 3 4 5 6
Village school
1 2 3
7 8 9
Middle school
10 11 12
Teacher training school
10 11 12
School of Islamic Law
10 11 12
School of technology
10 11 12
Agricultural school
10 11 12
School of dentistry
1 2 3
School of nursing
1 2 3
School for land surveyors
1 2 3
School of aeronautics
1 2 3
School for gendarmerie
1 2 3
Commercial school
7 8 9 10 11 12
Military academy
7 8 9 10 11 12
School of applied arts
1 2 3 4 5 6
School of mechanics
1 2 3
2/3 enter factories
4 5 6
Theological schools
1 2 3 4 5 6
D
E
F
G
H
I
J
K
L
M

and furniture is controlled by the Ministry in order to supply the needs of all schools and educational institutions, although a certain sum is included in the budgets of the individual schools for expenditure by the school administrations. Textbooks, copybooks, paper, pens, mathematical instruments, pencils and erasers, most of which are imported from abroad, are provided by the Departments of the Ministry.

Buildings. The School Buildings Department of the Ministry of Education is responsible for drawing up a list of the buildings required, on a priority basis, for the whole of Afghanistan. On the basis of this list the Minister of Education allocates the funds to complete half-finished school buildings, for new buildings and for repairs to such buildings. Since the existing school buildings cannot accommodate the increasing numbers of pupils the Government of Afghanistan, in the most urgent cases, supplements the building funds of the Ministry of Education with additional grants made through the Ministry of Public Works. In addition, during the last few years the local populations have been coming forward to share the cost of building schools, in some places by donating land and in others by bearing part of the cost of the building.

The progress achieved is reflected in the increase in the construction budget of the Ministry of Education, from 4,200,000 afghanis in 1948–49 to 44,000,000 afghanis in 1959–60.

TYPES OF SECONDARY EDUCATION

Secondary schools in Afghanistan are divided into two categories—academic or general, and vocational; entry is based on successful completion of the 6-grade primary school. Secondary education is on two levels: middle school (grades 7 to 9), and the full secondary school or *lycée* (grades 7 to 12). Many middle schools and *lycées* have their own primary classes, i.e., grades 1 to 9 or 1 to 12 may be housed in the same building and come under the same school administration.

Graduates of middle schools either leave school to enter one of the trades, or they enrol in vocational schools, *lycées* or other training courses. Graduates of the *lycées* who have completed grade 12 and have been awarded the baccalaureate may enrol in university faculties.

General secondary schools

The curricula in middle schools and *lycées* are shown in the time-tables opposite.

Girls' schools also have 2-year housekeeping and teacher training sections (grades 10–11), the subjects taught being as follows: housekeeping section: theology, Persian, Pushtu, physics, chemistry, biology, child care, housekeeping, drawing and handicrafts, mathematics, sewing and knitting, cooking, languages, psychology; teacher training section: Holy Koran and theology, Persian, Pushtu, physics, chemistry, biology, mathematics, psychology, teaching methods, sewing and knitting, history, geography, drawing, languages.

These time-tables are in force in boys' and girls' schools throughout Afghanistan. The number of teaching periods per week varies between 35 and 41, but is normally 6 periods a day in a 6-day week, each period lasting from 40 to 50 minutes. The academic year consists of approximately 35 weeks, but the opening and closing dates differ according to the climatic region. Nearly 50 per cent of the schools in Afghanistan are situated in warm regions with comparatively mild winters; these schools open on 7 September and close on 21 June. In very cold regions with mild summers the academic year begins on 5 March and ends on 7 December. Day schools at the secondary level, whether in cold or warm regions, begin at 8 or 8.30 a.m. and end at 1.30 p.m.; in addition, higher grades attend classes for practical experiments in physics, chemistry and biology three times a week. In boarding schools 5 hours of classes are held in the forenoon, followed by a rest period for lunch and prayers from 12.30 to 2 p.m. The pupils return to their studies for an additional 1½ hours until 3.30 p.m. except on Thursday when the afternoon is free.

CURRICULA IN MIDDLE SCHOOLS AND LYCEES
(in periods per week)

Subject	Grade					
	7	8	9	10	11	12[1]
BOYS						
Holy Koran	1	1	1	—	—	—
Theology	2	2	2	2	2	2
Persian	3	3	3	4	4	2
Pushtu	3	3	3	3	3	3
Mathematics	5	5	5	7	7	7
History	2	2	2	2	2	2
Drawing–handicrafts	1	1	1	—	—	—
Chemistry	2	2	2	3	3	3
Physics	2	2	2	3	3	3
Biology	2	2	2	—	3	3
Geology	—	—	—	3	—	—
Arabic	2	2	2	—	—	—
Foreign languages	6	6	6	6	6	4
Civics–economics	1	1	1	—	—	—
Logic	—	—	—	—	—	2
Geography	2	2	2	2	2	2
Sports	1	1	1	1	1	1
Total	35	35	35	36	36	34
GIRLS						
Holy Koran	2	2	2	—	—	—
Theology	2	2	2	2	2	2
Persian	3	3	3	3	3	3
Pushtu	3	3	3	3	3	3
Mathematics	5	5	5	5	5	5
History	3	3	3	3	3	3
Geography	2	2	2	2	2	2
Drawing–handicrafts	1	1	1	1	1	—
Child care	—	—	—	—	—	3
Sewing and knitting	2	2	2	2	2	—
Hygiene	—	—	—	—	—	—
Physics	2	2	2	3	4	4
Chemistry	2	2	2	3	4	4
Biology	2	2	2	3	2	2
Foreign languages	5	5	5	6	6	5
Arabic	2	2	2	—	—	—
Total	36	36	36	36	37	36

1. Philo-science section.

For enrolment in secondary schools (grade 7) candidates must obtain 60 per cent in the final primary examination (grade 6). In the case of boarding secondary schools where the number of applicants is large and accommodation is limited, the successful entrant must pass an additional entrance test.

In addition to the daily observations and tests carried out by the teachers in the class, 'quarterly' examinations are held and the students' marks in each subject are reported to the school administration.

The quarterly and half-yearly examinations are either written or oral; the third or final examinations consist of both written and oral tests in all subjects. The average of the marks obtained in each subject in the first two examinations are added to the average of the marks obtained in the final examinations and are then divided by two. The standard required as a pass is (a) an aggregate mark of 50 per cent or over, and (b) not less than 33⅓ per cent in each subject.

Secondary school teachers are generally recruited from among university graduates. However, for grades 7, 8 and 9 applicants who have completed 12 years of schooling and possess sufficient experience, are also engaged. At the moment the rapid expansion of secondary schools and the increase in the number of students have created a corresponding increase in the demand for teachers of all subjects, especially science. For this reason, in certain secondary schools in Afghanistan, foreign teachers are also recruited through direct negotiation with their governments.

All local teachers are regular government officials, and are promoted according to civil service rules and regulations.

Vocational and technical schools

Vocational training takes various forms:

1. Privately operated workshops take in apprentices to learn a trade under private instructors and artisans. During their term of apprenticeship they are paid a wage by the employer sufficient to meet their daily needs. After learning the trade they either continue work in the same shop as fully fledged artisans or set up shops of their own.
2. Several mills and factories have training workshops which accept young men as apprentices in specific fields of training. After completing the term of training and becoming proficient in their speciality, they are employed as skilled labour, usually in the same factory.
3. Basic vocational training is given in government schools. Through its Department of Vocational Education the Ministry of Education directs vocational education provided in the following schools: technical schools, the School of Commerce, the School of Agriculture, Teachers' Training Institute and colleges, institutions for theological training. Thus the duties of the Department of Vocational Education are somewhat different from those of similar departments in most other countries.

Mechanics' schools. These schools admit pupils who have completed primary school and offer a 3-year course. During 4 days of the week students receive practical training in various trades in the workshops. Theoretical training consisting of mathematics, drawing, technology, national languages, and German is given during 2 days of the week.

The first school in this category was the School of Mechanics in Kabul, which was established in 1937. It has the following sections: iron smithy, machine repair, tool making, foundry work, model making, low voltage and high voltage electricity, automotive repair and plumbing. After 3 years' training successful students are awarded the certificate of 'Skilled Technician' and the majority thereupon enter the various industries and technological institutions.

A secondary stage has recently been added to the school; this gives an additional 3 years' training and only exceptionally capable students are enrolled. Theoretical training during this period takes on greater importance. This upper stage is designed to train teachers for the School of Mechanics and prepare students for higher technical education.

In addition to the School of Mechanics in Kabul, two more such schools at the middle level, i.e., equivalent to the lower stage of the Kabul School of Mechanics, have also been established in Kandahar and Pakthia Provinces.

Afghan Institute of Technology. This institute was established in 1951; here greater emphasis is laid upon theoretical training. The graduates who enter employment are not mere 'skilled workers': they should be able to read the blueprints drawn up by the engineers and to work from them; they should be able to verify the practicability of projects submitted to them and to conduct and supervise these projects in the workshops; and they should have the ability and background to supervise persons responsible to them. The programme includes mathematics, applied science, shop courses, technical drawing, and specialized and general technical courses. During the first year all students follow a uniform course of basic subjects: English, mathematics, hand tools, Pushtu, Farsi, library work, sports, and supervised study. In the second year they have the opportunity to explore four areas: aeronautical, civil, electrical and mechanical engineering. The aeronautical course trains meteorologists and radio operators. The civil engineering course includes surveying, the study of building materials, and the theory and design of construction. The electrical course at present emphasizes communications, especially radio, and electrical power generation and its applications. The mechanical course includes both motor car repairing and the use of machine tools.

The medium of instruction in the institute is English. A special, intensive programme for teaching English has been established at the AIT by the experts who staff the institute's English department. During the first year it consists of 18 hours' teaching per week. As a result of this intensive training students acquire the ability to understand lectures and to read textbooks in English for the technical courses which they pursue for their remaining 2 years at the institute. The teaching of English continues throughout the 3-year school term. In the second year, the English course includes a review of English grammar, conversation, the reading of selected materials on scientific subjects, and composition. The third-year course adds the writing of business letters, the use of various forms, and report writing.

Agriculture. Training in agriculture is given at the School of Agriculture in Kabul. This school, which was established in 1925, admits pupils who have completed middle school and offers a 3-year course. During this period students receive practical training in agriculture. Theoretical training is given in English, mathematics, physics, chemistry, zoology, botany, animal and plant diseases, horticulture and agronomy. The school has its own experimental farm and workshops.

Commerce. The course lasts 6 years. The principal objectives are to produce a sufficient number of persons fully qualified to take up jobs in commercial organizations in the country, and to prepare selected students who show a high level of intelligence for higher training in business administration at the University of Kabul. The teaching programme is divided into two separate and distinct parts. The first stage of 3 years follows the same pattern of teaching as that of the secondary schools. In addition to this, a certain amount of training in economics is also given. Actual commercial correspondence and commercial subjects, such as accounting and book-keeping, are handled in the most simple and elementary manner.

The second stage is concerned with the actual vocational training. This stage also covers a period of 3 years, the whole of which is devoted to the teaching of economics and commercial subjects. The programme, which has been patterned on those of similar schools in Germany, Austria and Turkey, consists of economics, commercial correspondence, book-keeping, commercial geography, history of economics, technology, Islamic law, commercial arithmetic and mathematics. Typewriting takes an important place in the programme and English is taught side by side with Pushtu and Persian. Some of the teachers are Afghans, others of foreign extraction.

Arts and crafts. The most important school of this category is the School of Arts in Kabul which has departments of carpentry, bricklaying, tailoring, knitting and weaving, engraving and sculpture. Theoretical and practical training is given in this school and in addition to the national languages, Pushtu and Persian, German is also taught. Two more such schools have been established in Kandahar and Farah, but they teach only carpentry and bricklaying.

Home economics. Home economics has been included in the syllabus of all secondary schools for girls. Each school has a special section for regular classes in the subject. The remainder of the programme includes such subjects as sewing, knitting, cooking and child care. Foreign specialists have been imported for these sections, and with the co-operation of local experts, they have successfully drawn up a programme suited to the environment.

Other fields. Other fields of vocational education in Afghanistan include the teacher training institutes and theological schools, etc.

A large part of instruction at teacher training institutions has been devoted to teaching methods, handicrafts and agriculture. They are equipped with special experimental farms and workshops for woodworking and other handicrafts.

Theological seminaries are of two kinds: those which limit their lessons to traditional subjects and impart very little modern knowledge, and others which maintain a balance between religious and modern secular studies. Modern subjects taught in these institutions include science, mathematics, physics and chemistry and other subjects of social importance, such as history and geography. Graduates of such institutions join the Faculty of Islamic Law of the university.

Out-of-class activities

In all secondary schools in Afghanistan the students are given opportunities to take part in social activities. For example, there are school committees for cleanliness and sanitation, committees to arrange lectures and conferences, stage dramas and hold film shows, edit and publish the official organ of the school (if any), manage sports, supervise first aid programmes, scout activities and run the Junior Red Crescent Societies. These committees may have only a few members or a hundred or more students and they carry on their activities both within the school and outside.

Every school has a playground where the students practise individual and group sports every afternoon and form their own football, volleyball, hockey, basketball and other teams. The procurement and distribution of sports equipment is the duty of the Directorate General of Sports of the Ministry of Education; this department arranges matches, tournaments and athletics. The cost of sporting equipment, provided free to all sportsmen, is met out of the government budget. Prizes and trophies are also given by the Ministry of Education out of its own budget.

In certain secondary schools, particularly in boarding schools, clubs and co-operatives are set up by students with their own capital to provide some of their own school equipment and refreshments, etc.

TRENDS AND PROBLEMS

The number of secondary schools, whether academic or vocational, is still insufficient for the general needs of the country. Moreover almost all the secondary schools are of recent foundation and have not yet reached full development. One of the causes of the slow evolution of secondary education in this country is lack of finances. Although Afghanistan is spending huge sums on the development of educational facilities, the demands of the population, more and more of whom are sending their children to secondary schools, cannot be met. A rapid development of schools also means new buildings, more teachers and sufficient quantities of teaching materials. The only source of these is the State, therefore, despite the all-out efforts that are being made by the Government to meet these needs, the daily increasing demands on educational institutions and the unprecedented increase in the number of schools and students, together with the growing demand of the country for qualified technical personnel and secondary school graduates, make this a losing battle.

The economy of the country has also evolved during the past forty years with the attainment of political independence and the forging of economic and political

links with a large number of foreign countries. These changes have enabled the Government to make vigorous efforts for the amelioration of the economic plight of the people and raise their standard of living. This, in turn, has produced unprecedented activity. By establishing new factories, constructing dams and irrigation systems, reclaiming land for agricultural use, improving communications and roads, expanding imports and exports, introducing courses of adult education, encouraging education and training in modern technology, the Government has tried to improve the standard of living of the people and to prepare them for life in this machine age. This policy has inevitably increased the demand for secondary school graduates.

As yet, the desired standards of vocational education in Afghanistan are far from being reached, although the importance of this kind of education is being increasingly recognized, and the demands of industry and agriculture are effectively stimulating its development. A new plan to include vocational lessons in central as well as provincial schools has been drawn up and the day is not far off when vocational education will form part of the syllabus of all primary and secondary schools in Afghanistan.

While the development plans of the country have increased the need for graduates, the budget for the development of education has also been proportionately increased, so that opportunities are greater for the development of secondary school education (general and vocational) in Afghanistan.

[Text prepared by the Ministry of Education, Kabul, in November 1959.]

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STATISTICS

Population (mid-year 1958 estimate): 13,000,000.
Area: 251,000 square miles; 650,000 square kilometres.
Population density: 52 per square mile; 20 per square kilometre.

Summary of school statistics, 1953–57. Estimated enrolment at all levels of education was 141,500 students in 1957, representing little more than 1 per cent of the total population. In 1955, the latest year for which reasonably complete data are available, nearly 92 per cent of pupils were enrolled in primary schools, about 5 per cent in general secondary and teacher training schools at secondary level, 3 per cent in vocational institutions and under 1 per cent at the University of Kabul. Information on the proportion of girls enrolled at different levels of education is very incomplete. In 1954, girls made up only 8 per cent of the enrolment in primary schools and 18 per cent in secondary schools, and 53 women were attending the university; none were reported in vocational schools or teacher training courses. From the data available it appears that total enrolment at all educational institutions increased by about 27 per cent between 1953 and 1957 and the teaching staff at primary and secondary schools rose by 28 per cent over the same period. (See table.)

Educational finance, 1957. The total budget of the Ministry of Education for 1957 amounted to 164,755,751 afghanis (official exchange rate: 100 afghanis = 5.95 U.S. dollars), representing about 13 afghanis per inhabitant.

Sources. Afhanistan: Reports submitted by the delegate of Afghanistan to the Nineteenth and Twenty-first International Conferences on Public Education, Geneva, 1956 and 1958. See *International Yearbook of Education*, Volumes XVIII and XX, Paris, Unesco, and Geneva, International Bureau of Education.

SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools						
	Total	**1957**	...	[1]**4 288**	...	[2]**141 536**	...
	„	1956	...	[1]3 964	...	[2]126 092	...
	„	1955	...	3 408	...	111 658	...
	„	1954	653	3 191	212	105 978	7 977
	„	1953	571	2 926	182	103 659	6 828

1. All levels of education, but not including university teaching staff.

2. All levels of education, including university students.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Secondary							
General	Middle and complete secondary schools, public						
	Total	**1957**	...	[3] ...	...	[3] ...	...
	„	1956	...	[3] ...	...	[3] ...	...
	„	1955	...	[4] 381	...	[4] 5 900	...
	„	1954	25	207	36	3 576	648
	„	1953	24	201	34	3 267	467
Vocational	Vocational schools						
	Total	**1957**	...	[3] ...	...	[3] ...	...
	„	1956	...	[3] ...	...	[3] ...	...
	„	1955	...	269	...	3 400	...
	„	1954	20	178	—	2 452	—
	„	1953	20	177	—	2 585	—
Teacher training	Teacher training schools						
	Total	**1957**	...	[3] ...	...	[3] ...	...
	„	1956	...	[3] ...	...	[3] ...	...
	„	1955	...	[5] ...	...	[5] ...	...
	„	1954	3	43	—	801	—
	„	1953	3	43	—	879	—
Higher							
General and technical	University						
	Total	**1957**	**1**	...	...	[3] ...	...
	„	1956	1	...	...	[3] ...	...
	„	1955	1	51	...	758	...
	„	1954	1	69	—	682	53
	„	1953	1	68	—	625	49

3. Included with primary schools.
4. Including secondary teacher training.
5. Included in secondary general education.

ALBANIA

THE EDUCATIONAL SYSTEM

The educational system of the People's Republic of Albania is governed by the Constitution of the Republic and by a number of laws, all of which were promulgated after the liberation of the country (1944).

The following are some of the main legislative measures on education now in force:

1. Decree No. 2064 of 6 June 1955 (approved by Law No. 2251 of 4 April 1956), concerning popular education.

   This decree, which replaces the School Reform Law of 17 August 1946, defines the aims, structure and organization of education in the People's Republic of Albania, from pre-primary schools (kindergartens) to the institutes of higher education (now faculties of the State University). The educational system thus defined comprises: (a) pre-primary education (3-year course for children between 4 and 7 years of age); (b) general education: primary (4-year course for pupils between 7 and 11); first stage of secondary education (3-year course for pupils between 11 and 14); and second stage of secondary education (4-year course for pupils between 14 and 18); (c) vocational and technical secondary education (4-year course for pupils between 14 and 18); (d) higher education (4- to 5-year course for students between 18 and 22); (e) adult education, provided at schools of different types.
2. Decree No. 1352 of 1 November 1951 (approved by Law No. 1431 of 5 March 1952), concerning compulsory primary education.

   This decree, which replaces the Decree of 17 August 1946, defines the period of compulsory education, the duties of parents and the legislative measures which must ensure the children's enrolment and regular attendance at the primary school.
3. Decree No. 1448 of 12 June 1952 (approved by Law No.

1653 of 30 March 1953), concerning the 7-year period of compulsory education.

This decree authorizes the Minister of Education and Culture to adopt special measures with regard to the towns and villages which must apply the system of 7 years' compulsory education for children between 7 and 16 years of age.

4. Decree No. 732 of 21 September 1949 (approved by Law No. 760 of 12 January 1950), making it compulsory for citizens to learn to read and write.

This decree has co-ordinated all the efforts made since the Liberation with a view to eradicating illiteracy among persons between 14 and 40 years of age. Thanks to the application of this measure, illiteracy among persons of this age-group was completely eradicated by 1955.

5. Decree No. 2476 of 1 June 1957, concerning the establishment of the State University of Tirana.

This decree has made it possible to combine the existing institutes in a single institution of higher education, designed to train a permanent senior establishment and ensure the multilateral development of education, science and culture in Albania.

Apart from these legislative measures, there are special decisions taken by the Council of Ministers, namely:

1. Decision No. 421 of 10 September 1949, to ensure free housing and heating for village teachers who come from other regions of the country.
2. Decision No. 129 of 9 April 1955, concerning the standard model regulations of technical secondary schools. This decision has served as a model for the organization of these schools within a single system, for the enforcement of the rules, etc.

The highest state authority responsible for education is the Ministry of Education and Culture, which directs and supervises teaching and instruction as well as the execution of the state plans for general education applicable in schools of every category.

The Ministry of Education and Culture is guided in its work by the decisions and directives of the Party and the Government and its aim is to provide the younger generations with a communist education and to disseminate culture among the masses. In accordance with the Constitution, it offers all sections of the people the opportunity of attending the schools and cultural institutes. It plays an important part in the development of education, but the competent organs of the local authorities (executive committees of the district people's councils) play an equally important role. In fact, the co-operation of these organs of the local authorities is obligatory with respect to a great number of matters connected with education such as the provision of school buildings, equipment, furniture and teaching aids; the planning of the number of pupils to be admitted to the various schools and the execution of the plans; the approval of secondary school fellowships; the assignment of teaching posts within each district and the definition of the required qualifications; the appointment of teachers, headmasters and inspectors. General secondary schools are under the direct control of the local authorities.

The diagram on page 171 shows the structure of the educational system in Albania.

THE DEVELOPMENT OF SECONDARY EDUCATION

The opening of the first teacher training school at Elbasan, in 1909 (during the Turkish occupation), marked the institution of undenominational secondary education in Albania. This school was maintained with the help of funds provided by Albanian clubs and associations in Albania and abroad.

After the creation of the Albanian State in 1912, the first measures were adopted with a view to the organization of state education. New primary schools were opened, as well as a teacher training school at Bérat. During the first world war, the Albanian administrations operating in the zones occupied by foreign armed forces established, in the towns, simultaneously with the increase in the number of primary schools, upper primary schools providing a 2- or 3-year course, as well as three secondary schools: the national secondary school at Kortcha (1917), the 2-year teacher training school at Scutari (1918), and the labour school at Argyrocastro. In 1920, after the consolidation of the Albanian State, measures were taken with a view to unifying the school system and organizing general and vocational education. Primary education was made compulsory for children between 6 and 11 years of age.

Subsequently, changes mainly affecting secondary education were introduced into the school system by the Organic Law on Education of 27 July 1928, the Legislative Decree No. 54 of 28 September 1934 and the Law of 6 June 1938, to reform the secondary schools. Besides limiting the number of secondary schools these frequent changes lowered the standard of education, owing to the lack of stability. In 1938–39, the school system comprised:

1. A 5-year primary school.
2. Secondary education, provided at the gymnasium and *lycée* types of school, the teacher training schools, the commercial institutes and the vocational schools.

   The gymnasium type course consisted of two cycles, each lasting 4 years, and comprised two sections (classical and modern). The first cycle also prepared pupils for the teacher training schools and the commercial institutes.
3. Vocational education, which was given at the labour schools (2- or 4-year course) and the technical institute (8-year course following on primary education). The technical institute provided a lower course and a higher course, each lasting 4 years. The higher course was also open to pupils who had completed the 4-year course at a workshop school.

Between 1920 and 1939 (the year when Albania was occupied by fascist Italian forces) education was characterized, in general, by the shortage of primary schools, particularly in the villages, by the undue restriction of general secondary education, which had become a privilege of a minority composed of the ruling classes and the richest sections of the population, by the precarious conditions of secondary vocational and technical education, and by the total lack of higher education.

In 1938–39, there were: (a) 643 primary schools, with 1,340 teachers and 52,024 pupils (82 per cent of the population were illiterate); (b) 2,563 pupils attending schools of the first stage of secondary education; (c) 6 gymnasium type schools, with 817 pupils (second stage); (d) 3 teacher

training schools, with 675 pupils (second stage); (e) 2 vocational secondary schools, with 204 pupils; (f) 11 vocational schools (first stage), with 2,056 pupils.

After the liberation of the country and the establishment of the people's government, radical changes were introduced into the system, organization and contents of education in general.

The School Reform Law (17 August 1946) established an educational system with the following characteristics:

1. The duration of primary education was fixed at 4 years and primary education was made compulsory for children who had reached the age of 7 years.
2. The duration of the first stage of secondary education was fixed at 3 years and this stage was combined with the new 4-year primary school so as to form a 7-year school. This measure made it possible to develop secondary education first in the towns and then in the villages, and to extend the period of compulsory education gradually to 7 years.
3. The duration of the second stage of the secondary schools (gymnasium type, teacher training school, vocational school) remained fixed at 4 years (with certain exceptions).

The extension of the network of 7-year schools prepared the way for the gradual transition to the 11-year schools of general education and for the development of the network of vocational and technical schools.

The administration of the schools of general education, which formerly depended essentially on the Ministry of Education, has gradually passed into the hands of the local authorities, whose area of competence is constantly increasing.

The study plans and curricula of all types of schools have been radically modified. Greater attention is paid to the teaching of science and of Albanian (the pupil's mother tongue).

The institution and extension of higher education are due to the efforts of the people's government, set up after the liberation of Albania.

Legal basis

The principal laws and legal provisions now in force respecting general and technical secondary education have already been mentioned. Nevertheless among the measures which have influenced and still affect secondary education, special attention must be drawn to the following:

1. Law No. 1653 of 30 March 1953, relating to the 7-year period of compulsory education.
2. Decision No. 129 of the Council of Ministers of 9 April 1955, relating to the standard model regulations governing the *technicums* (technical schools).
3. Government Order No. 19 of 17 May 1952, concerning the training of a permanent senior establishment by means of vocational schools and training and refresher courses.
4. The regulations relating to the administration of educational establishments.
5. The regulations relating to the organization of examinations at the end of each school year.

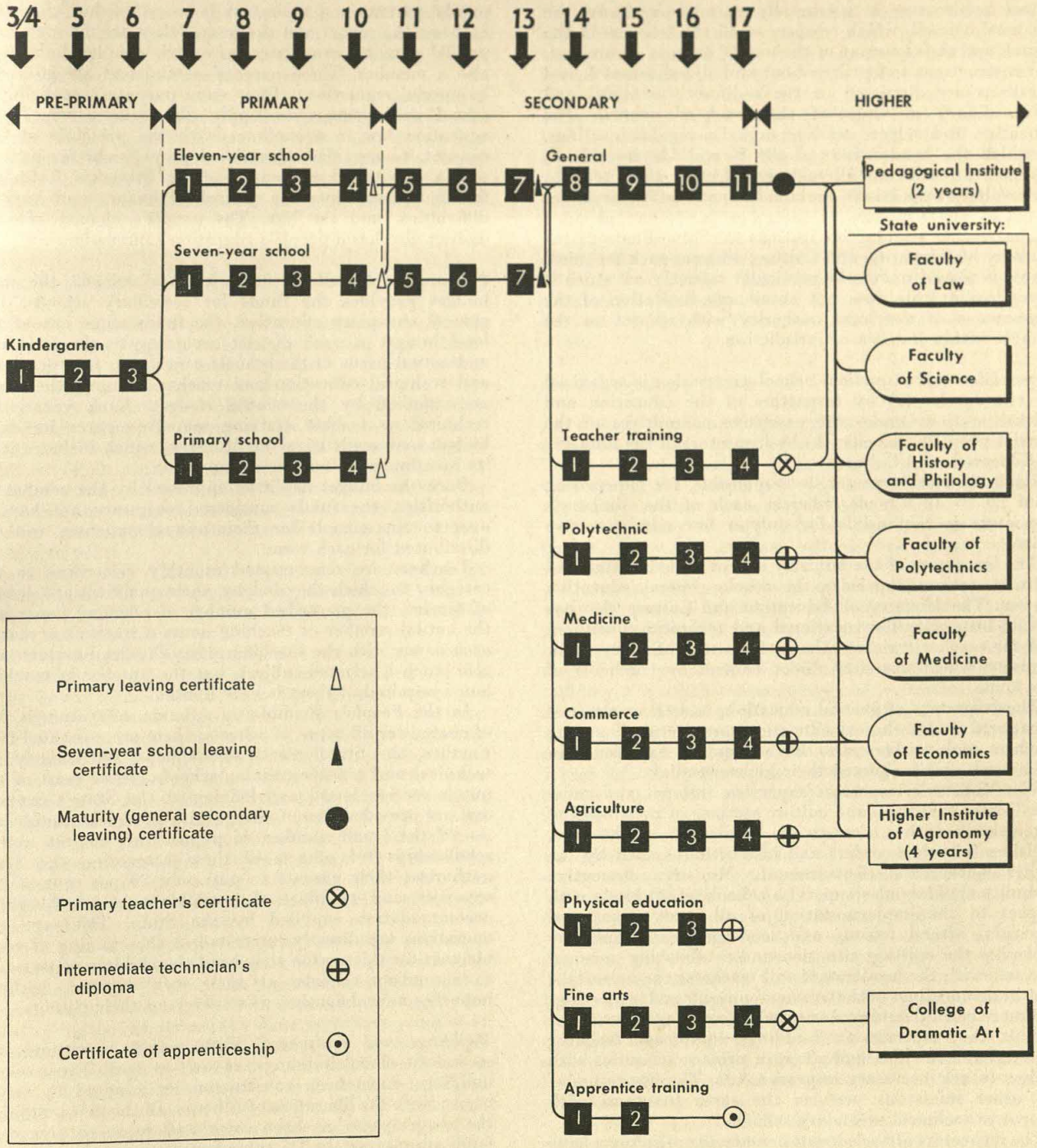
Administration

The plan for the organization of secondary education is established by the Ministry of Education and Culture, in accordance with the laws and other legal measures in force, and with the help of the bodies specially set up for that purpose. The Ministry is authorized to issue regulations, publish circulars and instructions and put out special publications concerning the administration of secondary schools. These documents may be discussed during larger meetings attended by competent persons not belonging to the Ministry. Attached to the Ministry of Education and Culture is a permanent advisory body, as well as a council specially set up to deal with teaching methods; but it is the Ministry itself which sees to the preparation of the curricula, textbooks and other teaching material, teaching aids, etc.

Control. In accordance with Law No. 2251 of 4 April 1956, concerning popular education, the Ministry of Education and Culture exercises control over general secondary education and teacher training, and, in co-operation with the other competent Ministries, over all vocational and technical secondary schools. It ensures the application of the law concerning the 7-year period of compulsory education and the enrolment of the prescribed number of pupils at general and technical secondary schools. It carries out its tasks through its various organs and through those of the local authorities, namely the education and culture sections of the executive committees of the district people's councils. In fact, general secondary schools (first and second stages) come under the authority of the district executive committee, which organizes, controls and supervises them, through its education and culture section, in accordance with the Ministry's instructions and with due regard to the existing needs. The Ministry's instructions are binding on the schools, but, at present, the competence of the local authorities is being extended, particularly with regard to the upkeep of secondary schools, material requisites and the assignment and transfer of teachers.

An Institute of Advanced Training acting under the Ministry assists with respect to methodological questions and the training of teachers. The executive committees of the main districts have a similar organ, but of a lower level, namely the pedagogical centre, where exchanges of experience as well as local refresher courses for teachers are organized.

The education and culture sections are in direct contact with the schools; they are not only technical bodies under the district executive committees, but also act as liaison members between the various educational establishments and the Ministry of Education and Culture. Every category of school of general education, as well as the pre-primary schools and evening schools for adults in the same district, are administered by that district's education and culture section. Every secondary school (including the fifth-, sixth- and seventh-year classes of the 7-year schools) has a headmaster and frequently an assistant headmaster. Special provisions and regulations give the headmasters and assistant headmasters sufficient powers to enable them to ensure the application of the laws, orders and circulars of the higher educational authorities. Every secondary


3/4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRE-PRIMARY
PRIMARY
SECONDARY
HIGHER
Eleven-year school
General
Seven-year school
Kindergarten
Primary school
Pedagogical Institute (2 years)
State university:
Faculty of Law
Faculty of Science
Faculty of History and Philology
Faculty of Polytechnics
Faculty of Medicine
Faculty of Economics
Higher Institute of Agronomy (4 years)
College of Dramatic Art
Teacher training
Polytechnic
Medicine
Commerce
Agriculture
Physical education
Fine arts
Apprentice training
Primary leaving certificate
Seven-year school leaving certificate
Maturity (general secondary leaving) certificate
Primary teacher's certificate
Intermediate technician's diploma
Certificate of apprenticeship

school headmaster is assisted by an advisory body, the teachers' council, which consists of all the teachers of the school, and the chairman of the pupils' parents' committee. The instructions to be carried out and all important school questions are discussed at the ordinary (monthly) and extraordinary meetings of the teachers' council. The education and culture sections organize regular meetings, in which the headmasters of the 7- and 11-year schools take part, to discuss all matters affecting their schools, the results of inspections, the circulars and various directives issued by the Ministry.

The teacher training institutions are subordinate to the Ministry of Education and Culture, whereas each technical school is placed under the particular ministry on which it depends, but this does not entail any limitation of the competence of the local authority with respect to the schools within its area of jurisdiction.

Supervision and inspection. School supervision is organized on two levels: (a) by inspectors of the education and culture sections under the executive committees of the district people's councils; (b) by inspectors of the Ministry of Education and Culture.

Each district inspector is responsible for supervising from 20 to 30 schools, whereas each of the Ministry's inspectors is responsible for only a few administrative units.

The inspectors of the Ministry and of the education and culture sections supervise the whole general education system. The Ministry of Education and Culture also has special inspectors for vocational and technical education, and for teacher training; the same is true of every other ministry which exercises direct control over schools of this kind.

The inspectors of general education, as well as those of vocational and technical education, are recruited among teachers and workers who have acquired experience in their work and completed their higher studies.

The Ministry's inspectors supervise, instruct and assist the district education and culture sections in their work of organization with a view to the application of the laws, decisions, circulars, orders and instructions issued by the higher authorities (Government, Ministry, Executive Committee). They also supervise schools of all kinds with respect to the implementation of all study plans and curricula, attend lessons and lend their assistance by analysing the existing situation and establishing personal contacts with the headmaster and teachers; they also take part in the meetings of the teachers' councils and in meetings of a more general nature. As regards the management of the schools, they supervise the buildings, equipment, teaching material and the like, and adopt or propose measures with a view to any necessary improvements. The inspectors of the other ministries perform the same functions with respect to technical secondary schools.

The inspectors of the education and culture sections have the same duties and responsibilities, but while exercising direct control, they maintain closer relations with the headmasters and teachers of the schools concerned.

Apart from the state authorities, which give assistance and exercise control, there are social organizations set up inside the schools themselves. These bodies consist of the pupils' parents and their task is to establish a close link between the school and the home; they are directed by a pupils' parents' committee, of which the headmaster is also a member. These parents' committees are governed by special regulations. Their main purpose is to help the school management to apply the compulsory 7-year education law in accordance with the principle of free consent, to organize educational propaganda for parents with a view to the application of the 'Students' Rules', to find better solutions for the school finance and hygiene difficulties, and the like. The people's council of each district also has a people's education commission.

Finance. As for all the other kinds of schools, the state budget provides the funds for secondary schools. For general secondary education, the funds come out of the local budget of each district according to the estimates and actual needs of the schools concerned; for vocational and technical education and teacher training, the funds are supplied by the central budget. Each vocational, technical or teacher training school prepares its draft budget and sends it to the Ministry, which includes it in its own budget after due examination.

Once the budget has been approved by the competent authorities, the funds considered necessary are handed over to the schools for their annual expenses and are distributed for each term.

Teachers are remunerated monthly, according to the category to which they belong, their qualifications, length of service, the prescribed number of teaching hours and the actual number of teaching hours a week or a year in accordance with the teaching plan. The headmasters may also teach a selected subject, but the number of teaching hours required of them is very limited.

In the People's Republic of Albania, education is free of charge for all types of schools; there are no school fees. Further, the State grants scholarships, particularly for technical and teacher training schools, where most of the pupils receive board and lodging at the State's expense and are provided free of charge with the books they need. As to the small number of pupils who do not obtain scholarships for schools of these categories, the State authorizes their parents to pay only 20 per cent of the expenses and to place their children in the boarding accommodation supplied by the State. The rural co-operatives are directly interested in the training of technicians; for this reason they send the children of peasants to secondary schools, at their own expense, without imposing any obligation whatsoever on their parents.

Buildings and equipment. With a few exceptions, all secondary school buildings, as well as most 7-year school buildings, have been constructed, or adapted to actual needs, since the liberation of Albania. In the new buildings, the room space has been calculated so as to give each pupil approximately 335 cubic feet of space; the plans put into effect during the last few years have increased this figure to approximately 583 cubic feet for each pupil.

School welfare services. Welfare services have been established at the secondary schools; they are responsible for the health, cleanliness and minor material needs of the

pupils and upkeep and orderliness of the school buildings.

As regards the pupils' health, there are complete medical inspections (general medicine, radiology, dentistry) and each pupil has his own health record book.

During the last few years, with a view to ensuring a good material preparation for the new school year, the practice of having schools sponsored by state enterprises or co-operatives has been successfully followed. Every secondary school is sponsored by an enterprise which maintains close contacts with it and thus ensures liaison between the school and practical life.

TYPES OF SECONDARY EDUCATION

Pupils who complete their primary education have access only to the first stage of secondary education. The schools providing this type of education give a 3-year course (fifth-, sixth- and seventh-year classes). The second stage of secondary education comprises 4 years' studies following immediately after the course of the 7-year school and is sub-divided into general education and vocational and technical education. General education is continued in the eighth-, ninth-, tenth- and eleventh-year classes, whereas vocational and technical education is characterized by a different denomination of the classes (first-, second-, third- and fourth-year).

Vocational and technical education is provided at technical schools (*technicum*), apprenticeship schools (vocational schools of the first stage), teacher training schools and art schools.

In order to guide pupils and their parents and enable those concerned, after they have completed their studies at the 7-year school, to continue their general education or to choose the most appropriate technical or vocational school, the school managers carry out organized propaganda, explaining the aims of the schools as well as the possibilities and prospects which they offer their pupils after they have completed their studies there. Further, the school managers organize visits and meetings in the schools for the benefit of the seventh-year class pupils. Every vocational and technical school usually publishes a booklet containing information about the courses of study and work, the school buildings and boarding facilities, the school traditions and the conditions of admission.

Pupils who have completed their secondary education can continue their higher studies as follows: (a) those who have completed their studies at a general secondary school (11-year school) can enrol at any university faculty or school of higher education; (b) those who have studied at a technical secondary school (*technicum* of any kind) can undertake higher studies at a university faculty or a school of higher education providing the same specialized teaching as the *technicum* they attended; (c) those who have attended a secondary teacher training school can follow the courses of a university faculty or of a school of higher education providing training for teachers; (d) those who have studied at a secondary school of fine arts (advanced art school) are entitled to engage in higher studies in a faculty of literature either at the university or at another higher educational establishment.

At the general secondary schools (fifth-year class to the eleventh-year class), the courses begin on 1 September and they end between 4 and 22 June (according to the classes and according as the pupils are preparing for the annual examinations or the school-leaving certificate). The school year is divided into three terms: first term, 1 September to 27 November (holidays from 28 November to 3 December); second term, 4 December to 28 February (holidays from 1 to 10 March); third term, 11 March to 4 or 22 June (summer holidays from 5 or 23 June to 31 August). The school year covers 33 school weeks.

At the vocational and technical schools (from the first-year class to the fourth-year class), including the art school, the courses begin on 1 September and end on 30 June (or 15 July). The school year is divided into two semesters, 1 September to 25 January and 8 February to 30 June or 15 July. The school year comprises 36 school weeks.

General secondary schools

As already indicated, general secondary education is provided at two types of schools: (a) the incomplete 7-year secondary school (fifth-, sixth-, and seventh-year classes); (b) the complete 11-year secondary school (from the fifth-year class to the eleventh-year class).

Corresponding to these schools and bearing the same names, there are evening schools and correspondence schools for adult workers.

The tasks of these schools are as follows: (a) the first stage of general secondary education (classes 5 to 7) provides pupils with elementary scientific knowledge and initiates them in productive work with a view to rendering them fit for practical life, for active participation in the building of a socialist community and for further studies at secondary schools of the second stage; (b) the second stage of general secondary education (classes 8 to 11) continues and completes the instruction given at the 7-year school by providing pupils with elementary polytechnic knowledge and by preparing them for higher studies.

Pupils who successfully complete the courses given at the above-mentioned schools of general secondary education are entitled to continue their studies at a higher level without any hindrance. Adult pupils following evening or correspondence courses enjoy the same rights.

With the exception of the art schools, there is no special selection of pupils for schools of any type or category. The boards attached to the district executive committees for the purpose of approving scholarships, take into account the state plan to satisfy the country's needs for a staff of qualified senior workers, as well as the real needs of the different sectors within their jurisdiction, and endeavour to find employment for these workers in their native region or in the vicinity thereof.

The study courses of the fifth-, sixth- and seventh-year classes include systematic courses in Albanian (grammar and spelling), as well as the reading of literary texts devoted to a given subject (fifth-year class) or chosen according to an historical or chronological criterion (sixth- and seventh-year classes).

The study of Albanian which is continued in the eighth- and ninth-year classes, includes questions of morphology

TIME-TABLE FOR GENERAL SECONDARY SCHOOLS
(in periods per week)

Subject	Classes (year)						
	5	6	7	8	9	10	11
Albanian language and literature	9	7	6	6	6	5	4
Mathematics	6	6	6	6	5	5	5
History	2	3	2	2	2	2	2
Study of the Constitution	—	—	—	—	—	—	2
Geography	3	2	2	2	1	2	—
Biology and geology	2	3	2	2	2	2	—
Hygiene	1	—	—	—	—	—	—
Physics	—	2	3	—	3	4	4
Astronomy	—	—	—	—	—	—	2
Chemistry	—	—	2	2	2	2	3
Psychology	—	—	—	—	—	—	2
Russian	3	3	3	4	4	3	3
Modern language other than Russian	—	—	—	2	2	2	2
Physical culture	2	2	2	2	2	2	2
Drawing	1	1	1	—	—	—	—
Technical drawing	—	—	—	1	1	1	1
Singing and music	1	1	1	1	—	—	—
Practical work	2	2	2	2	2	2	2
Total	32	32	32	32	32	32	34

and syntax. In the eighth-year class, the literature course includes the study of the complete texts of three or four small works by well-known Albanian authors; this study bears upon the contents, style and artistic form of the texts. In the ninth-, tenth- and eleventh-year classes, the syllabuses include a systematic historical and literary study of Albanian literature and of foreign literature, bearing mainly on certain great authors.

Arithmetic is taught during the fifth year and the first half of the sixth year, the study of this subject is continued during the seventh year until pupils are able to solve quadratic equations. In the fifth and sixth years, pupils acquire elementary knowledge of geometry through arithmetic, and in the seventh year they begin a systematic study of geometry.

The study of algebra begins in the seventh year and is continued in the other classes until pupils have learnt the rudiments of mathematical analysis. The complete study of geometry is organized as follows: plane geometry in the eighth and ninth years; stereometry in the tenth year; plane trigonometry in the eleventh year.

A first course in physics and chemistry is given in the seventh year.

A second and complete course in physics, which bears upon mechanics, heat, electricity, optics, the atom and the corresponding laboratory work, begins in the ninth year.

The systematic study of chemistry, which begins in the eighth year, relates mainly to the following: elementary theoretical knowledge of chemistry based on the molecular and atomic theory; chemical nomenclature; periodical classification of the elements; phenomena of chemical analysis and chemical statics; general properties of metals and a study of some of the metals which are of the greatest practical importance; fundamental principles of general chemistry and of organic chemistry. The practical agricultural work in the workroom and the school garden (fifth-, sixth- and seventh-year classes) comprises cardboard work, papier mâché work and woodwork, as well as work relating to vegetable growing, agricultural plants, the breeding of small domestic animals, etc.

The syllabuses of practical and agricultural work for the eighth-, ninth-, tenth- and eleventh-year classes include certain general technical subjects (fitting in the eighth-year class, study of machinery in the ninth-year class, automobiles or tractors and electrotechnics in the eleventh-year class). In the tenth-year class, the practical work relates to industrial or agricultural production. These subjects change according to the region in which the school is situated.

The teaching methods depend, firstly, on the nature of the subjects taught, and, secondly, on the age of the pupils, the level of studies of the different classes, etc. In this respect, teachers find general information in the syllabuses and the accompanying instructions, the texts and handbooks used for the teaching of the various subjects, special educational publications, methodological works, etc.

Achievement testing. A system of 5 marks is used for the appraisal of the pupils' results. Pupils who obtain 5, 4 or 3 marks are entitled to promotion, whereas those who obtain only 2 or 1 are not. The results are communicated to those concerned at the end of each school period (term or semester), and, at the end of the school year, they receive marks for all the work they have done during that year. For the reports at the end of each term or semester, account is taken of the marks obtained by each pupil for his oral and written work as well as for his homework, but this is not done mechanically by adding up or dividing these marks. Teachers also take into consideration the pupil's progress during the period concerned (a drop in the pupil's marks from 4 to 3 and then to 2 is by no means appraised in the same way as progress from 2 to 3 and then to 4, although the arithmetical mean is the same in both cases). The end of the year results are similarly appraised, but the results of the different periods of the school year are taken as the basis for this appraisal.

In the seventh- and eleventh-year classes, as well as in the terminal classes of the technical secondary schools and teacher training schools, there are special examinations for those wishing to enter a school at a different level. Formerly, end of the year examinations existed for the other classes, but they have been abolished. These examinations for promotion do not include all the subjects taught. As regards the subjects not covered by the examination the annual results are mentioned on the certificate. The following procedures are adopted as regards the subjects set for examination: if the final marking at the end of the year is 5, 4 or 3, the pupil is entitled to sit for the examination and his examination marks are noted on the certificate. In order to obtain promotion from the seventh-year class, the pupil's marks for the end of the year examination must be equivalent to the 'fair' mark. If he obtains a lower mark in one or two subjects he must sit for the examination again in the autumn. If, in autumn, he again fails, even in one subject only, he must spend another year in the same class. In the eleventh-year class, there is a final examination which is open to pupils who, during the year, have obtained 5, 4 or 3 marks for all subjects, including those set for this examination. Pupils who are not admitted to the final examination must pass a special examination during the following school year in

order to be able to sit for the final examination. Those who fail to pass the final examination are entitled to sit for it again at the end of the following school year. Pupils who are not admitted to this examination or who fail to pass it are not entitled to continue regular studies, but they can study on their own and sit for the examinations as outside candidates.

The examinations are held in the presence of the state boards of examiners which must include the following persons: the teacher in charge of the subject set for examination, one or two other teachers who teach the same or a related subject, the headmaster of the school concerned and a representative of the education and culture section (for the seventh-year class) or of the Ministry (for the eleventh-year class).

Teachers. At schools of the first stage of general secondary education, teachers must have completed, at a 2-year teacher training institute, the courses of the faculty corresponding to the subjects they are to teach. At schools of the second stage of this branch of education, teachers must have studied for 4 years at the university faculty corresponding to the subjects they are to teach. In both cases, teachers are appointed and assigned to their first post by the Ministry of Education and Culture. Any subsequent transfers are decided by the local authorities.

Vocational and technical schools

Technicum. The *technicum* school is a state institute, established for the purpose of training intermediate technical workers for the different branches of production (industry, agriculture, handicrafts) as well as for the various branches of administration (economists, accountants, etc.) and physical education. There are six types of *technicum:* industrial, agricultural, zootechnic, economic, medical, and those specialized in physical instruction.

The industrial *technicum* is the most highly developed and comprises the following schools: the *Polytechnicum* '7 November', which has three sections (engineering, electricity, mineralogy and geology); the petroleum *technicum;* the construction *technicum.* The agricultural type has developed considerably and consists of four schools. Each of the other types of *technicum* comprises only one school. There are in all 11 *technicums*, including the physical education *technicum*, where the course lasts only 3 years, whereas at the others it lasts 4 years. The courses at the *technicums* are all given at the secondary level.

The mode of recruitment of pupils, who all come direct from the seventh-year classes, has already been described.

The subjects taught at the *technicums* are divided into two main groups: general culture (Albanian language and literature, foreign language, mathematics, history, etc.); technical subjects (general and special). The following table gives a general idea of the allotment of time to these groups of subjects and to practical training in the main types of *technicum.*

The total number of hours indicated in the table also includes the hours spent in laboratory work.

The general cultural subjects are included in the syllabuses for the first 3 years, whereas the teaching of the technical subjects begins only in the third year, except in one particular case when it begins in the second year. It is during the third year that emphasis is placed on the specialized teaching particular to each *technicum.*

ALLOTMENT OF TIME IN *TECHNICUMS*
(in hours for entire course)

Type of *technicum*	General cultural subjects	Technical subjects	Practical work	
			at school	in production
Industrial . .	1 840	2 110	500–850	300–700
Agricultural . .	1 740	2 060	640	900
Economic . . .	1 800	2 600	—	360

One day per week (6 hours) is devoted to practical work (except at the agricultural *technicum*, where this work takes place during different seasonal periods).

Every semester, pupils are ranked in their order of merit and, at the end of each semester, they sit for an examination on the subjects included in the curriculum. At the end of the course, pupils of the industrial *technicum* sit for the examinations for the diploma, before a special state board of examiners whereas pupils of the other *technicums* sit for state examinations bearing on the three or four most important subjects. Successful pupils of each *technicum* receive the intermediate technician's diploma.

School results are marked in accordance with the same criteria as those applied in the general secondary schools.

At the *technicums*, the time prescribed for each class is two consecutive hours.

In accordance with the general methodological instructions, teachers employ particular teaching methods according to the requirements of each subject and each class and with due regard to their own personal experience. For technical subjects, in respect of which there are no directives, the commissions responsible for the different subjects play an important role. They organize meetings which discuss the means of raising the scientific and educational level of the courses and of comparing the experience of the various teachers.

Teachers of general cultural subjects are trained and recruited in the same way as teachers at schools of the second stage of general secondary education. They must have completed special higher studies at the faculties of engineering, medicine, agriculture, etc.; and, in accordance with the most recent provisions, they must have completed at least 3 years' practical experience in productive work before being posted to a school. In addition to the permanent teaching staff, the technical courses are given by engineers or highly qualified technicians who are engaged in other work outside these schools. Nevertheless the number of these teachers is diminishing, for the number of permanent teachers specially trained for the *technicums* is constantly increasing.

Apprenticeship schools (elementary vocational schools). Apart from the *technicums*, which train intermediate technical workers whose diplomas entitle them to undertake higher studies, there is a number of elementary vocational schools, providing a 1- or 2-year course for training skilled workers for industry, the building trades, and agriculture. The industrial vocational schools are

called apprenticeship schools, and the vocational schools for agriculture are known as agricultural courses. The former are attached to productive enterprises (factories, mines, work yards, etc.). They are open to pupils who have completed their studies at the 7-year school; the school week consists of 6 days, 3 for class work and 3 for practical work. Pupils who successfully complete their studies at these schools have acquired specialized training in a particular trade: turning, machinery fitting, masonry, carpentry, etc.

Those wishing to do so can continue their studies at a *technicum*, where they are admitted to the first-year class.

Teacher training schools

There is only one type of teacher training school; the course lasts 4 years (8 semesters) and follows immediately after the 7-year period of compulsory education. Internal examinations are held at the end of each semester and state examinations at the end of the 4-year course; successful candidates are entitled to teach in schools.

Students at the teacher training schools are mostly of peasant origin and benefit by scholarships or board and lodging facilities in the state boarding schools, where they pay only 12 per cent of the expenses.

As already indicated, these schools do not recruit their students on a selective basis.

The teacher training schools are directly subordinate to the Ministry of Education and Culture, which deals with questions relating to curricula, textbooks, staff and finance; but the competent organs of the local authorities have the right to supervise these schools. The curricula include subjects of general education as well as pedagogic matters. The general education which students acquire at the teacher training schools is virtually the same as that acquired by pupils at the schools of the second stage of general secondary education (from the eighth-year class to the eleventh-year class), except for the fact that certain subjects, particularly mathematics, are simplified. Special textbooks for these subjects have been prepared. The total number of teaching hours for the 4 years is 4,450, of which 3,757 are devoted to subjects of general education and the rest to teaching theory and practice. Great importance is attached to the teaching of Albanian.

Annexed to every teacher training school is a lower primary school where student teachers attend lessons and practise teaching.

Teachers at the teacher training schools are carefully selected by the Ministry of Education and Culture; they must not only possess the prescribed university qualifications (diploma conferred on the termination of higher studies) but must have gone through the required probationary period. Teachers at the lower primary schools annexed to the teacher training schools are also carefully selected.

Schools of fine arts

The art school which was established after the Liberation, provides second stage courses in secondary education, first stage courses, and in the case of a few special subjects, primary courses. Studies last 11 years, beginning from the first-year primary class. The fifth-, sixth- and seventh-year classes have a regular course in general education; pupils devote 3 or 4 hours more per week to learning special subjects. Pupils of the eighth-, ninth-, tenth- and eleventh-year classes (Classes 1 to 4) work approximately from 32 to 40 hours per week; for these pupils the number of hours of general culture represents from 50 to 60 per cent of the total number of class hours.

The task of this *lycée* is to train intermediate specialists for the various arts: plastic arts, music, the theatre. Pupils are recruited on the basis of two competitive examinations, the first is held before a district examining board, whereas the second examination which is reserved for those who passed the first test is held before an examining board constituted at the school itself. Students who pass the examinations with honours can obtain employment at one of the various art institutions, with the right to continue their higher education at the faculty of history and philology (faculty of letters) of the State University.

Out-of-class activities

The participation of pupils in school government and school life is a characteristic feature of general and technical secondary schools and teacher training schools. In fact, pupils of the fifth-, sixth- and seventh-year classes are grouped in pioneer organizations and those of the eighth-, ninth-, tenth- and eleventh-year classes, in the youth organization. These organizations, by ensuring the pupils' participation in school life, give valuable assistance to the school management and teachers. Thus, for instance, the pupils themselves maintain order and discipline during the recreation periods, not only in the classrooms, but also in the corridors and on the playgrounds. Further, various social activities are organized on the occasion of holidays together with artistic entertainments and group excursions; the pupils are also responsible for cleaning the premises and maintaining the gardens and playgrounds.

In order to develop their talents and to make teaching and learning living things the pupils, with the help of their teachers, have created various literary, artistic, scientific and technical clubs, as well as naturalists and sports clubs. These clubs organize special activities on the occasion of holidays and important events in the life of each school.

Pupils also take part in various sports and sporting competitions. For that purpose, they organize athletic, football, volley-ball and wrestling teams and matches are held between the different schools.

The art movement is also being given full play at the present time in the schools. Artistic shows of various kinds are organized not only at the end of each school year, but often at the end of each term or semester.

Apart from all this, secondary school pupils profit by their holidays by doing useful work in the farm co-operatives and the productive centres. They have also begun, particularly during the last two or three years, to take an interest in the discovery of mineral deposits.

Thus, out-of-school activities not only contribute to the pupils' intellectual and aesthetic development, but they also make it possible to give this development a social meaning by bringing it into closer connexion with the country's material situation and its general progress.

TRENDS AND PROBLEMS

The various explanations given above show that the main features in the development of secondary education in the People's Republic of Albania, particularly during recent years, are as follows:

1. The organization of this branch of education in two stages has rendered possible the gradual extension of the first stage, integrated in the 7-year school, to the entire country, as well as the gradual transformation of a large number of 7-year schools into 11-year schools, beginning with the most populated towns and centres.
2. Vocational and technical secondary education and teacher training attract a considerable number of the pupils who have completed their studies at the 7-year schools and wish to complete their secondary education. This makes it possible to train technical secondary school teachers, who will become more and more necessary as the national economy develops.
3. Secondary education for adult workers is an effective means of enabling those interested to complete their secondary studies without interrupting their work. The secondary evening schools and correspondence schools have largely helped to develop the aptitudes of young workers and this opportunity must be extended to all those who have not had or will not have the possibility of completing their secondary education.
4. The possibility of adapting the plans of study more and more so as to link science to practical work and school life to everyday life has been a matter of great concern during the last four or five years and the competent authorities are devoting their most earnest attention to the matter.

At present the main requirement is to ensure an increasingly better organization of the second stage of secondary education and a better distribution of the pupils between general secondary education and vocational and technical secondary education.

Since the Liberation, Albania has been laying the foundations of a system of secondary education in accordance with the needs of its economic, social and political development.

[*Text prepared by the Albanian National Commission for Unesco in September 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 1,507,000.
Area: 11,100 square miles; 28,748 square kilometres.
Population density: 136 per square mile; 52 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment in educational institutions at all levels was nearly 234,000 pupils, representing 16 per cent of the population. There were, in addition, some 16,500 people attending adult education courses. Of the school-going population, 7 per cent were pupils in kindergartens, nearly 86 per cent in primary schools, 2 per cent in general secondary schools, under 3 per cent in vocational courses, 1 per cent in teacher training schools and 1 per cent at higher educational institutions. Over a quarter of primary pupils were in schools with 7-year courses and the remainder were in 4-year courses. Girls made up 46 per cent of the enrolment in primary schools compared with 45 per cent in 1953/54, and 38 per cent in general secondary schools against 34 per cent at the beginning of the period under review. At teacher training courses women were over one third of total enrolment and 15 per cent at higher educational institutions. The teaching staff at all levels of education numbered nearly 8,400 in 1957/58 an increase of 26 per cent over 1953/54. At most levels of education recent data on numbers of women teachers are lacking. The pupil-teacher ratio in primary schools was 30 in 1957/58 against 32 in 1953. In general secondary schools, however, the ratio was 21 compared with 16 in 1953.

During the period under review, enrolment increased by over 150 per cent in general secondary schools, by 15 per cent in primary schools, and students in higher educational institutions trebled. On the other hand, enrolment appears to have declined in technical education and in secondary teacher training schools. (See Table 1.)

Enrolment trends in secondary education, 1950–57. Over the 8 years under review, enrolment in general secondary education more than trebled and the proportion of girls increased from 27 per cent to 38 per cent. Enrolment in vocational education declined somewhat from the peak in 1952 and in secondary teacher training schools enrolment has fluctuated from year to year. Average enrolment in all branches of secondary education increased from 10,000 in the period 1950–54 to 13,000 in the three years 1955–57 and the ratio of enrolment to estimated population 15 to 19 years old passed from 8 to 9 over the corresponding periods. (See Table 2.)

Educational finance, 1958. Total expenditure in the 1958 State Budget for Education, Culture and Social Affairs amounted to 4,971.5 million lekë. (Official exchange rate: 100 lekë = 2 U.S. dollars.) Details of the proportion spent on education are not available.

Source. Albania: Directorate of Statistics, *Statistical Yearbook of the People's Republic of Albania*, 1958, 1959.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens						
	Total	**1957/58**	**330**	**700**	**700**	**17 148**	...
	,,	1956/57	303	639	639	16 533	...
	,,	1955/56	289	606	606	15 868	...
	,,	1954/55	276	570	570	15 100	...
	,,	1953/54	254	506	506	14 405	7 006
Primary	Primary schools (4-year course)	1957/58	2 249	4 523	...	157 532	74 174
	Higher primary schools (7-year course)	1957/58	400	2 168	...	42 882	17 964
	Total	**1957/58**	**2 649**	**6 691**	**...**	**200 414**	**92 138**
	,,	1956/57	2 584	6 353	...	188 101	86 962
	,,	1955/56	2 515	6 007	...	179 973	82 729
	,,	1954/55	2 473	5 748	2 044	176 511	81 719
	,,	1953/54	2 423	5 491	2 006	174 990	79 356
Secondary							
General	Secondary schools						
	Total	**1957/58**	**29**	**250**	**...**	**5 180**	**1 948**
	,,	1956/57	17	203	...	4 147	1 510
	,,	1955/56	7	150	...	2 930	1 087
	,,	1954/55	7	139	32	2 326	901
	,,	1953/54	7	123	27	2 010	687
Vocational	Technical schools	1957/58	5	101	...	1 855	...
	Industrial schools	1957/58	4	20	...	766	...
	Commercial schools	1957/58	4	25	...	354	...
	Agricultural schools	1957/58	3	80	...	1 800	...
	Medical schools	1957/58	5	26	...	871	...
	School of Fine Arts	1957/58	1	41	22	249	63
	Other schools	1957/58	3	30	...	505	...
	Total	**1957/58**	**25**	**323**	**...**	**6 400**	**...**
	,,	1956/57	25	326	...	6 578	...
	,,	1955/56	24	321	...	6 395	...
	,,	1954/55	26	305	...	6 140	...
	,,	1953/54	29	293	...	7 019	...
Teacher training	Teacher training schools						
	Total	**1957/58**	**11**	**131**	**40**	**2 369**	**813**
	,,	1956/57	11	124	30	2 026	625
	,,	1955/56	10	133	45	2 140	689
	,,	1954/55	10	115	41	2 124	687
	,,	1953/54	10	132	46	2 550	756
Higher							
Teacher training	Teacher training schools						
	Total	**1957/58**	**1**	[1] ...	[1] ...	[2] **253**	[2] **96**
	,,	1956/57	1	[1] ...	[1] ...	[2] 181	[2] 83
	,,	1955/56	1	[1] ...	[1] ...	[2] 158	[2] 64
	,,	1954/55	1	[1] ...	[1] ...	[2] 104	[2] 36
	,,	1953/54	1	[1] ...	[1] ...	[2] 100	[2] 41
General and techncial	University of Tirana	1957/58	1	[3] 265	...	2 184	320
	Institute of Agriculture	1957/58	1				
	Total	**1957/58**	**2**	[3] **265**	**...**	**2 184**	**320**
	,,	1956/57	2	[3] 208	...	1 798	286
	,,	1955/56	2	[3] 156	...	1 437	227
	,,	1954/55	2	[3] 107	...	1 136	171
	,,	1953/54	2	[3] 77	...	757	128
Adult	Primary night schools	1957/58	[4] ...	[4] ...	[4] ...	11 470	...
	Secondary night schools	1957/58	[4] ...	[4] ...	[4] ...	2 829	...
	Two-year teacher training schools for workers	1957/58	[4] ...	[4] ...	[4] ...	[5] (73)	...
	Vocational schools for workers	1957/58	[4] ...	[4] ...	[4] ...	1 161	116
	Higher courses for workers	1957/58	[4] ...	[4] ...	[4] ...	914	220
	Total	**1957/58**	[4] **...**	[4] **...**	[4] **...**	**16 447**	**...**
	,,	1956/57	[4] ...	[4] ...	[4] ...	17 179	...
	,,	1955/56	[4] ...	[4] ...	[4] ...	15 215	...
	,,	1954/55	[4] ...	[4] ...	[4] ...	8 559	...
	,,	1953/54	[4] ...	[4] ...	[4] ...	6 742	...

1. Included in higher general and technical.
2. Two-year course only. Data for senior Teacher Training Institute are not available. In 1954/55 this institute enrolled 243 (F.64) students in the 4-year course.
3. Including teachers of higher teacher training and night courses.
4. Included with corresponding type of day school.
5. Already counted under regular secondary teacher training.

2. TRENDS IN SECONDARY EDUCATION, 1950–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1950	1 550	27	*2 963	...	1 935	47			
1951	1 571	27	5 095	...	2 442	34			
1952	1 640	30	7 101	...	2 591	34	10	126	*8*
1953	2 010	34	7 019	...	2 550	30			
1954	2 326	39	6 140	...	2 124	32			
1955	2 930	37	6 395	...	2 140	32			
1956	4 147	36	6 578	...	2 026	31	13	144	*9*
1957	5 180	38	6 400	...	2 369	34			

ANDORRA

The Valleys of Andorra form an independent State in the Pyrenees, the political status of which is regulated by agreements going back to mediaeval times. Andorra is placed under the joint suzerainty of the President of the French Republic and the Bishop of Urgel in Spain; the two Co-Princes are represented in Andorra by the Viguier de France and the Viguier Episcopal.

Custom is the main source of law. Heads of families are entitled to choose any of various forms of education for their children: education at home; at a private school; at schools established in Andorra at the instance of the Co-Princes; at schools outside Andorra. At present, France and Spain each maintain one or two primary schools in each village. There are also a number of nursery schools.

The French schools are mixed schools operating in accordance with the French regulations as regards the recruitment, remuneration and supervision of teachers, curriculum, time-table, certificates and examinations—the only difference being that the study of Catalan is included in the curriculum.

These schools come under the inspectorate of primary schools at Prades (in the *département* of Pyrénées-Orientales) and, more generally, under the *académie* (education authority) of Pyrénées-Orientales. The purchase and maintenance of school buildings and furniture are the responsibility of the parish; school supplies are provided by France free of charge. Teachers of Andorran extraction, holding the *baccalauréat*, receive priority for appointments to French schools in Andorra. Lastly, as far as education is concerned, the Valleys of Andorra are treated not as foreign territory but as a French educational district, with all the freedom which that implies (public or private schools, conducted by religious orders, etc.).

Spanish primary schools have separate classes for boys and girls. The curricula are on the lines of the system in force in Spain. The pupils learn Catalan and the teachers and the school inspector are paid by Spain. The communal authority or *comu* provides and maintains the school buildings and furniture. The decision as to the appointment, transfer and dismissal of Spanish teachers lies with the Spanish Government which must first obtain the approval of the Bishop of Urgel. There are three schools run by religious orders and subsidized by the Spanish Government at Andorra la Vieja, San Julian de Loria and Les Escaldes.

SECONDARY EDUCATION

For children in the French educational system there is a continuation school (*cours complémentaire*) at Andorra la Vieja. This offers the 4-year course leading to the lower secondary certificate (*brevet d'études du premier cycle*). An agricultural section for boys and a rural home economics section for girls are attached to this school. Pupils wishing to pursue other secondary or higher studies may do so in France. A number of scholarships are available.

Secondary education for Andorran children enrolled in the Spanish system is provided in the school at Seo de Urgel (Spain), just over six miles from the frontier of Andorra, and higher education in the Spanish universities. The Spanish Government grants scholarships or bursaries to the most outstanding pupils.

[*Text prepared by the Unesco Secretariat from official sources in September 1959.*]

STATISTICS

Population (mid-year 1958 estimate): 6,000.
Area: 175 square miles; 453 square kilometres.
Population density: 34 per square mile; 13 per square kilometre.

Summary of school statistics, 1953–57. Enrolment in 17 French primary schools and 1 secondary course in 1957/58 numbered 684 pupils of whom 46 per cent were girls. Enrolment in French schools had thus increased by 56 per cent compared with 1953/54. The teaching staff numbered 28 in 1957/58 compared with 17 in 1953/54 the pupil-teacher ratio falling from 26 to 24.

Recent information on Spanish schools in Andorra is not available. In 1954/55 there were 14 Spanish schools with 366 pupils.

Educational finance, 1958. Expenditure on education in French schools in 1958 (fiscal year beginning January) amounted to 20,595,425 French francs. This sum included 19,513,925 French francs for teachers' salaries and 1,081,500 French francs for other instructional expenditure. Of the total expenditure 16,357,037 French francs were spent for primary education and 4,238,388 French francs for secondary education. (Official exchange rate: 100 French francs = 0.238 U.S. dollar.)

No data are available on expenditure for Spanish schools.

Source. France: Ministry of Foreign Affairs, reply to Unesco questionnaire.

ARGENTINA

THE EDUCATIONAL SYSTEM

Article 14 of the National Constitution adopted in 1853 lays down that all the inhabitants of the Argentine Republic shall enjoy the right to teach and to learn, in conformity with the legislation governing the exercise of that right. Likewise, under paragraph 16 of Article 67, Congress is empowered to lay down the curricula for general and university education.

The development of education in Argentina has been facilitated by the uniformity in ethnic and language conditions which has been specially marked since the second half of the ninteenth century. The great wave of immigration into the country up to the first world war was almost exclusively of European origin. Spaniards and Italians constituted the predominant nationalities and more than three-quarters of the Argentine population of today are descended from them. Practically no aboriginal communities remain in the country. Spanish is the language in general use.

Although the organization of education is simplified when the racial, linguistic and religious components of any culture are homogeneous, this homogeneity often leads to the establishment of uniform and set-type standards which rule out attention to many differentiating traits that also have their value. This is what has occurred in Argentina where one of the chief difficulties in education is to rid the curricula of a uniformity that does not correspond to reality. A growing concern to remodel the educational system by adjusting it to the particular conditions of each region and to the changing needs of national development may be observed at all three educational levels, primary, secondary and university.

Under the federal régime, the provinces and municipalities are empowered to establish schools and colleges within their respective jurisdictions, a right which has been widely exercised in so far as primary education is concerned. Each provincial government has an educational body, called the general education council (*consejo general de educación*) or the provincial directorate of schools. In the interior, many provincial establishments, apart from institutions under the Ministry of Education or the national universities, provide technical and vocational training and secondary school leaving certificate (*bachillerato*), commercial and teacher training courses. Most provincial secondary schools are of the technical or vocational type; this is due to the gradual industrialization of the country and to the fact that technical instruction was not so widespread as that for the *bachillerato* and teacher training.

As in the case of the primary level, the tendency is now to accord national recognition to diplomas and certificates conferred by the provincial schools; until recently their validity was restricted to the province concerned.

It should be pointed out that the number of pupils attending private secondary schools amounts to almost half the number enrolled in public institutions.

The structure of the school system may be seen in the diagram on page 183.

Primary education consists of six classes (*grados*) the

first of which is divided into lower and upper. Possession of the sixth class certificate is required for entry to secondary level institutions.

DEVELOPMENT OF SECONDARY EDUCATION

Perhaps the clearest way of dealing with this topic will be to take in turn the principal bodies which maintain schools: the Ministry of Education, other ministries, provincial and municipal authorities, universities and private bodies. With this administrative classification, an attempt will be made to describe the types of school, with relevant legislation, and the various forms of curricula and certificates.

Ministry of Education

The public and private secondary institutions under the Ministry of Education are organized and controlled by the following departments: Directorate-General of Secondary, Teacher, Special and Higher Education; Directorate-General of Private Education; Directorate-General of Education in the Arts; Directorate-General of Technical Education; Directorate-General of Physical Education.

Directorate-General of Secondary, Teacher, Special and Higher Education. The national secondary schools for boys (*colegios nacionales*), the secondary schools for girls (*liceos de señoritas*), the national and regional teacher training schools and the schools of commerce are subordinate to this Directorate-General. The main features of these institutions are described below.

General secondary schools. The national *colegios* were organized systematically by the decree of 14 March 1863. The courses of study offered by these institutions, as also by their feminine counterpart, the girls' *liceos* (first established in 1907), lead to the *bachillerato* certificate.

The curriculum first approved in 1863 has since been revised a number of times, and there have been innumerable proposals for further reform which have not been carried out. Most of the changes proposed or approved have related to the total period of study for the *bachillerato* certificate or its division into cycles or phases.

The most important was that adopted in 1941 which, with some partial amendments introduced subsequently, is still in force. This reform established the so-called basic cycle (*ciclo básico*) of 3 years, common to the *bachillerato* and teacher training courses alike. This cycle covers the following subjects: Spanish, one foreign language (English or French), mathematics, elementary physics and chemistry, biology, geography, history, democratic principles, drawing, music, and practical and physical education. The *bachillerato* requires a further 2 years, during which some of the subjects of the lower course are treated in greater detail and with some degree of specialization, and literature, philosophy, civics, and a second foreign language are added.

The *bachiller* certificate issued by the national *colegios* and girls' *liceos* qualifies for entrance to all university faculties.

Teacher training schools (*escuelas normales*) were established by a National Law of 1869. The curriculum was systematically re-planned in 1905 and remained in force for the 9 years until 1914 when substantial modifications were introduced. The teacher training course was of 4 years' duration from 1914 until 1941 when a further year was added. The first 3 years correspond to the general lower cycle for the *bachillerato* and the final 2 years qualify the student as a teacher. In addition to the intensified and specialized study of some subjects of the lower cycle, the following courses are given in the second teacher training cycle: pedagogy, general and special teaching methods, practice in teaching, the policy, legislation and organization of education, general history of education, general and applied psychology, philosophy, civics, language and literature, home economics (girls) or handwork (boys).

A demonstration section (*departamento de aplicación*) is attached to each teacher training school; it is designed to offer a full primary education in accordance with the curricula and programmes in force and to provide practical teaching experience for prospective teachers.

The teacher training schools confer the national teacher's diploma (*título de maestro normal nacional*) which qualifies for teaching in primary schools under the National Council of Education or those provincial authorities that accept it. (In practice all the provinces recognize the validity of this diploma.)

Regional teacher training schools, called 'rural teacher training schools' until 1932, were instituted by a Law of 1909. They train teachers for service in rural areas and accordingly their curricula include a number of subjects appropriate to living conditions that are not the same as in urban communities. Certain cultural and practical subjects of the lower teacher training cycle are modified and the following are added: dressmaking and cutting, cookery and homecrafts, weaving (girls); workshop instruction, agriculture, and rural building (boys); husbandry and farmwork (for both sexes). The second cycle also follows the general teacher training course. By reducing the hours of study in certain subjects, the following can be added: home economics and homecrafts; educational handwork; specialized farming; husbandry and processing of agricultural products; darning, washing and ironing; preparation of food for children, and dietetics; regional dyeing; weaving and pressing; husbandry and regional crafts (girls); rural building, carpentry and metalwork, specialized farming, husbandry and processing of agricultural products, topography; workshop instruction; husbandry and regional crafts (boys). The regional teacher's diploma (*maestro normal regional*) conferred by these schools qualifies for teaching in rural schools.

Training School for Language Teachers. The work of this school is based on a partial modification of the curriculum for the general teacher training schools. The difference consists in a reduction of the number of hours for certain subjects with a corresponding increase in the classes in the foreign language studied.

Language teacher training schools may be regarded as a preparatory stage for study at the Institute of Foreign Language Teachers, since the curricula for primary school teaching for which these schools provide the necessary qualifications do not include instruction in foreign languages.

Schools of commerce. National schools of commerce were instituted in 1891, when the first institution was

opened in the federal capital. At the present time schools of this type are governed by the plan approved in 1952, as amended in 1956. Two kinds of courses are given: day and evening. The day courses consist of a lower cycle of 3 years and an upper of 2 years. The lower cycle subjects are: Spanish, one foreign language (English or French), mathematics, elementary physics and chemistry, biology, geography, history, civics, democratic principles, music, typewriting, calligraphy and ornamental design, book-keeping, and physical education. In the second cycle there is greater intensification and specialization in some lower cycle subjects and the following are added: literature, physics, applied chemistry, general law and legal practice, commercial law, political economy, organization of trade and business, administrative law and fiscal legislation, and shorthand. The evening courses were instituted to enable persons employed in commerce during the day to attend classes. The subjects for the basic and second cycles are the same as for the day courses, the sole difference being in their distribution. The evening course takes 1 year more than the day course—4 years for the lower cycle and 2 for the second. Students who successfully complete the fourth year of the day course or the fifth year of the evening course are awarded a diploma in book-keeping (*tenedor de libros*); those passing out from the fifth year of the day course or the sixth year of the evening course receive the diploma of business expert (*perito mercantil*). The latter certificate is required for admission to the Faculty of Economic Sciences.

The Directorate-General of Secondary, Teacher, Special and Higher Education has made provision for students to transfer from one type of course to another in all schools, colleges and institutes under its control. In other words, any student following the *bachillerato*, teacher training or commercial school course may change his category with no loss in acquired grading; he may have to study a few elementary subjects in cases where there is a difference in any part of the lower cycles.

Many private educational establishments are connected with those of the Ministry of Education. They are governed by the plans and programmes of work approved for the public institutions subordinate to the Directorate-General of Secondary, Teacher, Special and Higher Education, with which they are incorporated.

Directorate-General of Education in the Arts. The Directorate-General was established as such in 1956, after functioning since 1948 as a department to which were subordinate a number of art institutes; many of the latter had started as private academies but gradually became official bodies after 1905. Education in the arts covers schools of visual arts, ceramics, dramatic art, dancing and music. Until 1958 these schools were conducted solely in the federal capital.

The National School of Visual Arts offers 4-year courses. One school in this category also provides a further 3-year cycle which prepares for the diploma of national professor of engraving or painting or sculpture; the holder of this qualification may teach in the preparatory or intermediate cycles of visual arts or teach drawing in secondary schools.

The National School of Ceramics gives instruction in both decorative and industrial ceramics. The curriculum comprises a basic cycle of 4 years, followed by a higher fifth-year course. The successful student may continue for a sixth year, at the end of which he receives the diploma of national ceramics teacher.

The National School of Dramatic Art was granted autonomy in 1957, before which date courses in dramatics had been given in the Dramatic Art Section of the National School of Music and Dramatic Art. At the end of the first three years the student is eligible for the certificate of actor, and on successful completion of the fourth year is awarded a diploma of national teacher of dramatic art.

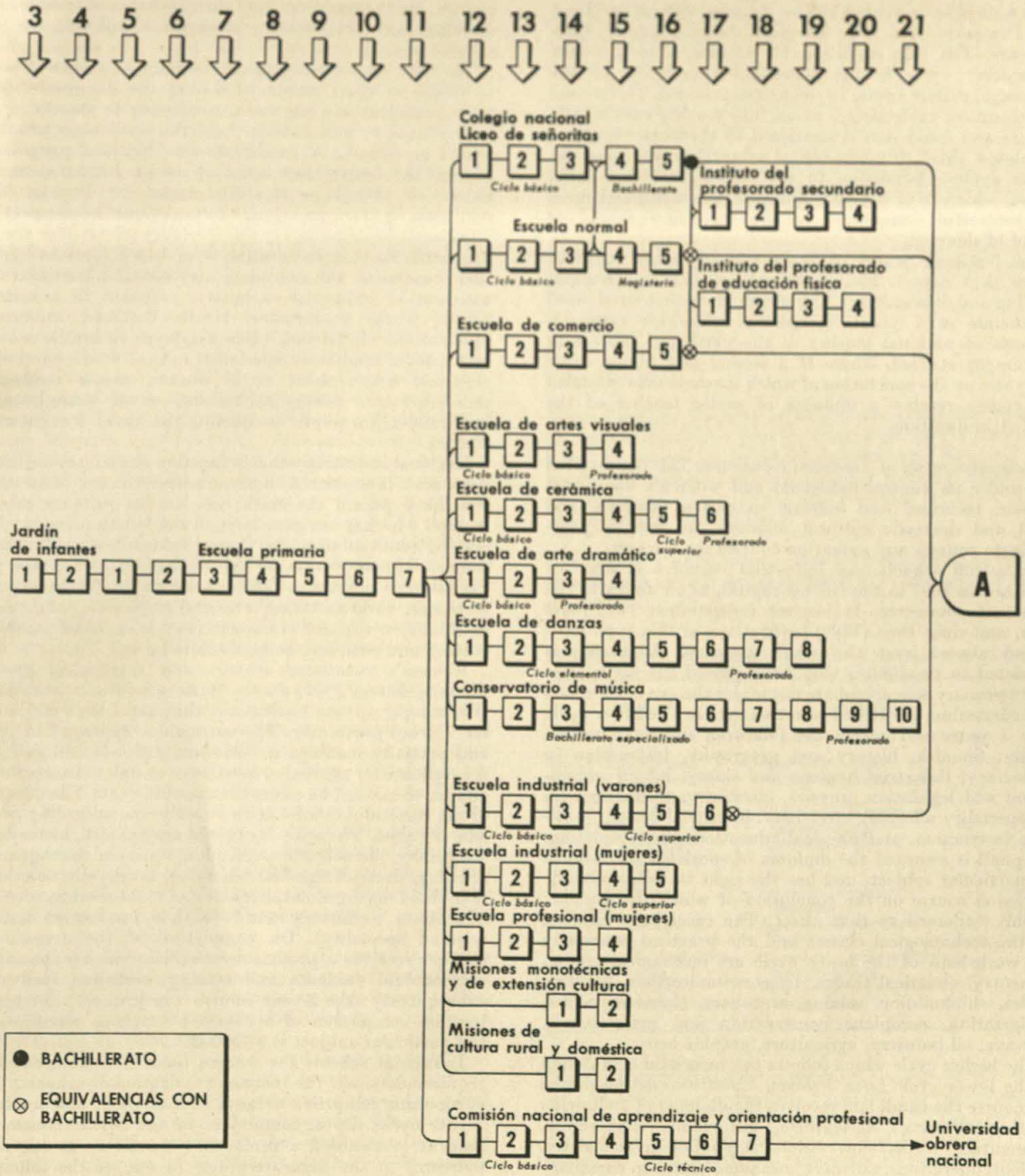
The National School of Dancing was instituted by the Decree of 13 June 1951. Before that date, courses in classical dancing (from 1924) and in Argentine folk-dancing (from

GLOSSARY

bachillerato: upper cycle of general secondary course.
bachillerato especializado: specialized *bachillerato* course at vocational secondary school of music.
ciclo básico: lower or 'basic' cycle.
ciclo superior: upper cycle.
ciclo técnico: cycle of technical training.
colegio nacional: general secondary school for boys.
Comisión nacional de aprendizaje y orientación profesional: courses run by the National Commission for Apprenticeship and Vocational Guidance.
escuela de arte dramático: vocational and teacher training school of drama.
escuela de artes visuales: vocational and teacher training school of pictorial and plastic arts.
escuela de cerámica: vocational and teacher training school for ceramics.
escuela de comercio: vocational secondary school of commerce.
escuela de danzas: vocational and teacher training school of classical and national dancing.
escuela industrial (mujeres): girls' vocational training school for industrial trades.
escuela industrial (varones): boys' vocational training school for industrial trades.
escuela normal: teacher training school.
escuela primaria: primary school.
escuela profesional (mujeres): vocational training school for women's occupations.
instituto del profesorado en educación física: specialized training college for physical education teachers.
instituto de profesorado secundario: training college for secondary school teachers.
jardín de infantes (kindergarten): pre-primary school.
liceo de señoritas: general secondary school for girls.
magisterio: upper cycle (professional training) in teacher training school for primary teachers.
misiones de cultura rural y doméstica: itinerant schools providing courses in homecrafts and home economics and elementary general education for women in country districts.
misiones monotécnicas y de extensión cultural: itinerant schools providing courses in various industrial and agricultural trades and elementary general education for men in country districts.
profesorado: teacher training course.

HIGHER EDUCATION

A. National universities.
Universidad Obrera Nacional: advanced technical and technological training at the National Workers' University.


3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
Colegio nacional
Liceo de señoritas
1 2 3 4 5
Ciclo básico
Bachillerato
Instituto del profesorado secundario
1 2 3 4
Escuela normal
1 2 3 4 5
Ciclo básico
Magisterio
Instituto del profesorado de educación física
1 2 3 4
Escuela de comercio
1 2 3 4 5
Escuela de artes visuales
1 2 3 4
Ciclo básico
Profesorado
Escuela de cerámica
1 2 3 4 5 6
Ciclo básico
Ciclo superior
Profesorado
Jardín de infantes
1 2
Escuela primaria
1 2 3 4 5 6 7
Escuela de arte dramático
1 2 3 4
Ciclo básico
Profesorado
A
Escuela de danzas
1 2 3 4 5 6 7 8
Ciclo elemental
Profesorado
Conservatorio de música
1 2 3 4 5 6 7 8 9 10
Bachillerato especializado
Profesorado
Escuela industrial (varones)
1 2 3 4 5 6
Ciclo básico
Ciclo superior
Escuela industrial (mujeres)
1 2 3 4 5
Ciclo básico
Ciclo superior
Escuela profesional (mujeres)
1 2 3 4
Misiones monotécnicas y de extensión cultural
1 2
Misiones de cultura rural y doméstica
1 2
BACHILLERATO
EQUIVALENCIAS CON BACHILLERATO
Comisión nacional de aprendizaje y orientación profesional
1 2 3 4 5 6 7
Ciclo básico
Ciclo técnico
Universidad obrera nacional

1940) had been provided at the National School of Music and Dramatic Art. The classical dancing course lasts 10 years. The sole condition for admission to a 2-year preparatory cycle is the successful completion of the first stage (*primer grado*) in the primary school. The second or elementary cycle lasts 5 years. The teacher's cycle lasts 3 years and admission is restricted to students who have completed their primary school education and also the earlier cycles. Admission to the Argentine folk-dancing course, which is of 3 years' duration, is conditional upon the successful completion of the secondary school or school of dancing.

The National School of Music was so named in 1957: before that date it had contained sections in elocution, dancing and dramatic art. The courses include a specialized *bachillerato* of 7 years, completion of which carries a diploma of national teacher of the particular subject or instrument studied. There is a second and higher cycle of 3 years on the conclusion of which teachers who attended the course receive a diploma of senior teacher of the subject in question.

Directorate-General of Technical Education. This department has under its control industrial and women's vocational schools, technical and cultural extension missions, and rural and domestic cultural missions, as well as post-graduate courses and extension courses for workers.

Industrial schools. An industrial school was first established in 1897 in the federal capital, as an annex to the school of commerce. It became independent two years later, and since then (1899) institutions of this type have spread almost over the whole country. Admission is restricted to candidates who have passed the sixth class of the primary school and are not under the age of 12 years. The curriculum is divided into two cycles. The lower cycle lasts 3 years and covers the following subjects: mathematics, Spanish, history and geography, instruction in democracy, industrial hygiene and safety, labour organization and legislation, physics, chemistry, technology (in the speciality selected), electricity, industrial design, workshop instruction, and physical education. On completion, the pupil is awarded the diploma of specialist (*experto*) in his particular subject, and has the right to follow a trade extension course on the conclusion of which the diploma is duly endorsed to that effect. The specialities covered by the technological classes and the practical courses in the workshops of the lower cycle are mechanical trades, carpentry, electrical trades, telecommunications, building trades, shipbuilding, mining, transport, chemical trades, refrigeration, aeroplane construction and maintenance, railways, oil industry, agriculture, graphic arts.

The higher cycle which follows the successful completion of the lower cycle lasts 3 years. Upon completion of the full course the candidate receives the diploma of technician in the following: agriculture, automobile engineering, aeronautics, works supervision, shipbuilding, electricity, oil-fields operations, railways, mechanics, mining, chemistry and telecommunications. The technician's diploma qualifies for admission to faculties of engineering, technology, architecture and the exact sciences. Students completing the higher cycle may, like those finishing the lower cycle, go on to further specialization, by attending graduate courses. On the termination of their courses the technician's diploma may receive an endorsement referring to the subject studied.

The industrial schools provide evening extension courses to enable workers employed during the day to become more proficient in their work. Admission to these courses is restricted to persons who hold the sixth class primary school certificate. A candidate who has not progressed beyond the fourth class must sit for an entrance examination or attend preparatory classes for 1 year. The minimum age for admission is 16 years and the prospective pupil must be employed in the speciality selected for study. The curricula vary in duration from 1 to 3 years and upon their conclusion the candidate may obtain a certificate of assistant in industrial chemistry, assistant in industrial safety, works constructor, textile designer, radiocommunications electrician, office employee in textile works, orthopaedic appliances specialist, optical works specialist, electrical fitter, sheet metal worker, motor mechanic, radio-operator, mining technician, naval draughtsman, boatbuilder (for pupils completing the naval draughtsman course).

Regional industrial schools function in country districts. Admission is restricted to persons over the age of 12 years who have passed the sixth class in the primary school. A pupil who has not gone beyond the fourth primary class may be admitted provided that he takes a 2-year qualifying course. On completion of the curriculum of 3 years, the candidate is granted a skilled worker's certificate as rural mechanic, rural metalworker, rural carpenter, rural motor mechanic, or regional craftsman (boys); or in dressmaking, cutting and weaving, or homecrafts (girls).

Women's vocational schools were established by the Finance Act of 1901, on the pattern of the Santa Marta Workshops, private institutions that had been functioning for 7 years previously. The curriculum approved in 1950, and partially modified in 1953 and 1956, is still in force. A candidate for admission must have completed her primary education and not be under the age of 12 years. The duration of the curriculum varies from 1 to 4 years, according to the course taken. The subjects taught are Spanish, history and geography, democratic principles, business management, drawing, dress design and trimming, music, diet, clothing, household management, hygiene and child-rearing, physical education, technology and workshop instruction (in the selected speciality). On completion of the course, the student receives a proficiency certificate in her speciality.

Successful students and serving workshop staff may subsequently take 2-year courses which qualify for teaching; on completion of a course a teaching certificate in the particular subject is awarded.

Industrial schools for women have the same entrance requirements as the women's vocational schools. The curriculum comprises a lower 3-year cycle and a higher 2-year cycle. Upon completion of the 5-year course the student is awarded a proficiency certificate as specialist (*maestra*) in the decorative arts in one of the following subjects: engraving and metalwork, interior decoration, books and advertising, sculpture.

Itinerant mono-technical and cultural extension schools (*misiones monotécnicas y de extensión cultural*) were established under the Finance Act of 1947. They travel

from place to place in the underdeveloped areas inland and are exclusively for male pupils. The conditions for admission are the successful completion of the fourth primary class and a minimum age of 14 years. The course lasts 2 years and on its completion the student is awarded an elementary certificate in one of the following subjects: motor mechanics, carpentry, electrical trades, agricultural machinery, building, husbandry.

Itinerant rural cultural and domestic schools also function for temporary periods in interior areas. They are exclusively for women and the entrance requirements are the same as for the itinerant mono-technical schools. On completion of a 2-year course the pupil is awarded an elementary certificate in rural homecrafts.

Courses run by the National Commission for Apprenticeship and Vocational Guidance. The commission was established by Decree No. 14538 of 1944, which two years later was converted into Act No. 12921. It was subordinate to the Ministry of Labour and Welfare until 1951 when by Decree No. 1477 of the Executive Power it was transferred to the Ministry of Education. Although subordinate to this Ministry, the Commission is autonomous in administrative and financial matters. Its functions may be resumed as: supervision, control and direction of the work and apprenticeship of persons between the age of 14 and 18 years; organization of schools for minors in employment; organization of apprenticeship for non-employed minors; organization of extension courses for adults (according to trade and speciality); provision of higher technical education and training for the purpose of industrial management. The courses comprise 3 cycles—lower, technical and university.

The lower cycle lasts 3 years and consists of apprenticeship, half-time employment, and workers' qualification courses. The apprenticeship courses are for both boys and girls between the ages of 14 and 18 years, who have completed their primary education. Boys attend factory schools for two 4-hour periods and girls for one 4-hour period. Minors employed in industry must attend a half-time course which lasts 5 hours. Factory schools also offer pre-apprenticeship courses of 2 hours' duration for pupils who have completed the fourth, fifth or sixth class in the primary school. On the conclusion of the lower cycle the student is awarded a certificate of *experto* (or *experta*) in a wide range of trades.

The lower cycle also provides special courses in certain industrial occupations, preparatory courses for admission to qualification courses or for training in specified trades, and intensive courses to provide skilled labour to industrial undertakings on their application.

The technical cycle lasts 4 years and admission is subject to the successful completion of the lower cycle course in the trade selected. The courses are held in the evening and designed to train technical supervisory staff for industrial undertakings. On completing the cycle, the outgoing student is awarded a certificate of factory technician (*técnico de fábrica*) in any one of a number of trades.

There are also private factory schools, maintained by industrial undertakings where the instruction is supervised by the National Commission for Apprenticeship and Vocational Guidance.

The university cycle courses are held in the National Workers' University, which was established by Act No. 13339 of 1948. Admission is subject to completion of the technical cycle in a school of the National Commission for Apprenticeship and Vocational Guidance or of the Directorate-General of Technical Education. Attendance at classes is compulsory. The university controls faculties in the federal capital, Avellaneda, La Plata, Bahía Blanca, Santa Fe, Córdoba, Mendoza and Tucumán. The outgoing student is awarded a diploma of factory engineer (*ingeniero de fábrica*) in the trade chosen.

Courses run by the National Council for Minors. The council maintains a school of commerce and a college offering supplementary training in agriculture. Both institutions are situated in the interior of Buenos Aires province and are boarding schools.

Other Ministries

Apart from the Ministry of Education, other departments of national ministries provide instruction at the secondary level. In general these establishments give technical and vocational training, although teacher training, *bachillerato* and commercial courses are also provided by some of the provinces and universities.

Department of Agriculture. The following table shows the special courses and diplomas offered by the schools under its control.

DEPARTMENT OF AGRICULTURE: SCHOOLS AND COURSES

School	Diploma	Duration of course (in years)
School of Agriculture	Agricultural expert	4
School of Fruit-Growing and Wine-Making	Fruit-grower/wine-maker	4
School of Agriculture and Stock-Breeding	Specialist in forestry or sheep-raising	3
School of Agriculture, Stock-Breeding and Husbandry	Agricultural expert	4
School of Poultry-Breeding	Specialist in poultry-breeding	3
School of Agricultural Machinery	Agricultural machinery technician	2
School of Milk Production and Processing	Specialist in milk production and processing	3
Higher Institute of Farm house Management	Instructress in farm house management	1

Department of Transport. Organizes courses in its School for Workshop Apprentices, schools in diesel-electric engines, brakes, workshop mechanics, and theoretical and practical work for apprentices, Technical School of Theoretical and Practical Work, School for Technical Vocational Guidance, School of Telegraphy, and School for Transport Apprentices. These schools are distributed throughout different parts of the country. They award certificates in mechanics, welding, iron-work, electricity, sheet metal work and carpentry.

Department of Communications. Controls the Postal and Telecommunications Technical School, which grants certificates in telegraphy and radio-telegraphy; and the Technical School for State Telephone Apprentices which grants electrician's certificates for public or private telephone exchanges. Specialized technical courses are also provided, for proficiency certificates, as well as courses for electrician foremen for public telephone exchanges, and inspectors of private telephone exchanges, line construction and cable laying.

Department of Public Works. Conducts a school for sanitary engineering apprentices and a school for port and harbour construction apprentices.

Service Departments. Institutions run by the War Department include the military academies (*liceos militares*) the programme of work of which is equivalent to the *bachillerato* courses of the national *colegios;* a *colegio* which provides *bachillerato*, teacher training and commercial courses, with a boarding-school free of charge for soldiers' orphans; and a school of military engineering which confers the certificate of non-commissioned engineer. The Navy Department likewise has a Naval Academy and a secondary-level *colegio*, with a boarding-school free of charge for the orphans of naval personnel; both of these offer courses equivalent to the *bachillerato.* There is further a school of naval mechanics whose outgoing students receive the rank of chief petty officer. There is also a school for naval apprentices specializing in engineering, which awards the certificate of naval engineer. The Aeronautical Department conducts a school of aeronautics which confers a certificate of non-commissioned engineer; it also organizes courses for apprentice mechanics in the various air brigades. The National School of Civil Aviation issues qualifying certificates for certain branches of aviation.

Provinces and municipalities

The education authorities of the provinces and larger municipalities maintain a considerable number of schools at the secondary level, generally of the vocational and technical types. The full list of provinces having educational establishments is Buenos Aires, Catamarca, Córdoba, Corrientes, Chaco, Chubut, Entre Rios, La Rioja, Mendoza, Misiones, Neuquen, Rio Negro, Salta, San Juan, Santa Cruz, Santa Fe, Santiago del Estero, Tucumán. Of the municipalities, that of the city of Buenos Aires has the largest school programme.

By way of illustration, the example of the province of Buenos Aires may be given. The provincial directorate of higher, secondary and vocational education is responsible for many vocational and agricultural schools. Vocational school courses vary in length according to the qualifications laid down for the various trades. On passing out, a proficiency certificate is conferred in certain subjects (such as dressmaking, shorthand, typewriting, etc.) or a qualifying certificate in such subjects as mechanical drawing, radio-technology, etc. The course, duration and certificates obtainable in the schools specializing in agriculture are shown in the following table:

TYPES OF PROVINCIAL AGRICULTURAL SCHOOLS

Type and place of establishment	Certificate	Duration of course (in years)
Agrarian School (Rivera)	Skilled farm worker	3
School of Agriculture and Stock-Breeding (San Francisco de Bellocq)	Skilled agricultural worker	3
Rural Training school (Las Flores)	Skilled agricultural machinery worker	2
Stock-Breeding School (General Villegas)	Skilled worker in stock-breeding and milk processing	3
Dairy Farm School (Miramar)	Skilled dairy farm worker	3
Dairy Farm School (Alberti)	Skilled dairy farm worker	3

There is also in Colón a social agrarian workshop where practical instruction in the industrial production of brooms, feather-dusters, wicker-work articles, etc., is given, in courses lasting from 9 to 10 months.

An agrarian *bachillerato* course may be taken in higher or special schools. The curriculum consists of a 3-year lower cycle and a higher cycle of 2 years. On completing the lower cycle, the student may finish his training by spending 1 year in an establishment for various specialized trades. Outgoing students from the School of Agriculture (Carmen de Patagones) receive a certificate of skilled workman (*perito*) in fruit-growing and wine-making or in viticulture and oil production; and from the School of Fruit-Growing (Dolores) the certificate of *perito* in fruit-growing and processing; and from the School of Stock-Breeding (Coronel Vidal) the certificate of *perito* in stock-breeding and milk processing. The higher cycle is taken in the last-named school, leading to the agrarian *bachiller* diploma which qualifies for admission to the agronomic and veterinary faculties; or practical training may be completed in an experimental establishment, for the purpose of obtaining the certificate of agricultural expert (*agrotécnico*) at the end of one year. The Higher Agrarian School for Women (Tandil) confers the certificate of technical visitor in farmhouse management on completion of a compulsory 1-year residential course. In addition, temporary farmhouse management and technical courses are provided in various places throughout the province of Buenos Aires.

Universities

The national universities control many secondary-level establishments and institutes, differing in organization and methods. In some cases (*bachillerato* and teacher training courses, industrial and commercial schools), the curricula are designed to prepare for subsequent university study. Thus, for example, the curricula of the university national colleges generally cover 6 years and include an introduction to Latin. On the other hand, the primary aim of many institutes—in particular, those concerned with education in the arts—is to promote activity in their particular cultural sphere, in view of the fact that most of the institutes of this type are established in the federal capital.

Private institutions

As stated above, the number of students attending private institutions that are connected with the official schools amounts to one-half of the total enrolled in the latter. The number becomes substantially greater if account is taken of the immense contribution of private institutions that are not incorporated with state education although they are permitted, in some cases, to issue certificates of validity equal to those conferred by the secondary schools of the Ministry of Education.

The following are the private schools conducted by the Catholic Orders that issue officially-recognized secondary education certificates: Colegio del Salvador in the federal capital; Colegio de la Inmaculada Concepción in Santa Fe; Colegio San José in Esperanza (Santa Fe province); and the Bachillerato Humanista Moderno, which incorporates a number of institutions and is maintained by the Archbishop of Salta.

A type of institute now known as the people's university began in 1917. These establishments which are to be found throughout the country are not attached to the official educational establishments. Admission is subject to completion of primary schooling. The people's universities give instruction in a number of special subjects not taught in the official schools such as television, watch-making, custom-house broking, public auctioneering, taxation legislation, legal aids, etc. Where there is a lack of teachers with academic qualifications recourse is had to suitable persons with practical experience.

There are in addition other private institutions the character of which does not strictly conform to secondary level; for example, schools for journalists, librarians and social assistants. Courses in instrumental music and singing, shorthand, typewriting, radio and television, foreign languages, dressmaking and cutting, etc., do not qualify for the issue of recognized certificates, as the private institutions in which they are given do not meet the requisite conditions for incorporation with official *colegios*.

The English Culture Association of Argentina, the Argentine-North American Cultural Institute, the Alliance Française, the Italian Dante Alighieri Society, the Argentine-German Cultural Association, and other institutions maintained by foreign communities conduct courses in their respective languages.

Administration

The educational system is prescribed by the National and Provincial Constitutions. As regards national jurisdiction, although Article 67, paragraph 16, of the Constitution empowers Congress to organize 'general and university programmes of instruction', this function has in fact been generally carried out by the Executive Power, due to the lack of legislative regulations governing the intermediate cycle. Private establishments (under Acts No. 934 of 1878 and No. 14389 of 1954) function in affiliation with similar state institutions and come under the same system as regards instruction, inspection and organization. Act No. 13047 of 1947 contains standard provisions governing the relationship of private schools with the State. The Corporate Private Education Council, with mixed representation, interprets and applies these provisions.

Public education at the secondary level is free but not compulsory. Most institutions of secondary type come under the control of the Ministry of Education; the remainder are (in decreasing order) under private organization, the provinces, other national ministries and municipalities.

Under the Ministry of Education, school inspection is assigned to inspectorates-general, under the control of the various directorates of education. Inspectors are assigned to specific areas and carry out periodic visits to schools for the purpose of verifying the standard of teaching and level of attainment of the pupils, the operation of all school services, building and equipment needs, and other aspects of organized education. After each visit, the inspector makes a report, assessing the merits of the particular institution.

Finance. The funds for support of the secondary education cycle are provided from the national, provincial or municipal budget, as the case may be. These funds come from general revenue, special accounts (the apprenticeship tax, local resources, the earnings of workshops, legacies and gifts) and public loans. The greater part of the public education budget represents salaries of the teaching, technical and administrative staff, the remainder is divided between capital investment and miscellaneous costs. Private establishments attached to the official educational establishments receive a state grant equal to three-quarters of the minimum teaching staff salaries, provided that their own resources are shown to be inadequate, or equal to the total amount of the salaries where instruction is provided free. The sums allotted for school buildings and equipment were increased in 1957 by a special account constituted by a tax on the entrance charges to racecourses in the federal capital and its environs, the payment of a duty on the exhibition (up to 200,000 pesos) of foreign feature films, and a special tax equivalent to 15 per cent of the basic prices of admission to all cinemas throughout the country. The decree was converted into Act No. 14553 in 1958 and the benefits were extended to secondary education. As regards school equipment, assistance is provided by co-operative associations and by vocational schools out of the earnings of their workshops. Two-thirds of these proceeds are distributed in industrial schools among the pupils. The pupils are also eligible for scholarships for further training if in view of their economic circumstances they would otherwise be unable to pay.

Buildings and equipment. The Directorate of Architecture of the Ministry of Education undertakes the planning, construction, repair and extension of school buildings, in consultation with the responsible educational directorate-general or similar authority under the competent national ministry or provincial government. It has attempted to establish school 'patterns' or 'types' which will meet the characteristics and needs of each region. The Directorate-General of Administration has also standardized school furniture, instruments and equipment.

School welfare services. The National Directorate of School Health carries out the compulsory medical and dental examinations of schoolchildren in every educational cycle.

In addition many scholastic institutions have organized medical and dental clinics of their own, in collaboration with the competent co-operative associations, and these provide services free of charge to pupils. The National Commission for Apprenticeship and Vocational Guidance conducts a psycho-technical guidance institute and an employment service (*bolsa de trabajo*) for directing minors to suitable occupations in industry and commerce.

Authorization was given in 1957 for the establishment of students' co-operatives, membership in which is open to parents of schoolchildren, past students, school personnel and general co-operative members. These co-operatives collaborate in organizing and operating school dining halls and canteens in numerous schools where a double-shift or evening time-table is in operation.

The Ministry of Education's Directorate of Social Welfare (DOSME) is maintained by budget appropriations and contributions from the Ministry's teaching and administrative staff amounting to 1½ per cent of the salaries received. Benefits to members consist of social services, including medical and dental care, household supplies, and reductions for certain places of entertainment and holiday travel.

Training and status of teachers. Secondary level schools which train teachers for primary schools have been described above. Teachers for secondary schools are trained in the secondary school teachers' institutes, which come under the Directorate-General of Secondary, Teacher and Higher Education. Institutes of this kind exist in the federal capital, Paraná (Entre Rios province), Rosario (Santa Fe province), and the cities of Córdoba, Santiago del Estero, Catamarca, San Juan, Jujuy, and La Rioja. The curriculum lasts two years and concludes with the diploma of secondary school teacher (*profesór de enseñanza secundaria*) in the subject chosen. The Kindergarten Teachers' Institute (there are many kindergartens in the country) and the Domestic Science Teachers' Institute are also subordinate to this Directorate-General.

The Physical Education Teachers' Institute, under the control of the Directorate-General of Physical Education, organizes courses for men and women, who are awarded the diploma of physical education teacher.

The Teachers' Statute, the original draft of which was prepared by the Ministry of Education, became law in 1958 by Act No. 14473. The statute governs admission to and promotion and transfer within all sections of the teaching body. Teachers' representatives on the classification and disciplinary boards that function in each of the school districts into which the country is divided for this purpose are elected by a vote of the whole teaching body. The classification boards are responsible for classifying prospective teachers, fixing teaching hours, and promotion within schools up to the most senior administrative and inspectoral posts. For this purpose it submits lists of candidates in order of merit and appoints selection boards. Each candidate who presents himself is graded according to the total number of points allotted for his diploma, the average assessment of his work, his seniority and other merits. The board also deals with applications for transfer, exchange, re-admission, substitutes and temporary employment and decides on the availability of the staff. The disciplinary boards advise on the holding of disciplinary inquiries, rule on requests for the reopening of the proceedings, decide on applications for reconsideration of the case or appeals to a higher authority, apply and remove penalties and exercise disciplinary control in every sphere of teaching.

The Teachers' Statute fixes the salary scale applicable to each educational cycle (primary, intermediate and university). Monthly pay indexes are determined by adding together the salary allotted to the teaching grade and post, and seniority, local differential, overtime and family allowances. The Executive Power is required by law to fix annually the monetary value of index No. 1, taking account of fluctuations in cost of living. It also prescribes the conditions governing retirement; after 25 to 30 years of service, pension is at the rate of 82 per cent of serving salary; no age limit is applied.

The statute supports freedom to join in professional associations, promotes social assistance and guarantees the exercise of all political citizenship rights. Likewise, it facilitates further study and research work by professors and teachers, through the granting of scholarships; recipients continue to be paid their monthly salaries for the duration of the scholarship up to a maximum of one year. Ten years' active teaching service is required to become eligible for a scholarship.

TRENDS AND PROBLEMS

In every cycle of public and private education, there is ample evidence of the desire to bring the educational system more into line with the true needs of the country. The need for greater attention to technical training is being especially stressed at the secondary level, in view of the country's rapid progress towards industrialization, with the resulting demand for specialized staff to direct and man the factories.

There is a tendency to modify the *bachillerato* course by depriving it of its encyclopaedic character and emphasizing the practical training side. These two objects are generally accomplished by extending compulsory schooling so as to include the lower cycle and by instituting a second vocational cycle. Another matter of growing interest is the provision of education taking more into account the particular features and needs of the environment in which the school is situated. The application of uniform standards to certain subjects is advocated, giving to other subjects the flexibility needed in order to express the differences in character on which the cultural life of the various regions is founded.

As regards education in the arts, the conventional repertory of subjects traditionally covered by the term 'fine arts' should be extended to include many products of industry. It would be useful, further, to train pupils in other branches of this form of work such as diagrammatic representation, furniture design, glass-working, stage decoration, advertising, etc.

In technical education, efforts are being made to bring the existing school system and programme of studies into conformity with the present and future needs of industry. This purpose will be effectively achieved if there is closer

co-operation between business interests and the bodies responsible for technical education. It is proposed therefore to set up a unified executive body under the direction of state and business representatives, into which the existing Directorate-General of Technical Education of the Ministry of Education and the National Commission for Apprenticeship and Vocational Guidance will be merged.

There is a strong tendency for unrelated educational bodies in a district to work together and attempts are being made also to achieve more rational co-ordination among bodies under different jurisdictions, with the object of utilizing distinctive district features to the best advantage.

Lastly, there is unanimous agreement that there should be a more coherent and organic connexion between the three levels of instruction so as to achieve real continuity in education.

[*Text prepared by Professor Félix della Paolera and a subcommittee set up by the Argentine National Commission for Unesco, in August 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 20,248,000.
Area: 1,072,748 square miles; 2,778,412 square kilometres.
Population density: 19 per square mile; 7 per square kilometre.

Summary of school statistics, 1953–57. In 1957, school enrolment (not including adult education) reached a total of 3.4 million pupils, representing 17 per cent of the total population. Of these pupils, 2 per cent were enrolled in kindergartens, 78 per cent in primary schools, 4 per cent in secondary schools, 8 per cent in vocational schools, 3 per cent in teacher training schools, 4.5 per cent in institutions of higher education, and 1.5 per cent in special education. The proportion of girls was 49 per cent in primary schools, 36 per cent in secondary schools, 41 per cent in vocational schools, 87 per cent in teacher training schools, and 28 per cent in higher education institutions. Women teachers made up 90 per cent of the staff in primary schools, 58 per cent in secondary schools, 46 per cent in vocational schools, 78 per cent in teacher training schools, and 49 per cent in the teacher training colleges. Average number of pupils per teacher was 23 in primary schools, but less than 10 in any of the categories of secondary school. Between 1953 and 1957, enrolment increased by 5 per cent in the kindergartens, 8 per cent in the primary schools, 25 per cent in the secondary and vocational schools together, 52 per cent in teacher training schools, and 22 per cent in higher education. (See Table 1.)

Enrolment trends in secondary education, 1930–57. Between 1930 and 1957, enrolment in general secondary schools increased four times and in teacher training schools five times. In vocational education, despite the lack of comparability in the data presented, there is no doubt that enrolment increased at a very rapid pace in the course of the 28 years covered in this review. While in 1930, vocational school enrolment was less than either of the other types of secondary education, by 1940 it had become the predominant type of secondary education, and in 1957, there were more pupils enrolled in vocational schools than in all the general and teacher training secondary schools put together. The rapid expansion of secondary education is shown by a quadrupling of the secondary enrolment ratio, which indicates that the average total enrolment for the period 1955–57 was equal to one-fourth of the estimated population 15–19 years old. (See Table 3.)

Examination results in secondary education, 1953–57. The number of teacher training certificates doubled between 1953 and 1957, and the diplomas of industrial and trade schools showed a 50 per cent increase. In other categories there was little change in the annual number of certificates granted. The proportion of girls receiving the various types of certificates varied from 12 per cent in the case of industrial school diplomas to over 90 per cent in the case of trade and craft school diplomas and of teacher training certificates. (See Table 2.)

Educational finance, 1959/60. For the fiscal year beginning in November 1959, the budget estimate for primary, secondary and university education amounted to 12,348 million pesos, distributed as follows: primary education, 4,627 million pesos (37.5 per cent); secondary education, 4,708 million pesos (38.1 per cent); university education, 3,013 million pesos (24.4 per cent). The average expenditure per inhabitant was about 600 pesos. (Official exchange rate: 100 pesos = approx. 1.20 U.S. dollars.)

Source. Argentina: Ministry of Education and Justice, Statistical Office, replies to Unesco questionnaire.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergarten, public	1957	860	2 691	2 674	46 466	23 687
	Kindergarten, private	1957	375	788	786	21 184	11 113
	Total	**1957**	**1 235**	**3 479**	**3 460**	**67 650**	**34 800**
	,,	1956	1 213	3 165	3 148	59 878	31 154
	,,	1955	1 265	3 234	3 207	68 246	35 185
	,,	1954	1 186	2 715	2 708	67 140	34 568
	,,	1953	1 184	3 077	3 057	64 554	33 474
Primary	Primary schools, public	1957	15 078	106 942	96 377	2 428 517	1 162 140
	Primary schools, private	1957	1 180	8 842	7 345	247 024	145 261
	Total	**1957**	**16 258**	**115 784**	**103 722**	**2 675 541**	**1 307 401**
	,,	1956	16 448	117 728	104 700	2 623 228	1 277 799
	,,	1955	16 341	113 725	100 361	2 642 235	1 283 924
	,,	1954	16 190	109 572	96 496	2 564 905	1 246 927
	,,	1953	15 829	104 008	90 740	2 472 908	1 201 004
Secondary *General*	Secondary schools, public	1957	196	12 420	7 345	83 123	28 941
	Secondary schools, private	1957	364	6 424	3 566	42 322	15 854
	Total	**1957**	**560**	**18 844**	**10 911**	**125 445**	**44 795**
	,,	1956	519	17 297	9 778	126 937	43 627
	,,	1955	498	16 590	9 215	115 634	39 565
	,,	1954	464	16 162	8 586	104 335	33 882
	,,	1953	433	15 515	8 002	98 012	30 979
Vocational	Vocational schools, public	1957	1 186	26 912	11 943	220 013	90 443
	Vocational schools, private	1957	348	4 185	2 286	46 317	20 061
	Total[1]	**1957**	**1 534**	**31 097**	**14 229**	**266 330**	**110 504**
	,, [1]	1956	1 409	29 270	12 638	266 058	105 922
	,, [1]	1955	1 368	27 988	12 815	267 322	109 287
	,, [1]	1954	1 542	28 828	12 844	262 841	106 946
	,, [1]	1953	1 296	24 308	11 458	215 322	100 242
Teacher Training	Teacher training schools, public	1957	140	8 568	6 119	73 072	59 736
	Teacher training schools, private	1957	266	4 662	4 213	43 298	41 761
	Total	**1957**	**406**	**13 230**	**10 332**	**116 370**	**101 497**
	,,	1956	372	11 327	9 289	113 846	98 713
	,,	1955	329	11 091	8 448	100 978	87 433
	,,	1954	320	10 872	8 306	87 542	76 627
	,,	1953	308	10 114	7 738	76 661	67 286

1. Including part-time education.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Higher							
Teacher Training	Teacher training colleges, public	1957	36	735	391	3 816	3 329
	Colleges training fine-arts teachers, public	1957	3	199	112	1 033	863
	College training teachers of religion, private	1957	1	119	9	447	319
	Total	**1957**	**40**	**1 053**	**512**	**5 296**	**4 511**
	,,	1956	37	895	432	5 048	4 193
	,,	1955	36	830	354	4 939	4 184
	,,	1954	32	810	369	4 976	4 139
	,,	1953	34	810	390	4 861	3 956
General and Technical	University faculties (national universities)	1957	81	4 999	543	147 025	40 836
	Higher courses at national industrial schools	1957	3	31	1	183	—
	National universities for workers	1957	9	367	—	1 163	—
	Total	**1957**	**93**	**5 397**	**544**	**148 371**	**40 836**
	,,	1956	88	4 757	431	138 888	37 175
	,,	1955	86	4 918	356	144 148	36 480
	,,	1954	82	4 313	314	139 257	36 951
	,,	1953	79	4 246	301	121 508	28 160
Special	*Escuelas diferenciales*, public	1957	4	101	95	484	132
	Open air schools, public	1957	2	59	59	448	236
	Hospital schools, public	1957	23	170	163	3 393	2 346
	Escuelas domiciliarias, public	1957	1	89	82	326	139
	National institute for deaf-mutes, public	1957	2	104	93	388	190
	Reformatories, private	1957	9	67	65	313	144
	Total	**1957**	**41**	**590**	**557**	**5 352**	**3 187**
	,,	1956	35	568	538	4 597	2 795
	,,	1955	35	587	557	5 425	3 278
	,,	1954	32	533	502	5 046	3 120
	,,	1953	32	527	494	5 039	3 152
Adult	Primary courses, public and private	1957	706	4 301	2 522	65 196	17 327
	Vocational courses, public and private	1957	588	1 460	1 076	54 250	39 785
	Schools attached to prisons	1957	11	37	—	592	3
	Schools of the armed forces	1957	142	592	1	13 232	—
	People's universities	1957	25	436	333	14 612	9 055
	Technical 'academies', private	1957	1 525	5 004	3 656	190 984	110 445
	Total	**1957**	**2 997**	**11 830**	**7 588**	**338 866**	**176 615**
	,,	1956	3 343	13 206	8 597	351 269	190 644
	,,	1955	3 282	15 922	10 180	354 437	195 698
	,,	1954	2 839	13 766	8 758	351 328	194 668
	,,	1953	3 627	11 827	7 540	341 975	198 634

2. EXAMINATION RESULTS IN SECONDARY EDUCATION 1953–1957

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Secondary school leaving certificate	10 529	2 842	10 205	2 767	11 478	2 964	10 955	2 560	11 396	2 692
Diploma of industrial schools[1]	8 006	248	9 841	320	14 459	1 451	14 333	1 699	12 587	1 546
Diploma of trade and crafts schools[1]	6 766	6 029	8 199	7 817	9 942	8 918	9 356	8 455	9 860	9 030
Diploma of commercial schools	7 317	3 656	7 797	4 128	7 788	3 993	7 504	3 725	7 021	3 414
Diploma of art and music schools	771	539	791	567	726	494	506	350	622	517
Other vocational education diplomas	2 156	1 531	2 466	1 690	1 910	1 103	2 279	1 619	2 268	1 640
Teacher training certificate	9 455	8 744	11 081	10 188	12 801	11 667	15 357	13 905	17 570	16 041

1. As from 1955, Escuelas de la Comisión Nacional de Aprendizaje y Orientación Profesional are included.

3. TRENDS IN SECONDARY EDUCATION 1930–57

School year	Number of students enrolled by type of education						Average total enrollment[1] (000's)	Estimated population 15–19 years old	Secondary enrolment ratio[1]
	General		Vocational[1]		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	29 502	13	21 038	38	22 069	85			
1931	30 217	14	20 771	39	19 403	85			
1932	32 936	15	21 609	41	20 300	85	54	1 235	*4*
1933	35 144	15	21 400	43	23 035	86			
1934	37 767	16	25 717	40	21 563	83			
1935	40 501	18	27 642	41	23 471	83			
1936	41 026	18	33 209	38	26 256	82			
1937	42 172	19	36 956	37	32 681	81	75	1 336	*6*
1938	44 147	17	40 415	36	38 947	82			
1939	45 749	17	43 602	34	41 852	82			
1940	46 602	17	48 370	36	44 900	83			
1941	46 933	17	51 237	35	45 957	83			
1942	52 558	21	55 652	36	47 490	83	99	1 450	*7*
1943	55 952	24	59 444	36	47 534	83			
1944	59 125	25	63 365	35	48 347	83			
1945	62 213	25	68 422	34	49 052	84			
1946	66 030	27	62 985	38	57 813	85			
1947	66 686	28	63 776	40	56 233	86	121	1 584	*8*
1948	69 387	29	83 830	34	53 625	86			
1949	71 285	30	91 788	35	52 209	87			
1950	77 583	30	187 824	40	63 847	87			
1951	81 766	31	224 764	42	67 512	88			
1952	85 732	31	215 252	43	66 105	87	162	1 782	*9*
1953	98 012	32	215 322	47	76 661	88			
1954	104 335	33	262 841	41	87 542	88			
1955	115 634	34	267 322	41	100 978	87			
1956	126 937	34	266 058	40	113 846	87	233	1 929	*12*
1957	125 445	36	266 330	41	116 370	87			

1. Enrolment reported for vocational education is not consistent owing to the exclusion of some schools in several years. Vocational education has therefore not been included for calculating average total enrolment and the secondary enrolment ratios.

AUSTRALIA

THE EDUCATIONAL SYSTEM

Responsibility for the administration of education within the six Australian States is vested in the respective State Governments. The Education Acts passed by the State Parliaments towards the end of the last century establish, together with subsequent amendments, the statutory framework for the present system of free and compulsory education. The dates of the promulgation of these Legislation Acts are: Victoria 1872, Queensland 1875, South Australia 1878, New South Wales 1880, Tasmania 1893 and Western Australia 1893.

At the time of Federation in 1901, the Commonwealth accepted responsibility for the provision of education within the territories which it administers. In the Territory of Papua and New Guinea (which is made up of the Territory of Papua and the Trust Territory of New Guinea) and in the Trust Territory of Nauru, schools are administered by Education Departments established as part of the administration of the territories concerned. In the other territories,

schools are administered on behalf of the Commonwealth Government by one or other of the State Education Departments: in the Australian Capital Territory and Norfolk Island by the New South Wales Department of Education; in the Northern Territory by the South Australian Education Department; and in the Cocos Islands and Christmas Island by the Education Department of Western Australia. Special schools for aboriginal children in the Northern Territory are administered, however, by the Department of Welfare of the Northern Territory Administration.

Government primary and secondary schools in each of the States are administered by the one authority, the State Education Department, and no delegation of authority takes place in this respect to local government organizations. Government schools in 1957 enrolled at both primary and secondary levels approximately 76 per cent of the school population. The remaining 24 per cent of students attended schools conducted by the Roman Catholic Church (19 per cent), or by other religious denominations and private bodies (5 per cent). At the secondary level government schools catered for 70 per cent of the school population and non-government schools 30 per cent.

The continent of Australia is some 3 million square miles in area with a population concentrated mainly in the east and south-east regions. The majority of the 10 million inhabitants are of European (mainly British) descent, although small numbers of Australian aborigines live in the northern, western and central areas of the continent. English is spoken almost universally and although considerable numbers of foreign language speaking migrant children have arrived in Australia in recent years and commenced schooling with little knowledge of the language, it has not been considered necessary to make provision for special English tuition at school level. In Victoria a short language course for children of 8 years and upwards has, however, been made available by the Education Department.

Some important characteristics of Australian education have resulted from the uneven distribution of the population. The compulsory clauses of the State Education Acts require all children between prescribed ages and living within a prescribed distance from a school to attend a government school or some other recognized institution, or to receive regular and efficient instruction in the home. The need to provide educational facilities for children living in isolated regions has presented problems for each of the Education Departments. Some of the solutions adopted have been the development of one-teacher schools, schools of the air, special radio broadcasts, and education by correspondence.

Most non-government schools are controlled by, or affiliated with, the various religious denominations, particularly the Roman Catholic Church, which has established a comprehensive system of pre-primary, primary and secondary schools providing educational facilities for over 70 per cent of the students not attending government schools. Schools administered by other church bodies are not organized to form comprehensive systems of education. A few non-government schools, including some of the foremost, are undenominational and controlled by corporate bodies, and many small kindergartens and preparatory schools are also privately owned. Unlike the government schools, many Roman Catholic schools and most of the other non-government schools have facilities for boarders, especially at the secondary level.

The structure of the school system is shown in the diagram on page 195.

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary education began in Australia some 50 years after the founding of the colony of New South Wales in 1778. Although a number of government primary schools enrolling children up to the age of 14 years had been established during the early part of the nineteenth century, the education of children past the primary stage and the preparation of candidates for university matriculation was first undertaken by schools established on the English pattern by voluntary organizations and religious bodies. These drew their pupils mainly from the families of administrators, army officers, clergy and well-to-do merchants.

With the passage of the various Education Acts towards the close of the nineteenth century, legislative provision was made for the setting up of secondary schools by government authorities. In New South Wales, for example, the first government high schools were opened at Sydney, Bathurst and Goulburn in 1883. Initially, these schools charged fees but later it became possible to admit all students free of charge. By 1910, most States had established effective secondary schools systems consisting of high schools providing secondary instruction only, and superior or continuation schools formed by the addition of secondary classes to existing primary schools. At this time there were also nearly 40 non-government schools throughout the Commonwealth providing secondary instruction for approximately 6,000 students.

Within the next few years, the orientation of secondary education was considerably changed owing to the establishment of public examination boards in the States. These bodies, set up under statutory authority, consisted of representatives of State Education Departments, non-government schools and the universities. The scope and content of secondary courses thus began to reflect the influence of university requirements, especially the work in the later years of secondary school. These boards are still the public examining authorities in each of the States, and the great majority of university entrants qualify for matriculation through passes in examinations controlled by the boards. The establishments of the examining boards also had the effect of bringing more closely together the curricula and syllabuses of government and non-government schools, through personal contacts between boards members and the preparation of students for the same examinations.

The years following the 1914–18 war saw the establishment of teachers' colleges, the development of better selection and examination techniques, and the introduction of less academically biased courses for the benefit of students not proceeding to matriculation. In addition, during this period a great expansion in school building and in teacher recruitment took place. Although the depression years 1929–33 checked the rate of school building and teacher training, the subsequent growth of

secondary industries during the 1930's stimulated the development of pre-vocational education in post-primary schools.

Since 1945 the Australian secondary school system has successfully faced the many problems arising from the period of recovery from the war and the increases in enrolments resulting from the war-time rise in the birth rate and post-war increase in immigration. In 1948, for example, the number of government secondary school enrolments was 879,000, whereas in 1956 this figure had risen to 1,355,000. Parallel to this growth there has been a significant broadening of the content and variety of courses offered. Schools with a rural bias, for example, have been established in the various States and there has been a tendency towards decentralization in the administrative structure of government schools, for example, in the establishment of Area and Regional Directors in New South Wales and Queensland.

No mention has been made in this section of the history of vocational education, since such education is not generally provided through secondary schools. Pre-apprenticeship classes are held as a part of the secondary school curriculum in one State and certain certificate and trade courses are offered by technical colleges which might be classified as secondary vocational. The first, however, are taken concurrently with normal secondary classes and the second are generally commenced after some secondary schooling has been completed.

Legal basis

The State Education Acts, already referred to, form the legislative framework of the Australian secondary education system and provisions for compulsory education are contained in these Acts. In each State, children are legally required to begin their schooling at the age of 6 years, and the minimum school leaving age is 14 years (15 in New South Wales and 16 in Tasmania). In Queensland, secondary education commences at the average age of 14 years but in other States the average ages are 12 or 13. Thus in all States except Queensland the compulsory education clauses cover some years of secondary school. Schooling may be given in government schools (including correspondence and special schools), in non-government schools or by private tuition. Exemptions are granted in the case of severe mental or physical illness and in some cases of geographical isolation from school facilities. Usually, little difficulty is experienced in ensuring attendance since free tuition is available in government schools. There are, however, compulsory attendance officers employed to interview offending children or parents and their intervention is usually sufficient to make legal action unnecessary.

Administration

Each State system of education is highly centralized, matters of policy being the responsibility of the Minister for Education. The Minister, who is a member of the State Cabinet and responsible to the State Parliament for the administration of his Department, has available to him the advice of his departmental head—the Director or Director-General of Education—and in some cases of special committees constituted in an advisory capacity. Thus questions of policy or of future planning may first be brought up at a school or inspectorial level and passed to the Minister via his Department and Director. Where legislation is concerned, cabinet and parliamentary approval are necessary.

Questions affecting most syllabuses used in government secondary schools are not, however, independently determined at departmental or ministerial level. In each State, public examination boards have power to confer school leaving certificates and to draw up prescribed syllabuses for these. Membership of these boards is shared between representatives of State Education Departments, universities and non-government schools. In Western Australia, for example, the Public Examinations Board is made up of the Vice-Chancellor, the Professor of Education and seven other representatives of the University of Western Australia; the Director of Education and five other representatives of the Education Department; three representatives of non-government secondary schools for boys; and three representatives of non-government secondary schools for girls. It is rare for anyone outside educational circles to belong to any of the state examining authorities.

Although the scope and content of the majority of courses

GLOSSARY

NOTE. As school systems vary from State to State, this diagram is simplified. At the secondary level it shows types of courses available rather than types of schools.

infant school: school comprising pre-primary classes and the first two classes of the primary course.

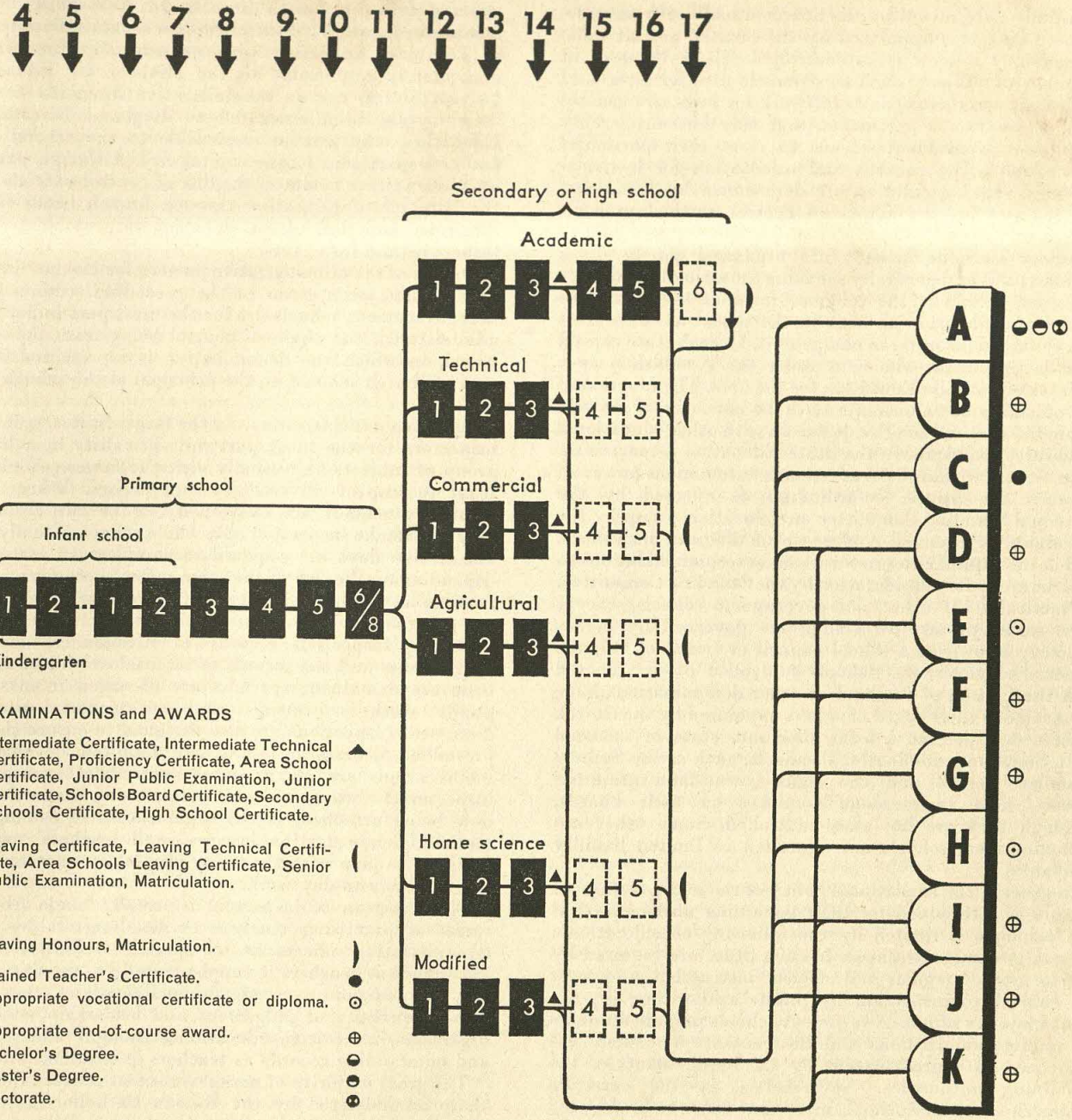
kindergarten: pre-primary school.

primary school: duration of primary course proper varies from six to eight years according to the State.

secondary or high school: secondary school offering one or more of the various courses shown in the diagrams (*academic, technical, commercial, agricultural, home science, modified*). *Modified* includes 'local bias' courses in area schools and consolidated schools as well as the alternative curricula adopted in other high and secondary schools.

INSTITUTIONS AT POST-SECONDARY LEVEL

A. Universities.
B. Library schools.
C. Teachers' colleges.
D. Conservatorium of music.
E. Professional and vocational training schools.
F. Naval College.
G. Military and air force colleges.
H. Technical colleges (diploma and professional courses).
I. Agricultural colleges.
J. Business colleges.
K. Technical colleges (trade courses).


4 5 6 7 8 9 10 11 12 13 14 15 16 17
Secondary or high school
Academic
1 2 3 4 5 6
Technical
1 2 3 4 5
Commercial
1 2 3 4 5
Agricultural
1 2 3 4 5
Home science
1 2 3 4 5
Modified
1 2 3 4 5
Primary school
Infant school
1 2 1 2 3 4 5 6/8
Kindergarten
A B C D E F G H I J K
EXAMINATIONS and AWARDS
Intermediate Certificate, Intermediate Technical Certificate, Proficiency Certificate, Area School Certificate, Junior Public Examination, Junior Certificate, Schools Board Certificate, Secondary Schools Certificate, High School Certificate.
Leaving Certificate, Leaving Technical Certificate, Area Schools Leaving Certificate, Senior Public Examination, Matriculation.
Leaving Honours, Matriculation.
Trained Teacher's Certificate.
Appropriate vocational certificate or diploma.
Appropriate end-of-course award.
Bachelor's Degree.
Master's Degree.
Doctorate.

are usually determined by the boards on advice from committees of experts appointed by the boards, not all work in secondary schools is so controlled. The syllabuses in a number of subjects such as domestic arts for girls, and woodwork, metalwork, and craftwork for boys, are usually prepared by the Departments, and may be considerably modified by individual schools to meet their particular needs. Again, the content and orientation for less academically minded children are determined by Education Departments on the advice of special curriculum committees.

Roman Catholic schools are organized partly on a diocesan basis and generally speaking the ultimate authority over each school is the religious head of the area. The control and direction of work in the school however rests with the religious order in charge of it. In each state capital there is an official who acts under the Archbishop as a Director of Catholic Education for the area. The function of this official is to co-ordinate Catholic educational matters within his area and to provide liaison with other educational authorities, particularly the State Education Department. Each diocese within the area remains autonomous however. Between the States, co-ordination is effected by the Episcopal Standing Committee on Education set up by the Hierarchy. A triennial conference of diocesan inspectors, held in the capital cities in turn, makes recommendations to the Hierarchy for consideration by the Standing Committee.

Practically all other non-government schools, except those under private ownership, are governed by bodies variously known as a school council or board of trustees or board of governors. Schools controlled by or affiliated with the Church of England or other denominations have all or some of their board members appointed by the church concerned, either at a local, diocesan, state or national level. Some undenominational schools, such as the Sydney Grammar School and the eight Queensland grammar schools, have government nominees on their boards, although they are not state-controlled. Some other undenominational schools are organized as limited liability companies.

In general, the educational policy of the non-government schools is determined by their governing authorities but this principle is limited by the following considerations: (a) non-government schools in each State are required by law to provide regular and efficient instruction, and most are subject to inspection by public authorities; (b) the great majority of non-government schools prepare students for public examinations and the contents of courses are influenced to a great extent by the requirements of the examining authorities. Nevertheless, in the curricula of church-controlled schools more time tends to be devoted to religious instruction than in the government schools. In addition, some of the non-denominational schools are known for their relatively adventurous approach to educational theory and practice.

Control. A State Education Department is usually divided into three main branches—primary education, secondary education and technical education—each supervised by a director, superintendent, chief inspector or similarly titled officer responsible to the Director of Education for the institutions under his control. In some States teacher training forms a fourth branch. In New South Wales technical education is controlled by a separate Department of Technical Education with its own Director, who is immediately responsible to the Minister for Education. In two States, certain administrative functions have in recent years been delegated to Regional Directors of Education, who remain responsible to the central Education Department in the capital city. Although patterns vary from State to State, the line of control extends from the Director of Education through branch heads (called directors, superintendents or chief inspectors) to staff inspectors and inspectors.

Details of the administrative pattern for Roman Catholic schools have been given in the preceding section. Other non-government schools are for the most part individually administered, the chain of control being from the school board, in which the denomination is represented in the case of church schools, to the principal of the school.

Supervision and inspection. In the larger States, secondary inspectors for the most part are specialists in a limited group of subjects and usually visit the larger schools as a team to inspect all teachers and classes. Where small secondary schools are concerned one or two inspectors may undertake inspection of a whole school. Usually from one to five days are required to complete an inspection, depending on the size of the school. Each secondary school receives an official visit once every two years, and at least one other supervisory visit.

During inspection records of attendance, teachers' programmes and the records of internal examinations and tests are examined; teachers are observed in class, the pupils' work is inspected and the teachers' problems discussed. Inspections are also designed to ensure that the prescribed courses of study are followed or that any modifications are along sound lines. Another aspect of inspectorial duties, to which increasing importance is now being attached, is the organization of seminars on method, demonstration lectures, and teachers' meetings designed to help with the many problems occurring in the teachers' day-to-day work.

The selection of inspectors is usually made from the ranks of practising teachers or headmasters by senior administrative officers or by special committees. Their experience as teachers is supplemented by training on the job. In addition to academic qualifications, they must possess qualities of judgement and leadership, ability as organizers, interest in educational thought and practice, and outstanding records as teachers or headmasters.

The great majority of non-government schools, including those administered by the Roman Catholic Church, are visited regularly by inspectors attached either to State Education Departments or to other bodies authorized for the purpose. In most States, such inspections are required by law. In others, schools are usually inspected at their own request in order to be approved for the instruction of children holding government scholarships or bursaries.

In addition to government inspections, Roman Catholic schools are inspected, usually annually, in either religious or secular subjects or both, by the diocesan inspector of schools or his equivalent. The only other school organization to have its own inspector is the Church of England in the

Diocese of Adelaide in South Australia where a representative of the Diocesan Board of Education visits and examines Church of England day schools.

Finance. Expenditure connected with the day-to-day administration of government schools, the payment of teachers' salaries, purchase of essential equipment, maintenance of school buildings, training of teachers, medical and dental services, travelling allowances and scholarships and bursaries for secondary education is met from the consolidated revenues of each State. There are no taxes or rates levied especially for educational purposes and neither in primary nor secondary government schools are students required to pay fees, except in Queensland secondary schools, and here an extensive system of state scholarships meets the cost of fees for most pupils. The Commonwealth Government is the only authority in Australia imposing income tax and from these collections it allocates each year to each State an amount known as taxation reimbursements. These are calculated mainly on a population basis, and along with the States' own business undertakings, are the major source of state revenue.

School building programmes are financed mainly from loan funds raised by the Commonwealth Government on behalf of the States, and the allocation of these funds among the States is determined by the Australian Loan Council, which consists of the Prime Minister of the Commonwealth and the Premier of each State or Ministers nominated by them in their stead.

Under the centralized systems of school administration, salary payments are made by cheque and forwarded direct to teachers by the Education Departments. In general, headmasters may make payments for minor repairs, services or equipment on their own initiative but other items of expenditure must be authorized by the central office of the Education Department.

The funds of Roman Catholic schools are derived from fees, parents' donations and allocations from church revenues. Parish schools do not charge fees although contributions are made by all who can afford them. Many of the larger Roman Catholic secondary schools, however, have a set scale of fees which are adhered to except in cases of hardship. Other non-government schools are maintained by fees and by income from property, bequests, etc. In Queensland, eight grammar schools receive a state subsidy, and in the Australian Capital Territory all approved non-government schools are eligible for Commonwealth assistance towards meeting interest payment on loans raised for building purposes.

Most Roman Catholic schools and some Church of England schools are staffed by teachers belonging to religious orders, and these teachers do not receive salaries, although the cost of their maintenance is met from church funds. Because of the large increase in school enrolments in recent years it has been necessary to train, employ and pay an increasing number of lay teachers, and the salaries of these, as in the case of other non-government teachers, are individually determined.

Financial assistance is available to parents through government scholarships and bursaries, taxation concessions and, up to the age of 16 years, child endowment allowances. In recent years, the Government of Victoria, for example, has made available over 4,000 scholarships per year to students at various secondary levels attending government and non-government schools; this total may be compared with the secondary school enrolment figure of 126,900 (1957) for that State. The majority of scholarships are tenable for two to four years and are intended to help parents meet the cost of maintaining children at school and purchasing school books and materials. In South Australia the majority of secondary students receive allowances during the first three years of secondary school. In addition, over 350 scholarships are made available each year in that State to students taking academic and technical courses beyond the third year of study. At the majority of non-government schools, privately endowed scholarships are awarded in varying numbers, and reductions in fees are normally made for children of the clergy or for two or more members of one family attending the same school. Parents may claim certain income tax deductions with respect to children receiving either government or non-government schooling, and in addition receive, irrespective of income, a government child endowment allowance on the basis of 5/- per week for the first child under 16 years and 10/- per week for each other child under 16 years.

Buildings and equipment. The provision of adequate school accommodation is one of the major problems now facing Australian education authorities. Since the war, both in government and non-government systems, there have been substantial shortages of buildings and equipment brought about by steep increases in the child population, and the tendency for pupils to remain longer at school. The impact of increased enrolments, which has been felt for a number of years at the primary level, is now (1959) affecting the secondary schools, and has led to extensive school building programmes, especially by government authorities and the Roman Catholic Church. Between 1949 and 1955 for example, annual loan fund expenditure by State Governments on secondary education facilities rose by over 600 per cent.

Various methods have been adopted by the State Education Departments to keep costs to a minimum and to secure the best use of available funds. Some States have tried out prefabricated schools and classrooms of various types—timber frame, aluminium, pre-cast concrete and steel—and have found them cheaper and easier to erect than brick buildings, and less affected by shortages of labour and materials. The standardization of these prefabricated buildings, and of the design of more conventional buildings, has also been an important factor in lowering costs and speeding construction.

In New South Wales, 600–800 is considered the maximum number of pupils a secondary school should accommodate, and all new, large schools are planned accordingly. In order to allow the fullest possible use of classroom and school equipment, about 24 classrooms are specified for each such school, each room ranging in size from 550 to 750 square feet. The larger rooms may accommodate from 40 to 48 pupils if necessary and special rooms are provided for science, manual training and home science subjects. Lighting, heating and sanitation specifications vary from State to State.

Planning and design of school buildings in all States is

carried out by the respective Public Works Departments, which, in consultation with the Education Departments concerned, prepare plans and specifications, invite tenders and supervise the actual erection of buildings.

School welfare service. Each of the State Education Departments has established school medical and dental services. The Victoria school medical service, for example, employed, in 1958, a staff of 31 doctors and 38 nurses, and the school dental service, 40 dentists and 45 dental attendants. In New South Wales, in addition to medical and dental officers, a small number of psychiatrists, ear specialists, psychologists, social workers and speech therapists are specially employed for diagnostic and remedial work with children.

Generally speaking, most children receive medical examinations at least three times during their school careers, including once or twice at secondary school. If any defects are found, parents are notified and advised to seek treatment, or in cases of hardship, free treatment is available. Most parents, however, receive assistance towards such expenses through membership of a government-subsidized medical insurance scheme. Where possible, a school nurse visits the homes of the parents to discuss the general health of the children examined or to determine whether recommended medical treatment has been effected.

Dental services in most States, owing to shortages of staff, have had to be confined to primary schools.

In New South Wales, five child guidance clinics, each staffed by a psychiatrist, a psychologist and social workers, are maintained in the Sydney metropolitan area. The clinics are designed to help children suffering from disorders of personality or behaviour or from psychoneuroses. One of the clinics deals exclusively with cases before the children's courts. Clinics are also maintained for children suffering from hearing or speech defects.

In all States, special schools and classes have been established by the Education Departments and by voluntary organizations for the education of children who, because of some social, physical or psychological handicap, cannot work to their best advantage in ordinary classes. Among groups specially catered for are delinquent, blind, deaf, crippled and backward children. Specially trained teachers staff these schools and classes, and the courses offered are adapted to the children's particular needs. Handicapped children who cannot attend these special schools and classes are often enrolled at a correspondence school.

Crippled children are catered for in hospital schools most of which are administered by the State Education Departments. If secondary courses are not provided by the school, pupils who have reached that stage usually receive tuition from the correspondence school. The education of the deaf is undertaken both in special schools and classes established by the Education Departments, the Roman Catholic Church and by voluntary organizations. Many of the schools are residential. Schools and classes for the blind function along similar lines to those for the deaf.

A scheme of accident insurance is in operation in every State whereby school children are insured against injury sustained at school, while engaged in a school activity or, subject to certain exclusions, travelling to or from school. In most States the schemes originated with the State Federation of Parents and Citizens Associations or the State Association of School Committees entering into an agreement with an assurance corporation. Approval of the scheme was given by the respective Ministers of Education. In Western Australia, the State Government Insurance Office introduced the Schoolchildren's Insurance Scheme according to the plan of the Federation of Parents and Citizens' Associations. In Queensland, the State Government called for tenders for the introduction of an accident insurance scheme for school pupils.

In the five States in which the School Pupils' Accident Insurance Plan underwritten by the assurance corporation is in operation, the annual premium is 5/-. The policy entitles the claimant to a maximum of £75 for medical expenses contingent upon an accident, and there is no limit to the number of claims which may be made in any one year. For a premium of 10/- (in Victoria £1) a schoolchild may be insured against accident for 24 hours per day.

In the remaining State, the scheme is substantially the same, but the maximum amount which may be claimed for any one accident is higher.

Guidance services are a part of the educational administration of every Australian State. Educational guidance is provided by specially selected and trained officers both at the head office of the Education Department in the capital city of each State and, by visiting officers, in the schools. In some States there are also a number of metropolitan and country guidance centres.

There are variations between the States in the programmes carried out by the guidance branches in relation to secondary schooling. In New South Wales, all children are tested in the later years of primary school for selection for secondary schools. In Tasmania, all children applying for entrance to a selective high school and the majority of children going on to a non-selective secondary school are tested in the final primary grade. In Western Australia, all children in metropolitan schools are tested in the final primary grade. In the other three States, pupils are tested on enrolment in secondary schools.

In each State provision is made by the Education Department for schoolchildren to receive clinical remedial treatment.

In the matter of vocational guidance, officers of the Education Departments work in co-operation with other appropriate State and Commonwealth Departments.

TYPES OF SECONDARY EDUCATION

With the exception of Queensland, where the average age at which pupils complete primary school coincides with the school-leaving age, almost all students in the various States continue their education after primary school at a government or non-government secondary school. A variety of courses is available including those which are designed to prepare students for the university, those which provide for the development of special interests and aptitudes and those which cater for students who are not likely to remain at school for the full length of the normal secondary course. Most non-government schools adopt a curriculum of the first type, although within the Roman Catholic system there are also home science, commercial and agricultural schools.

With the exception of pre-apprenticeship classes in one State, true vocational education is not given in secondary schools, the instruction in secondary schools and courses being directed in the main towards general education. Such 'technical' instruction as is given tends to be pre-vocational rather than vocational, although it is true that some students in commercial courses reach a standard of proficiency in shorthand and typing which is acceptable in the business world without further training in a business college or similar institution. A number of part-time trade courses and courses leading to a certificate may nevertheless be classified as secondary, although few students enter them without having previously spent some time in a secondary school.

Most students are 12 to 13 years of age (14 in Queensland) when they begin their secondary courses. If they complete a full secondary course, they will have reached the age of 17 or 18. They may then, if they have satisfied entrance requirements, pass on to courses at universities, technical colleges and teachers' colleges in preparation for entry to a profession. Many students leave school, however, with lower qualifications than a school leaving certificate or matriculation. Some of these enter employment immediately, others take part-time or full-time courses at agricultural colleges, or they commence training as nurses. In all States facilities are provided by the technical colleges and business colleges for such students to qualify for a school-leaving or matriculation qualification through day-time or evening study or by correspondence.

The school year in Australia begins at the end of January or early in February, and ends in mid-December. The long vacation is taken over the summer months of December and January, and the two short vacations, in May and August–September, divide the school year into three terms. All secondary schools provide full-time instruction only, with the exception that in some cases evening classes are conducted for people who have left school before qualifying for the school leaving examination. In general they observe a 5-day week and approximately a 6-hour day, which is usually divided, for the purposes of subject allocation, into seven or eight periods.

General secondary schools

In general terms, all government secondary education, whether provided in academic, technical, or other schools, aims at integrating students into their social and economic environment, helping them acquire mental skills, knowledge, and capacity for critical thought, assisting in the developing of their character and of physical, moral and mental well-being, and providing a sound educational basis for their future careers.

Non-government schools, however, assume additional responsibilities. Church schools, and to a lesser extent, other independent schools, take a special interest in the religious education of children. They are not bound, as are the government schools, to avoid sectarian issues in the religious instruction given and the existence of boarding facilities in many of them offers further opportunities for character training.

As mentioned above, each State Education Department has now established comprehensive educational guidance services to help students choose the type of secondary course best suited to their abilities. The results of psychological tests, considered in conjunction with the child's school record and the wishes of the parents determine the type of secondary education he or she will receive.

Each state system provides a variety of courses, each type being to a large extent flexible through the provision of a fairly wide choice of subjects. One of the most important types may be called an academic or general course, since it is designed principally to prepare students for university entrance. The principal subjects included are English, history, geography, mathematics, chemistry, physics, economics. In addition, most pupils study at least one foreign language, usually French, and the more able may take Latin as well. A few pupils commence a third language in their second year, German being the most common, although other ancient and modern languages are taught in some schools. In the junior years, at least, woodwork for boys and needlework for girls, art and music form part of the curriculum. In all years provision is made in the school time-tables for physical education and sport.

In addition to the academic type of course, Education Departments have provided alternative courses to suit children with other needs. These 'interest' courses are built around a core of subjects, usually consisting of English, mathematics, social studies (or history or geography) and one or more sciences. No more than one foreign language is studied. Technical or industrial courses for boys give a prominent place in the curriculum to woodwork, metal work and trade drawing, whereas technical or domestic courses for girls include cookery, needlework, domestic economy and other subjects relating to household management. Commercial courses are available in some States in which subjects such as book-keeping, business principles, shorthand and typing are studies in addition to the core subjects. Agricultural courses usually include such subjects as agriculture, horticulture, animal husbandry, farm economy and farm crafts.

Provided the core subjects are taken according to the same syllabuses as are used in academic courses, it is frequently possible for students taking these courses to qualify for the school leaving certificate or even for matriculation. In some States, however, separate syllabuses are used and the courses may not cover as long a period of years as the academic courses. In other States additional curricula have been drawn up to suit the large numbers of students who leave school by the end of the third or fourth year of secondary schooling. They consist in the main of English, social studies, general mathematics, general science, physical education and health, music, art and a variety of crafts, the syllabus content in each case being more suited to the ability of the child who is not academically inclined.

While in all States the headmasters are at liberty to adapt any course somewhat to take advantage of local interests and needs, in some country districts it is the headmaster's responsibility to develop a course which bears directly on the needs of the local community. Such courses are known as area school courses, consolidated school courses or the like.

In most schools internal examinations, i.e. set and marked by the school staff, are conducted two or three

times a year and reports on each child's progress are sent to his parents. In addition, at least twice during the period of secondary schooling, children taking appropriate courses sit for public examinations. For the most part these are set and marked externally, although some States have introduced a certain amount of accrediting in the lower examination. In four States students may qualify for matriculation by passing in appropriate subjects at the school leaving or senior examination. In Victoria and Tasmania, however, the matriculation examination is a separate examination. Students who have been following courses based on syllabuses other than those prescribed by the public examinations boards usually qualify for their special certificates by internal examination.

Secondary courses are provided, for the most part, in multilateral schools offering two or more courses. In some of the state capital cities, however, the older government schools provide one type of course only and, as has already been remarked, many non-government schools are also of this type. Some secondary schools provide courses for the full period of secondary schooling while others cater for only the first three or four years. It is usually possible, however, for a student who has been studying at a school of the latter type to transfer to one providing the full course if he wishes to continue his studies. Many secondary schools, especially those giving the short course, are attached to primary schools, or, if the numbers of pupils are too small to be classified as a school, secondary classes may be attached to primary schools. In areas of even lower population density, the number of secondary pupils may not be sufficient to form a class. In this case the pupils receive lessons from the correspondence school of the capital city and complete them under the supervision of the primary school teacher. Children who are too isolated to attend any school, children of itinerant parents and sick children may receive all their secondary schooling by correspondence, although an effort is made through the provision of boarding allowances and school buses to bring as many as possible within reach of class teaching and the benefits of specialist instruction, adequate equipment, the variety of subjects and the social education provided by schools of reasonable size.

For the most part the training of secondary teachers is carried out by the universities in close collaboration with the government-controlled teachers' colleges, although the Roman Catholic Church trains many of its own teachers and there are two other private teacher training institutions.

The majority of secondary teachers, especially those in government schools and Roman Catholic schools, have taken a course of professional teacher training. Some non-government schools, however, do not require the teachers they employ to possess formal teaching qualifications and these accept a university degree as a qualification.

Most teacher trainees are recruited from among those who have already qualified for matriculation although some students in secondary schools are awarded scholarships to assist them to complete their secondary education and begin training as teachers. In most cases those who wish to teach in secondary schools are required to undertake a 3 or 4-year course towards an appropriate university degree followed by a 1-year diploma course of education. This diploma course consists of lectures and seminars on subjects associated with educational theory and practice, study and methods and techniques appropriate to secondary school subjects and periods of practice teaching and observation of experienced teachers.

In some teachers' colleges special courses, usually two years in length, are provided for suitable students who have qualified for matriculation but have not obtained a university degree. These teachers are usually appointed to positions involving the teaching of junior secondary classes only.

Teachers of specialist subjects, such as music, art, manual arts, domestic science and commercial subjects receive from two to five years training at teachers' colleges, universities, technical colleges or conservatories of music. In some cases, where the specialist course is given at an institution other than a teachers' college, the final year is reserved for professional training.

On appointment, a secondary teacher is normally required to teach two or three subjects, usually those he has studied in the degree course.

Teachers in government secondary schools are public servants of the State in which they teach. Their salaries are determined either by a board set up specifically for this purpose, as in four States, or by a public service or general authority dealing with this question. As public servants they enjoy security of tenure and cannot be dismissed unless they are guilty of a criminal act, gross misdemeanour or incompetence. They receive annual increments in salary until the top of the salary range is reached and, when they are considered of sufficient ability and experience, whether men or women, they are eligible for promotion to positions of greater responsibility, such as subject master or deputy headmaster.

Vocational and technical schools

Vocational education in the strict sense of the term is not given in secondary schools. In one State, however, the pre-apprenticeship classes run in association with government secondary schools constitute a form of vocational education which might be regarded as secondary in standard. In all States technical colleges offer trade courses and courses leading to a certificate which may be similarly classified. A large number of these trade courses are tied to apprenticeship regulations governing such matters as the length of appenticeship, wages and conditions of employment and the technical education of apprentices. Specially appointed authorities usually supervise the administration of these regulations. The colleges provide technical instruction and with the exception of several in Victoria, are government controlled. Certificate courses are usually more advanced than trade courses and, in general, provide semi-professional training.

Minimum entrance requirements for trade courses vary from State to State. Since only in special circumstances may a student enrol in a trade course before he has reached the statutory school-leaving age, in every State except Queensland, where secondary education is not compulsory, the student will have completed some secondary schooling. The school intermediate or junior certificate (taken after three years at secondary school) is the highest entrance qualification required.

In New South Wales pre-apprenticeship classes are conducted at technical colleges in Sydney, Newcastle and Wollongong in association with government secondary schools. The boys selected for the classes must have had three years' secondary education and must be no more than 15½ years of age at the beginning of the year in which they enter the course so that they will not be over age for entering into an apprenticeship at its conclusion. They receive full-time day instruction partly at the schools and partly at the technical colleges. The school subjects are English, mathematics, history or social studies, physical education and sometimes physics, while the college subjects, occupying at least 18 hours per week, are workshop practice, trade calculations, trade theory and trade drawing appropriate to the course the boy wishes to follow when he enters into an apprenticeship. Successful completion of the course gains him exemption from the first year of the trade course taken during apprenticeship.

Although the pattern of trade and certificate courses differs from State to State, they are similar in some important respects. The courses offered by Sydney Technical College may therefore be taken as an example with regard to the fields covered. Here, trade courses are offered in building, electrical trades, shoemaking, printing, hairdressing, mechanical and automotive trades, fitting and machining, plumbing, shipbuilding and similar trades. The automotive engineering trade course, for example, is of 4 years' duration with 6 hours each week spent studying such subjects as automotive theory and practice, fitting and machining, automotive drawing, calculations, trade science and oxywelding. In the building trades the courses available include bricklaying, carpentry and joinery, painting and decorating and plastering. The bricklaying course is of 4 years' duration, 6 hours per week, and comprises practical work, trade theory and calculations, trade drawing and construction theory and drawing. Instruction is given in the employer's time on one day (8 hours) per fortnight and in the student's own time on one evening (2 hours) per week. To qualify for the award of trade certificates in these and other trade courses, students must fulfil requirements regarding practical experience, as well as satisfactorily completing the prescribed course of study.

Certificate courses are provided by the college in such fields as agriculture, accountancy, electrical engineering, chemistry, biology, wool classing, textiles and electronics and communications. The accountancy certificate course for example is normally held over 4 years with instruction given for an average of 8 hours per week. The subjects studied include English, commercial law, bankruptcy law, company law and taxation law, monetary theory, auditing, management accounting and various aspects of bookkeeping. Entrance requirements in general are the secondary intermediate certificate or its equivalent. On satisfactory completion of the course students are granted exemptions from the examinations of such professional bodies as the Australian Society of Accountants and the Public Accountants' Registration Board.

In general, teachers of trade subjects in technical colleges are recruited from among qualified and experienced tradesmen, and after appointment they usually receive instruction in classroom teaching techniques. In one State, technical college teachers receive in-service professional training for one full day per week over a period of 1 year. A technical teachers' college has been established in Victoria.

Teacher training schools

There are no teacher training institutions at the secondary level in Australia. Teacher trainees, irrespective of the level at which they intend to teach, are required to have completed a full secondary course before commencing training.

Other specialized schools

In two States secondary schools are attached to the conservatory of music in the capital city and provide a secondary curriculum for students with special aptitude in music. The curriculum of one of the conservatory high schools, for example, includes English, history, mathematics, art, French and geography in addition to special study in music. In the few cases where choir schools are attached to cathedrals, a similar curriculum is followed. In all States many secondary school pupils supplement the musical education received during school hours with tuition from private teachers or teachers on the staffs of the conservatoriums of music.

Smaller numbers of students extend their study of art through individual or class tuition at technical college art classes or with private tutors.

Out-of-class activities

In most secondary schools, both government and non-government, pupils are given some measure of responsibility for the administration of school affairs. The scope of their activities and the system whereby they share them with the staff depend on the view of the principal and staff of the individual school. Most schools, however, have some positions of leadership for senior pupils, such as school captain, house captain, prefect, or the like, and in some schools a representative school council is made up of pupils from all sections of the school. The responsibilities of captains, prefects or councillors usually involve such duties as maintaining the standard of out-of-class behaviour, representing the school on civic occasions, acting as host or hostess to visitors to the school, etc. Students may be chosen for such positions by the school staff, elected by the pupils or appointed by some combination of staff choice and pupil election.

Democratic election procedures are most frequently adopted in the selection of class leaders, or in the appointment of office bearers for out-of-class clubs.

Most schools have a variety of clubs, catering for the interests of the pupils. The most popular are the school choirs, dramatic clubs, social service clubs such as the Junior Red Cross, and library, gardening, chess, stamps, and debating clubs. Worthy of special mention are the Junior Farmers' Clubs associated with country schools and which admit members up to 25 years of age.

Sport is encouraged in both government and non-government schools and most schools have one or more teams participating regularly in inter-school matches. The most popular sports are cricket, swimming, football, tennis, hockey, athletics, basketball and softball.

Some State Education Departments have a programme of school camps under which arrangements are made for classes to spend from a few days to a fortnight at one of the Department's camp sites. The programme at the camps includes physical education, bush walking, nature study, handcrafts and instruction in personal and community hygiene. In general, the aims of the camping programmes are to provide experiences in social living, to stimulate leisure interests and to extend the schools' health education programmes.

TRENDS AND PROBLEMS

In recent years the content and organization of secondary education has been under review in four States.

In Tasmania, following recommendations made by the Tasmanian Director of Education after his study of secondary education overseas in 1955, a number of experiments have been conducted on the provision of secondary education on a multilateral or comprehensive basis instead of the unilateral basis which had previously prevailed. Four district high schools were established, each conducting both the high schools (academic) course and the secondary schools (modified) course. Comprehensive schools began in 1957 with the comprehensive intake of first-year pupils into three area schools, in which they would all follow a course similar to the high schools course for the first year, but with increased specialization and differentiation in later years.

In New South Wales a committee appointed by the Minister for Education to survey secondary education presented its report in 1957. This committee, the University of Sydney, the Teachers' Federation and non-government schools, also recommended that secondary schools should be comprehensive, providing a core of subjects (English, social studies, science, mathematics, music, art, crafts, physical and health education, religious education) with a progressive increase in the proportion of elective subjects. By the fourth year the core subjects for many pupils would occupy about 60 per cent of the total school time, the remaining 40 per cent being spent on about three elective subjects. It was also recommended that the secondary school course should be extended to six years instead of five and public examinations held at the end of the fourth and sixth years instead of at the end of the third and fifth years. By this means it was hoped that more pupils would be encouraged to remain at school until the end of the fourth year and that students entering university would be better equipped, both in maturity and in background of study, for the courses they undertook. The committee tended towards the view that government schools should in future enrol both boys and girls, but no definite recommendation on the adoption of co-education was made. Although it may take some years before all these recommendations can be fully implemented, a first step towards the establishment of comprehensive schools has been taken in the conversion of many unilateral schools into multilateral schools.

In Western Australia a special committee was set up in 1958 to examine the adequacy of the secondary schools curriculum to meet the changing requirements of modern Western Australian life and the needs of all pupils, whether intellectually gifted or not. The committee consisted of 30 representatives from business and community organizations, the Teachers' Union, the University of Western Australia, churches, private schools and the Western Australian Education Department. In its interim report, recommendations were grouped under five headings: health and physical education; intellectual development and the basic skills; personal and group relationships; responsibility for moral choices; environmental factors and forces. Further work is being carried out in translating the recommendations into school syllabuses.

In 1958 also, a committee of six from the Victorian Education Department and the Australian Council for Educational Research was established by the Minister for Education to survey the Victorian education system generally. The terms of reference for the survey are principally the investigation of the present educational position and analysis of the problems facing the present system.

[*Text prepared by the Commonwealth Office of Education, Sydney, in June 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 9,846,000.[1]
Area: 2,974,583 square miles; 7,704,159 square kilometres.
Population density: 3 per square mile; 1 per square kilometre.

Summary of school statistics, 1953–57. In 1957 there were some 2,000,000 students enrolled in educational institutions from primary to university level, representing over 20 per cent of the population. There were in addition some 12,000 students attending adult education courses. Of total school enrolment about 71 per cent was in primary schools, 23 per cent in general secondary schools, 3 per cent in technical colleges, and the remaining 3 per cent in universities and post secondary teacher training institutions. Girls represented about half the enrolment at primary and general secondary levels and 62 per cent of teacher training enrolment, but only 21 per cent at universities. In primary schools 61 per cent of teachers were women and in secondary schools 43 per cent. Between 1953 and 1957 enrolment increased by 20 per cent in primary schools, 35 per cent in general secondary schools, 12 per cent in technical colleges, 54 per cent in teacher training courses, and 28 per cent in the universities. In 1957 the average pupil-teacher ratio was 32 in primary and 25 in general secondary schools. (See Table 2.)

Enrolment trends in secondary education, 1930–57. Table 3 shows the development since 1930 of general secondary school enrolment. Data for enrolment in vocational secondary schools are not complete for all years. Teacher training is generally at the third (higher) level and is thus excluded from this table.

Enrolment in general secondary schools more than tripled from 1930 to 1957. The average ratio of general secondary enrolment to total estimated population aged 15–19 years was 65 in the three-year period 1955–57, compared with an average ratio of 25 in the period 1930–34.

Examination results in secondary education, 1953–57. Some 19,290 students successfully sat for the secondary school leaving certificate in 1957/58 compared with 12,130 in 1953/54, an increase of 59 per cent. The number of girls obtaining the certificate rose from 5,340 to 8,400 over the same period and represented about 44 per cent of the total certificates granted in each year.

Educational finance, 1956/57. Total expenditure on education in Australia and the dependent territories in 1956/57 (fiscal year beginning July) was 129,764,000 Australian pounds, representing £11.4 per inhabitant in Australia, Norfolk Island, New Guinea, Nauru and Papua and approximately 2.8 per cent of the estimated national income for Australia in 1957. Of the total spent, 16 per cent was for capital expenditure. Recurring expenditure was distributed as follows: administration 3.1 per cent, instructional expenditures including salaries 85.4 per cent, other recurring expenditure 11.5 per cent. (See Table 1.)

Sources. Australia: Commonwealth Office of Education, replies to Unesco questionnaires.

1. Excluding aborigines.

1. EDUCATIONAL FINANCE, 1956/57 (in thousand Australian pounds)[1]

A. EXPENDITURE BY PURPOSE

	Amount
Total expenditure[2]	**129 764**
Recurring expenditure	108 477
For administration or general control	3 383
For instruction	
Salaries to teachers, etc.	66 289
Other instructional expenditure	26 308
Other recurring expenditure	12 497
Capital expenditure	21 287

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure	**[3]108 477**	**[3]100.0**
Administration[3]	(3 383)	(3.1)
Pre-primary and primary education	51 341	47.3
Secondary education[4]	33 368	30.8
General	19 090	17.60
Vocational[4]	9 041	8.33
Teacher training	5 237	4.83
Higher education, universities	11 085	10.2
Agricultural colleges	739	0.7
Adult education and cultural organizations	2 956	2.7
Other education	[5]8 988	[5]8.3
Other recurring expenditure[3]	(12 497)	(11.5)

1. Official exchange rate: 1 Australian pound = 2.24 U.S. dollars.
2. Closed account. Expenditure also includes data for the territories Nauru, New Guinea, Norfolk Island and Papua, and represents all educational expenditure by the Commonwealth Government.
3. Includes expenditure for administration (£3,383,000) and for other recurring expenditure (£12,497,000) distributed by level and type of education.
4. Includes senior technical education.
5. Of which, £8,620,000 for pre-primary, primary and secondary education.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution[1]	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public[2]	1957	*7 200	34 315	18 905	1 100 018	527 269
	Primary schools, private[2]	1957	1 360	9 260	7 780	323 080	165 060
	Total[2]	**1957**	***8 560**	**43 575**	**26 685**	**1 423 098**	**692 329**
	" [2]	1956	8 542	42 284	25 607	1 371 432	668 003
	" [2]	1955	8 510	40 660	24 706	1 314 419	639 884
	" [2]	1954	8 521	39 022	23 499	1 250 169	609 378
	" [2]	1953	8 515	38 187	23 143	1 189 958	580 692
Secondary							
General	Secondary schools, public[2]	1957	*870	13 738	5 347	325 108	153 527
	Secondary schools, private[2]	1957	640	4 540	2 590	130 890	66 350
	Total[2]	**1957**	***1 510**	**18 278**	**7 937**	**455 998**	**219 877**
	" [2]	1956	1 485	16 887	7 521	416 832	200 954
	" [2]	1955	1 448	16 090	7 178	382 156	184 671
	" [2]	1954	1 421	14 637	6 449	357 943	173 993
	" [2]	1953	1 360	13 549	6 003	338 946	164 496
Vocational[3]	Technical colleges, public						
	Total	**1957**	[4]**170**	[4]**8 700**	...	[5]***64 210**	[5]***1 280**
	"	1956	[4]164	[4]8 364	...	[5]64 220	[5]*1 280
	"	1955	[4]151	[4]7 632	...	[5]59 110	[5]*1 180
	"	1954	[4]148	[4]7 149	...	[5]*61 150	[5]*1 220
	"	1953	[4]141	[4]6 688	...	[5]57 500	[5]*1 150
Higher							
Teacher training[6]	Teacher training colleges, public						
	Total	**1957**	**23**	**630**	**218**	[7]**10 756**	[7]**6 723**
	"	1956	22	571	197	[7]9 526	[7]5 899
	"	1955	22	526	191	[7]8 422	[7]5 204
	"	1954	20	511	190	[7]7 579	[7]4 545
	"	1953	19	465	176	[7]6 982	[7]4 050
General and technical	Universities	1957	10	3 769	...	36 903	8 087
	Technical colleges	1957	[8]170	[8]8 700	...	5 589	877
	Total	**1957**	[8]**180**	[8]**12 469**	...	**42 492**	**8 964**
	"	1956	[8]174	[8]12 066	...	39 866	8 453
	"	1955	[8]161	[8]11 112	...	35 163	7 435
	"	1954	[8]158	[8]10 560	...	33 714	6 942
	"	1953	[8]151	[8]9 880	...	33 180	6 548
Adult	Adult education courses						
	Total	**1957**	[9]**546**	...	...	[9]**11 823**	...
	"	1956	[9] [10]507	...	...	[9] [10]10 589	...
	"	1955	[9]600	...	...	[9]11 625	...
	"	1954	5 771	...	...	84 299	...
	"	1953	...	...	...	[11]66 582	...

1. Information on pre-primary institutions is available only for 1955, when 767 schools, public and private, enrolled 34,147 pupils.
2. Including special schools and classes. All public schools with primary pupils are classified as primary schools, and all public schools with secondary pupils are classified as secondary schools. Private primary schools are estimated on number of pupils in primary classes, and private secondary schools on number of pupils in secondary classes.
3. Excluding private vocational schools.
4. Including data on post-secondary courses (diploma courses).
5. Part-time students enrolled in trades courses.
6. In addition, there is some teacher training conducted by private organizations, such as religious seminaries.
7. Including students undertaking university courses as part of their training. These are included also under higher general education.
8. Including data on secondary vocational education in technical colleges.
9. Not including university tutorial classes, adult education board classes and discussion groups, nor classes of the Workers' Educational Association.
10. Not including Metropolitan lecture classes.
11. Not including university tutorial classes, classes of the Workers' Educational Association, Council of Adult Education groups, nor university tutorial 'kits' and discussion groups.

3. TRENDS IN GENERAL SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled		Average total enrolment	Estimated population 15–19 years old (000's)	General secondary enrolment ratio
	Total	Per cent female			
1930	145 000	46			
1931	152 000	45			
1932	152 000	45	150 600	611	*25*
1933	151 000	44			
1934	153 000	45			
1935	151 000	46			
1936	158 000	48			
1937	168 000	46	167 200	602	*28*
1938	175 000	46			
1939	184 000	46			
1940	190 000	46			
1941	204 000	47			
1942	207 000	48	209 000	596	*35*
1943	220 000	47			
1944	224 000	48			
1945	232 000	47			
1946	230 000	48			
1947	229 000	49	232 200	586	*40*
1948	235 000	48			
1949	235 000	48			
1950	269 999	49			
1951	288 439	47			
1952	309 971	48	313 060	568	*55*
1953	338 946	49			
1954	357 943	49			
1955	382 156	48			
1956	416 832	48	418 329	641	*65*
1957	455 998	48			

NAURU

Trust Territory

THE EDUCATIONAL SYSTEM

The administration of Nauru is vested in an Administrator, who is responsible to the Australian Government through the Minister of State for Territories. An advisory body, the Nauru Local Government Council, advises and assists the Administrator. An Educational Advisory Committee acts as a liaison body between the Council and the Education Department on educational matters.

Under the Compulsory Education Ordinance 1921/1951, the Administrator controls education and is empowered to make rules, regulations and orders for the conducting and maintenance of schools.

Education is free and compulsory for all children from the age of 6 years to 15 years in the case of European children and to 16 years (extendible for a further 12 months) in the case of Nauruan children. In consequence almost all children completing their primary education proceed to secondary schooling.

The school system is designed to provide effective education for all the children in the Territory. The population includes large European, Chinese, and Gilbert and Ellice Islands immigrant groups in addition to the Nauruans and the fundamental differences in languages and in educational and social background of the children make it necessary to provide different types of schools at the primary level. This differentiation, however, is solely on educational and cultural grounds, and the schools for

Nauruans for example also include some pupils from each of the immigrant groups.

Private agencies may conduct schools, subject to regulations governing such matters as the qualifications of teachers and the standards of instruction.

THE DEVELOPMENT OF SECONDARY EDUCATION

Compulsory education for Nauruans up to the age of 16 years was introduced in 1921 as one of the earliest Acts of the Australian administration, and in 1925 provision was made for a further 12 months of part-time compulsory education. For girls, secondary schooling had a strong bias to domestic arts and to instruction in Nauruan crafts. For boys there was a 3-year general cultural and junior technical course, followed by 3 years of full-time technical education. A few Nauruan youths were also sent to Australia for secondary education or for higher training.

During the war and enemy occupation, education of Nauruans was dislocated and it was not until 1952 that a secondary school was re-established on the Island. From 1948, however, scholarships for secondary education in Australia were awarded to promising Nauruan students.

In 1954, the new secondary school building was erected. This school is well equipped for both general education and domestic arts and technical instruction. The school takes pupils through the first 4 years of the secondary course of the Australian State of Victoria. The Roman Catholic Mission of the Sacred Heart now also offers the same 4-year secondary course at its school.

Administration

The Department of Education determines the outlines of secondary education for Nauru. Syllabuses and examinations are those used in the State of Victoria and arrangements are made with the Victorian Department of Education for the conducting of courses, examinations and similar matters.

Although local adaptation is restricted because of the links with the Victorian examination system, some modifications are made to meet local needs. This applies particularly to the teaching of English which is not the mother tongue of the Nauruan children. The Education Committee of the Nauru Local Government Council may assist in an advisory capacity in the development of policy and planning.

The Administration secondary school is controlled directly by the Department of Education and the headmaster is an officer of that Department. The only other school with secondary classes is conducted by the Sacred Heart Mission and is inspected regularly to ensure that proper standards are maintained. Inspection and supervision of all schools are carried out by trained officers of the Department of Education as part of their normal duties.

The Administration meets all the costs of the Nauru Secondary School including buildings, equipment, supplies and teachers' salaries. No fees are charged at this school. The Sacred Heart Mission meets all the costs of conducting its secondary classes, but is assisted by the Administration in the provision of school supplies. Parents are assisted through the provision of scholarships for secondary education and for various forms of training overseas.

There are no specific school welfare services except regular medical and dental attention. Any problems of either parents or pupils are dealt with as they arise by officers of the Administration.

TYPES OF SECONDARY EDUCATION

The secondary education available on Nauru is of a general nature and includes provision for the study of technical, commercial, and domestic arts. For scholarship holders sent to Australia the types of courses to be undertaken are determined by the Director of Education, in accordance with the pupils' interests and abilities and the wishes of the parents. Privately sponsored students going to Australia are advised on courses available. Nauruan students in Australia receive careful guidance from the Department of Territories and the Commonwealth Office of Education.

Most students who want further education must go overseas. The Administration provides scholarships and cadetships for post-secondary education and training at the Central Medical School and the Central Nursing School at Suva, Fiji, and in Australia. In Nauru itself service training is provided in appropriate fields within the Administration, particularly through part-time classes, and the British Phosphate Commissioners have a form of apprenticeship training.

Since the secondary schools in Nauru follow Australian syllabuses and present students for Australian public examinations, they adopt a pattern of organization very close to that of Australian schools and have similar terms, school days and holidays.

General secondary schools

The secondary schools in Nauru aim to provide a general education which will raise educational levels, encourage good citizenship and, while fostering traditional crafts and activities, enable each student to undertake whatever further secondary education or training he may be fitted for.

The only qualification required of students for entry into secondary schools is completion of their primary education. The degree of differentiation within the schools is limited because of the small numbers of pupils involved; at the Administration secondary school students attempt either the Intermediate Technical Certificate or the academic Intermediate Certificate according to their interests and abilities.

The subjects taught at the Administration secondary school are English, arithmetic, algebra, geometry, social studies, history, general science and hygiene. Boys are instructed in woodwork, metal work, mechanical drawing and in such Nauruan skills and crafts as canoe making. Girls are instructed in cooking, nutrition, household management, needlework, and in the preparation of various local materials and in the making of mats, baskets, fans and belts. The course for the Junior Technical Certificate takes 3 years and the Intermediate Technical Certificate and the Intermediate Certificate 4 years.

Teaching methods are generally the same as those used in Australia. Special methods, however, have been devised for the teaching of English. All teachers in the secondary schools in Nauru have been trained in Australia in secondary teaching. At the Administration secondary school two of the teachers, including one Nauruan woman, have been trained as specialized domestic arts teachers.

Vocational and technical schools

The British Phosphate Commissioners provide evening classes in appropriate practical subjects for apprentices, who also attend weekly classes in English and trade mathematics conducted by the Department of Education.

TRENDS AND PROBLEMS

The educational policy for Nauru is one of advancing the Nauruan people as rapidly as possible, with a view to their taking an increasing share of the management of their own affairs. This requires, in the case of secondary education, a broad basis from which students can proceed to the appropriate specialized training.

There is, concurrently, a need to provide for sound primary education as a basis for secondary education. The special concentration in the past few years on the improvement of the primary curriculum and on the development of special methods of teaching English has led to steady improvement at all levels of education and training.

Secondary enrolments are at present low on account of factors associated with the war. The higher birth rate of the post-war years, however, will lead to a rapid increase in secondary enrolment. The Administration secondary school, with an enrolment of 49 at 1958, has accommodation and facilities which would be adequate for 250 secondary pupils, and as enrolments increase a wider range of subjects will be made available. Nevertheless the population of the Island is small and it will be necessary to continue to rely on Australian facilities for higher secondary levels.

[*Text prepared by the Department of Territories, Canberra, in June 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 4,000.
Area: 8 square miles; 21 square kilometres.
Density: 500 per square mile; 190 per square kilometre.

Summary of school statistics, 1953–57. From 1953 to 1957 total enrolment in primary and secondary schools increased by 25 per cent. In the latter year 45 per cent of the pupils were girls. The number of pupils per teacher in primary schools was 23 in 1957 as against 19 in 1953. (See Table 2.)

Educational finance, 1957/58. In the fiscal year beginning 1 July 1957, the Commonwealth Government spent 44,938 Australian pounds on education in Nauru. Salaries to teachers represented 45 per cent of the total and capital expenditure 21 per cent. The average expenditure per inhabitant was £11 for 1957/58 as compared with £7 for 1945/55. (See Table 1.)

Source. Australia: Commonwealth Office of Education, replies to Unesco questionnaires.

1. EDUCATIONAL FINANCE, 1957/58
(in Australian pounds)[1]

Expenditure by purpose		Amount
Total expenditure[2]		**44 938**
Recurring expenditure		35 595
Salaries to teachers, etc.	21 501	
Other recurring expenditure	14 094	
Capital expenditure		9 343

1. Official exchange rate: 1 Australian pound = 2.24 U.S. dollars.
2. Closed account. Data refer to expenditure by the Commonwealth Government.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	3	21	...	436	*202
	Primary schools, private	1957	1	4	3	176	*78
	Total	**1957**	**4**	[1]**25**	**...**	**612**	***280**
	,,	1956	4	[1]23	...	569	*260
	,,	1955	4	[1]25	...	544	*242
	,,	1954	10	[1]28	...	506	*226
	,,	1953	10	[1]25	...	466	*208
Secondary	Secondary school, public	1957	1	[2]4	3	51	*20
	Secondary class in primary school, private	1957	(1)	1	1	23	*10
	Total	**1957**	**1**	[2]**5**	**4**	**74**	***30**
	,,	1956	1	[2]5	3	83	*33
	,,	1955	1	[2]3	2	86	*35
	,,	1954	1	[2]5	...	106	*47
	,,	1953	1	4	...	82	*37
Adult	Cookery classes	1956	2	1	1	42	42
	Elementary accountancy class	1956	1	1	...	24	...
	Apprentices' course in English and mathematics	1956	1	2	...	41	...
	Total	**1957**	**5**	**...**	**...**	**...**	**...**
	,,	1956	4	4	...	107	...
	,,	1955	4	4	...	75	...
	,,	1954	1	2	...	50	...
	,,	1953	1	2	...	50	...

1. Not including part-time teachers (5 in 1957, 5 in 1956, 4 in 1955, 4 in 1954 and 4 in 1953).

2. Not including 2 male part-time teachers.

NEW GUINEA

Trust Territory

THE EDUCATION SYSTEM

The Trust Territory of New Guinea and the Territory of Papua were constituted an administrative union designated as the Territory of Papua and New Guinea, under the Papua-New Guinea Act, 1949–57. Education in both territories is administered as a single programme, and the information provided here (with the exception of the statistics, which are available separately for New Guinea and for Papua) applies equally to Papua.

The chief legislation is the Education Ordinance 1952–57, which provides that the overall control and direction of secular education is the responsibility of the Administration. The Native Apprenticeship Ordinance 1951–55 makes provision for apprenticeship training and the Native Local Government Councils Ordinance 1949–58 provides for the establishment of schools by local authorities.

In providing education for the indigenous people many social, linguistic and other factors must necessarily be taken into account, notably the wide diversity of social groups, the existence of several hundred distinct languages, and the fact that indigenous people range from those who have had several generations of close contact with Europeans to those who still live a primitive life and are making their first contacts with the world beyond their own immediate environment. The population also includes European, Asian and mixed-race groups, whose manner of living is such that special provision must usually be made for them.

All government education is controlled by the Department of Education, with headquarters at Port Moresby, which both conducts its own schools and also has overall control of schools conducted by missions and any other non-government schools. Native local government authorities may establish schools, assist in their operation, and make recommendations in respect of local education, although these schools are staffed and controlled by the Department of Education.

For historical and other reasons private agencies, for example the religious mission organizations, play a very important part in the provision of education. They conduct

a large number of schools at all educational levels, which are subject to administration supervision and control.

Students who complete grade 6 in the primary schools designed chiefly for non-indigenous students, and students of appropriate age and educational standard who complete standard 6 in the indigenous primary school system proceed to grades 7 and 8 and thence to forms 1 and 2, on the completion of which they attempt the Queensland Junior Public Examination. Alternatively, on the completion of grade 6 or standard 6, students may proceed to secondary schools in one of the Australian States.

In general, however, students who complete standard 6 in the indigenous primary schools proceed to post-primary education as follows: (a) intermediate school (standards 7 to 9), followed by forms 1 and 2, as referred to in the above paragraph; or (b) technical training centre (years 1 to 4).

For secondary studies above the level of the Queensland Junior Public Examination, students go to Australia.

Beyond the secondary level, the whole range of further education available in Australia is open to children of the territory who have the necessary academic qualifications. Within the Territory, various forms of training are available, such as teacher training courses. The Auxiliary Division of the Public Service is designed as a training division in which the officers receive training and education to acquire the qualifications demanded for entry into the normal divisions of the Public Service. Thereafter, the Public Service Institute provides opportunities for higher study.

Non-indigenous children usually complete grade 6 at about 12 years of age and indigenous children usually complete standard 6 at about 14 years, although there is a wide range in the ages of children at post-primary levels.

THE DEVELOPMENT OF SECONDARY EDUCATION

Until 1942, there were separate Administrations for Papua and for New Guinea. Education was left almost entirely in the hands of the missions, each of which determined its own pattern of education. There was some stress on technical education of a practical character for older students, but for the most part education was elementary.

Following the re-establishment of civil government and the provisional union of the two territories, a Department of Education was set up in 1946. The first problem was, and still is, the extension of primary education as an essential foundation for higher education. Post-primary education was, however, given in the Territory in a 3-year central (since re-named intermediate) school course, to be followed by a 2-year secondary course, a teacher-training course, and technical training courses.

In 1957, the local secondary course was replaced by the course leading to the Junior Public Examination provided in the Australian State of Queensland.

Meanwhile, in 1954, a system of scholarships was introduced under which up to 20 indigenous students are selected each year for secondary education in Australia.

Special provision was found necessary for the secondary education of non-indigenous students and, by a series of measures since 1951, all qualified non-indigenous students who proceed to Australia for secondary education receive an allowance designed to cover the additional costs faced by parents, and in certain cases special bursaries are also given. Secondary classes were established at Rabaul in 1951; these have been developed and are now being extended to other large centres in the Territory. They will be open to all non-indigenous and indigenous students who meet the necessary standards.

Legal basis

There is no legislation covering secondary education, other than the Education Ordinance 1952–57 referred to earlier. Although education is not compulsory, there is provision in that Ordinance for the introduction of legislation for compulsory education either throughout the Territory or in certain areas.

The Native Apprenticeship Ordinance 1951–55 provides the legislative basis for the Native Apprenticeship Scheme.

Administration

The Department of Education is responsible for such matters as the preparation and revision of syllabuses and textbooks. Textbooks adapted to local conditions have been prepared by the Department of Education, by some missions, and by the South Pacific Commission's Literature Bureau. The Department of Education acts as a clearing house in such matters. Non-government schools follow departmental syllabuses and some textbooks are included in the free issue provided to them.

An Education Advisory Board, established in 1953 with both mission and administration representation, advises on all educational matters. District Education Committees with similar representation perform this function at the district level.

Education is centrally controlled by the Administration through the Department of Education. The line of control is from the Director of Education to chiefs of divisions, to district education officers to the teachers in charge of schools.

No public authorities other than the Department of Education conduct secondary schools, although some authorities such as the Department of Public Health, the Department of Agriculture, Stock and Fisheries and the Native Apprenticeship Board provide or arrange training courses for students at the normal secondary school age levels.

Mission organizations are controlled by inspection to ensure that the requirements of the Administration are met. The system of government grants-in-aid, provided on an established basis, is a further means of ensuring that overall policy is maintained in mission schools. The larger missions have appointed officers to deal with the Department of Education, which itself maintains a Mission Relations section.

In addition to the staff of full-time inspectors the district education officers carry out inspections as part of their normal duties. All are trained and experienced teachers either promoted from other positions within the Department of Education or, in some cases, recruited from Australia. These officers report on both government and mission schools, their functions being broadly similar to those of inspectors in Australia.

No other agencies have supervisory functions, although

missions may establish their own methods of supervising their own educational work.

All Department of Education funds come from the general Administration budget which is derived from local revenue and a grant from the Commonwealth of Australia. Funds for expenditure on capital works also come from the Administration budget. Some contributions to the financing of education are made by native local government councils or parents' committees, where these exist. With the exception of minor items, all expenditures are made by the Department of Education, not by the school.

Mission organizations obtain their funds for education from their own sources and from government grants-in-aid which provide payment of £40 to £400 per annum in respect of each mission teacher (the amount varying with the teacher's qualifications), payments in respect of students enrolled at the higher levels, and payment for all necessary school equipment and supplies. Administration teachers are paid by the Department of Education; mission teachers by their employers.

No fees are charged in schools in the Territory. Assistance to parents includes free tuition in all schools, free board for indigenous children in boarding schools (most schools at the secondary and higher levels are boarding schools) and generous allowances to students attending secondary schools in Australia.

As regards school buildings, specific standards are not laid down, but the Education Regulations require that buildings meet a satisfactory standard in respect of access, drainage, light, ventilation, sanitary facilities, space and seating accommodation.

TYPES OF SECONDARY EDUCATION

The educational possibilities open to the primary school leaver have been summarized in the section dealing with the educational system as a whole. In selecting the type of post-primary education they wish to pursue students are assisted by Department of Education officers who point out the various types available and guide students towards the most appropriate. Guidance to students proceeding to Australia is provided by a special section of the Department. The guidance services in the various Australian States are also available to students from the Territory.

The Education Regulations require that the amount of class time at post-primary level should be as follows: intermediate schools—30 hours per week for 40 weeks; indigenous secondary schools—25 hours per week for 40 weeks; non-indigenous secondary schools—25 hours per week for 42 weeks; technical schools—25 hours per week for 42 weeks. All schools are required to work five days a week, taking the normal Territory public holidays, and the usual practice is to have the long vacation during the December/January period. The school year is being reorganized at present with a view to providing four terms instead of the usual three.

General Secondary Schools

General secondary education is offered in intermediate schools and in schools which follow the Queensland course up to Junior Public Certificate level; students from the Territory may also attend school in Australia. Details are set out below concerning the two types of schools available in the Territory. For details of the general secondary schools in Australia, the chapter on Australia should be consulted.

Intermediate schools. These schools are for indigenous pupils. The course is adapted to the needs of the Territory and allows students to proceed, on completion, to courses following the Queensland secondary school syllabus.

Students are required to have passed an examination at standard 6 level. Most intermediate schools serve fairly large areas since the indigenous population is scattered; in general they are free boarding schools.

Two courses are available, one for boys and one for girls, including respectively manual training and domestic arts. At a school at Vunamami an agricultural project method is used, and all school instruction revolves around the practical agricultural work done at the school.

The distribution of time recommended by the Department of Education for intermediate schools, in hours per week, is as follows: English 9, mathematics 6, social studies 4, hygiene 1, science 2, manual training 2½, art 1, religious instruction 1, ethics and morals 1, sport 2½; making a total of 30 hours. At the end of the course, students sit for an examination at standard 9 level set centrally.

The teaching staff in intermediate schools consists for the most part of experienced non-indigenous teachers trained in Australia and of indigenous teachers who have taken the teacher training course 'C' or its equivalent.

Schools following Queensland courses. Two stages of post-primary education are available in these schools: Queensland grades 7 and 8, which are strictly a continuation of primary schooling, and the 2 years, sub-junior and junior, which lead to the award of the Queensland Junior Public Certificate.

The first stage is provided for students who have completed the primary course designed principally for non-indigenous students. The second stage is for those who have completed either Queensland grade 8 or the intermediate school course.

The purposes of this form of secondary education are to provide a sound general education and the educational background necessary as a preparation for further training or higher secondary education (the latter at present being available only in Australia and not within the Territory).

In the first stage, the subjects are general primary subjects. In the second stage, students may take English, mathematics 'A' and 'B' (arithmetic, algebra, geometry and trigonometry), geography, social studies, manual training, agriculture and commercial subjects, and a further variety of courses is to be offered.

The teaching staff is the same as that in similar Australian schools.

Vocational and technical schools

A wide variety of full-time and part-time courses in vocational fields is provided for the indigenous people. For the most part these cannot be considered as secondary

education or its equivalent, as the students may include adults and students who lack an adequate background of primary education. It should also be noted that, for those with the necessary educational background, courses may be taken in Australia, that extensive use is made of the facilities at the Central Medical and Nursing Schools at Suva, and that use is made of various other overseas courses such as those conducted in various fields by the South Pacific Commission. Courses in the Territory which are likely to retain their present form for some time and which require a sound primary education background include midwifery and infant welfare courses, agriculture courses, courses at technical training centres, and apprenticeship.

Midwifery and infant welfare courses. Students are brought up to standard 6 level and take 2- and 1-year courses respectively, including both practical and theoretical studies. At the end of the courses, they either sit for oral, written and practical examinations for assistants' certificates, or take an oral examination only, to become midwifery or infant welfare attendants.

Agriculture. At Mageri, Papua, a 12-month course is available to students with an educational background varying from standard 6 to standard 9. The course provided includes study of agriculture, botany, farming mathematics, elementary agricultural economics, plant diseases and pests, and practical agriculture.

Technical training centres. Four-year full-time courses are available for students who have completed standard 6. The first 2 years of the course provide general education at post-primary level in English, arithmetic, social studies, general science, technical drawing, woodwork and metalwork. In the second 2 years, the students specialize in one of the following trades: auto mechanics, aircraft mechanics, boat building, carpentry and joinery, cabinet making, cane work, diesel mechanics, fitting and turning, plumbing, painting and decorating, film projection, postal trades, printing trades, sheet metalwork, welding and wood machinery. Additional fields for specialization are planned. The technical training centres are conducted and staffed by the Department of Education.

Apprenticeship. Students having the necessary educational qualifications may be apprenticed under the Queensland Apprenticeship Board and receive tuition by correspondence. The Native Apprenticeship Scheme also provides for young people without these qualifications to undertake a broadly similar form of training. In addition to their normal employment, students under this scheme attend a technical training centre for certain evening classes and for a full day each fortnight of practical and theoretical instruction.

Teacher training courses

Three 1-year teacher training courses are provided in the Territory for indigenous students, courses 'A', 'B', and 'C'. Course 'A' prepares students to teach up to standard 2, Course 'B' to standard 6, and Course 'C' to teach in intermediate schools. The courses prepare prospective teachers not only to give instruction in the schools but also for their exacting role as interpreters of contemporary culture to the people among whom they work and as leaders of their community.

Entrance to each course is by a standardized examination. Course 'A' trainees have completed standard 6, Course 'B' trainees have completed standard 8 or 9, and Course 'C' trainees have generally taken the course up to the Queensland Junior Public Examination. Other factors, such as aptitude for teaching, are taken into account in the recruitment of trainees. At the end of each course, students sit for an examination which determines their future status.

The subjects of study and the number of hours per week devoted to each subject, in Courses 'A', 'B' and 'C' respectively, are as follows: method of teaching and special teaching methods—10, 10, 12; school management—4, 4, 3; demonstration and criticism lessons—1, 1, 1; supervised teaching practice—4, 4, 4; method of teaching handicrafts—1, 1, 0; method of teaching gardening—1, 1, 0; method of teaching physical education—2, 2, 1; blackboard practice and drawing—1, 1, 1; singing—1, 1, 0; religious and moral instruction—0, 0, 1; school hygiene and first-aid—0, 0, 1. The total number of hours per week is thus 25 for each course. Training centres are staffed by qualified and experienced teachers.

In addition, teaching standards are maintained by a regular programme of in-service training which includes supervision and advice from qualified teachers, vacation and refresher courses, and in some cases educational tours of Australia.

TRENDS AND PROBLEMS

In the Territory of Papua and New Guinea a largely primitive society is being developed rapidly towards the stage where the people will be able to manage their own affairs.

As the result of concentration on the needs of primary education, the number of students ready for secondary education is now increasing steadily, with a consequent need for expansion of secondary education facilities.

For reasons relating to their educational and cultural background, indigenous students are generally much older at the secondary level than non-indigenous students. Up to the present this has made it necessary to provide separate schools and, in most cases, separate syllabuses.

As the number of secondary students increases and as the standards of indigenous students rise, the aim will be to provide schools to which all children will have equal access and to offer classes up to matriculation level, and in due course establish a separate Territory syllabus which is both adapted to the needs of the Territory and meets a standard of matriculation acceptable to Australian institutions of higher training.

Concurrently, there will be a steady improvement of standards in such fields as teacher training, agriculture and health courses, and more courses adapted to local conditions will be offered as the quality of candidates improves and their numbers increase.

[*Text prepared by the Department of Territories, Canberra, in June 1959.*]

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WILLIAMS, F. E. *The blending of cultures: an essay on the aims of native education.* Port Moresby, 1951, 41 p. (Papua and New Guinea Official Research publication no. 1).

STATISTICS

Population (mid-year 1958 estimate): 1,341,000.
Area: 93,000 square miles; 240,870 square kilometres.
Population density: 14 per square mile; 6 per square kilometre.

Summary of school statistics, 1953–57. In 1957, total school enrolment was 125,000 pupils, representing less than 10 per cent of the total population. Practically all these pupils were in primary schools, where the proportion of girls was 41 per cent. Only 7 per cent of the teachers were women; the average number of pupils per teacher was 27. Between 1953 and 1957, school enrolment increased by 43 per cent. (See Table 2.)

Educational finance 1956/57. In the fiscal year beginning 30 June 1956, educational expenditure by the Commonwealth Government amounted to 639,419 Australian pounds, representing an average expenditure of about 10/- per inhabitant. Recurring expenditure was 92 per cent of the total. (See Table 1.)

Source. Australia: Commonwealth Office of Education, reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1956/57 (in Australian pounds)[1]

A. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**639 419**
Recurring expenditure		586 249
For instruction		
Salaries to teachers, etc.	198 885	
Other instructional expenditure	341 296	
Other recurring expenditure	46 068	
Capital expenditure		53 170

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent
Total recurring expenditure		**586 249**	**100.0**
Instruction		540 181	92.1
Primary and secondary education	517 807		88.3
Vocational education, secondary level	22 374		3.8
Other recurring expenditure		46 068	7.9
For public libraries	9 105		1.6
Other not specified	36 963		6.3

1. Official exchange rate: 1 Australian pound = 2.24 U.S. dollars.
2. Closed account. Data refer to expenditure by the Commonwealth Government.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary[1]	European primary schools, public	1957		64	...	706	*325
	Asian primary schools, public	1957	17	6	...	299	*138
	Mixed race primary schools, public	1957		—	—	62	*20
	Native primary schools, public	1957	124	320	21	8 258	1 750
	European primary schools, private	1957		361	*138	107	*52
	Asian primary schools, private	1957	8	5	*3	186	*94
	Mixed race primary schools, private	1957		—	—	175	*75
	Native primary schools, private	1957	3 103	3 746	*102	113 059	*47 485
	Total	**1957**	**3 252**	**4 502**	***300**	**122 852**	***49 939**
	,,	1956	2 998	3 936	*240	111 027	*45 585
	,,	1955	2 948	3 506	*203	98 674	*40 878
	,,	1954	2 610	3 062	*192	79 668	*31 912
	,,	1953	2 543	2 879	*166	76 217	*27 658

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Secondary							
General[1]	Asian secondary schools, public	1957	1	20	...	38	20
	Native secondary schools, public	1957	8			443	8
	Native secondary schools, private[2]	1957	38	41	*2	1 449	...
	Total[2]	**1957**	**47**	**61**	**...**	**1 930**	**...**
	,, [2]	1956	102	224	*14	6 619	...
	,, [2]	1955	251	488	*25	13 151	3 419
	,, [2]	1954	241	506	*27	13 145	2 559
	,, [2]	1953	174	433	*21	11 164	2 082
Vocational[2]	Technical schools, public						
	Total	**1957**	**2**	**14**	—	**162**	—
	,,	1956	2	16	—	101	—
	,,	1955	2	23	—	145	—
	,,	1954	1	11	—	152	—
	,,	1953	2	13	—	75	—
Teacher training[2]	Teacher training centres, public						
	Total	**1957**	—	—	—	—	—
	,,	1956	4	10	2	152	15
	,,	1955	5	6	—	87	—
	,,	1954	1	1	—	22	—
	,,	1953	1	1	—	20	—

1. For 1953 to 1956 post-primary pupils in central and intermediate schools are included with those in general secondary education.

2. Figures for mission schools include some technical and teacher training.

PAPUA

The Australian Territory of Papua forms an Administrative Union with the Trust Territory of New Guinea, designated as the Territory of Papua and New Guinea. Education in both of these territories is administered as a single programme, and the information set out in the section dealing with the Trust Territory of New Guinea applies equally to Papua.

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WILLIAMS, F. E. *The blending of cultures: an essay on the aims of native education.* Port Moresby, 1951. 41 p. (Papua and New Guinea Official Research publication no. 1).

STATISTICS

Population (mid-year 1958 estimate): 487,000.
Area: 90,540 square miles; 234,498 square kilometres.
Population density: 5 per square mile; 2 per square kilometre.

Summary of school statistics, 1953–57. In 1957, total school enrolment probably reached 50,000 pupils, or about 11 per cent of the total population. The proportion of girls in primary schools was 42 per cent, and the average number of pupils per teacher was 26. Women teachers were about 20 per cent of the teaching staff in primary schools. Total enrolment increased by about 9 per cent. (See Table 2.)

Educational finance, 1956/57. For the fiscal year beginning 30 June 1956, educational expenditure of the Commonwealth Government for Papua amounted to 427,274 Australian pounds, averaging less than £1 per inhabitant. Recurring expenditure was 87 per cent of the total. (See Table 1.)

Source. Australia: Commonwealth Office of Education, reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1956/57 (in Australian pounds)[1]

A. EXPENDITURE BY PURPOSE

	Amount
Total expenditure[2]	**427 274**
Recurring expenditure	371 570
For instruction	
Salaries to teachers, etc.	116 985
Other instructional expenditure	[3]224 588
Other recurring expenditure	29 997
Capital expenditure	55 704

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent
Total recurring expenditure		**371 570**	**100.0**
Instruction		341 573	91.9
Primary and secondary education	331 553		89.2
Vocational, secondary level	10 020		2.7
Other recurring expenditure		29 997	8.1
For public libraries	9 944		2.7
Other not specified	20 053		5.4

1. Official exchange rate: 1 Australian pound = 2.24 U.S. dollars.
2. Closed account. Data refer to expenditure by the Commonwealth Government.
3. Includes grants-in-aid to missions, technical training, educational and special services and miscellaneous expenditure.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary[1]	European primary schools, public	1957	5	17	11	480	225
	Native primary schools, public	1957	64	160	18	4 111	1 152
	European primary schools, private	1957	1	197	*100	123	68
	Mixed-race primary schools, private	1957	4	30	* 9	420	200
	Native primary schools, private	1957	840	1 478	*237	43 209	18 719
	Total	**1957**	**914**	**1 882**	***375**	**48 343**	**20 364**
	,,	1956	815	1 441	*312	39 343	16 972
	,,	1955	824	1 334	*299	37 543	16 173
	,,	1954	721	1 232	*260	33 773	14 759
	,,	1953	734	1 192	*251	34 207	15 950
Secondary *General*[1]	Native secondary schools, public	1957	5	25	7	343	22
	Native secondary schools, private[2]	1957	19	34	7	748	116
	Total[2]	**1957**	**24**	**59**	**14**	**1 091**	**138**
	,,[2]	1956	96	410	*85	10 861	4 295
	,,[2]	1955	116	394	*84	11 220	4 338
	,,[2]	1954	128	511	*183	11 253	4 273
	,,[2]	1953	139	388	*78	10 960	4 195
Vocational[2]	Technical school, public						
	Total	**1957**	**1**	**12**	—	**56**	—
	,,	1956	1	12	3	34	—
	,,	1955	1	19	—	87	—
	,,	1954	1	17	—	110	—
	,,	1953	1	13	—	89	—
Teacher training[2]	Teacher training centres, public						
	Total	**1957**	**2**	**2**	**1**	**76**	**13**
	,,	1956	2	3	1	78	20
	,,	1955	2	3	1	80	12
	,,	1954	1	2	—	52	—
	,,	1953	1	2	—	35	—

1. For 1953 to 1956 post-primary pupils in central and intermediate schools are included with those in general secondary education.
2. Data on private general secondary schools include some technical and teacher training.

THE EDUCATIONAL SYSTEM

As long ago as 1848 the foundations of Austria's present-day educational system were laid in the Basic Plan for Public Education in Austria, drawn up by Franz Exner.

The compulsory primary school (today including primary, upper primary and special schools), which is the corner-stone of the whole system, was established by the Imperial Law on Primary Education (*Reichsvolksschulgesetz*) of 14 May 1869 in the form which, subject to the amendments introduced by the Supplementary Law of 1883 and by the Upper Primary School Law of 1927, it still has today. The training schools for men and women teachers and for girls' handicraft teachers are closely linked with the development of the compulsory primary school system; the same is true of training centres for women kindergarten and nursery school teachers.

The 'Magna Charta' of the general intermediate or secondary school system (*allgemeinbildende Mittelschule*) in Austria is the Plan for the Organization of General Secondary Schools (*Gymnasien* and *Realschulen*) in Austria, together with the accompanying Instructions, drawn up by Exner and Bonitz in 1849. Despite the many amendments and additions which have since become necessary, that basic plan still holds good today.

The main provisions governing the administration and inspection of Austrian schools go back to Article XVII of the Fundamental Law of 21 December 1867, under which the State exercises supreme control and supervision over the whole educational system—this had previously been the prerogative of the church authorities, acting on behalf of the State. (Religious instruction in schools is now provided by the churches or religious communities concerned.) Any citizen with the necessary qualifications may found a private school. The implementing Law of 25 May 1868 provided that the State should exercise its authority through the Ministry of Education and that every *Land* should have a Provincial Board of Education (*Landesschulrat*) (for secondary and lower schools), and every educational district a District School Board (*Bezirksschulrat*) (for schools belonging to the primary school system). The provincial boards of education were established as bodies organized on democratic lines, with elected representatives of the provincial government, the provincial diet and teachers.

The system of school administration and inspection thus established was adopted in the Constitution of the First Republic. The school supervision laws of the *Länder* were brought into line with the new constitutional situation. Since Vienna was separated from Lower Austria and established as an independant *Land*, it had its own education authorities—the Viennese Municipal Board of Education—which combined the functions of a provincial and a district board of education.

These various educational authorities remained in power until the end of the First Republic, when the National Socialist Government ousted them and, by introducing a foreign system, interrupted the whole normal historical development of Austrian education.

The Provisional National Government set up on 27 April 1945 brought the Federal Constitution as drafted in 1929 into force again. The various education authorities which had been abolished by the National Socialist Government were reinstated—not however as representative bodies, but as official departments. All the organic laws and regulations enacted since 5 March 1933 were annulled and all regulations of the National Socialist régime 'incompatible with the existence of a free and independent Austria, contrary to the legal concepts of the Austrian people, or which reflect typical National Socialist tenets' were repealed. Pending the solution of the legal problems, a series of preliminary administrative measures have been taken to ensure the continued running of schools on lines in conformity with the ideals of modern Austria. The formidable task of recodifying educational legislation in Austria still has to be faced; so far it has not been possible to accomplish it.

From the racial, linguistic and religious points of view, the population of Austria today is extremely homogenous—only in Burgenland and Carinthia are there small linguistic minorities. (For the Slovene minority in Carinthia the Law of 19 March 1959 for the Protection of Minorities (*Minderheitenschutzgesetz*) in Carinthia, enacted in conformity with the Austrian State Treaty, provides for the use of the Slovene language in primary education and for the establishment of a federal secondary school for Slovenes.) The social structure throughout the federal territory also shows a considerable degree of uniformity. The passing of new school laws (recodification of Austrian educational legislation) will not be an easy matter on account of the various divergencies of opinion between the chief political parties on cultural, political, philosophical and international questions, which also affect their attitude to questions of school organization; to some extent, too, these divergencies of opinion reflect centralizing or federalistic trends respectively.

Under the provisions of the Law on Private Schools of 27 June 1860, every Austrian citizen—a term which includes national corporations—is entitled, in accordance with Article XVII of the Fundamental Law of 21 December 1867 on the common rights of citizens, to establish and run private schools, although it would not be true to say that private bodies exercise a direct influence over school administration and inspection in Austria today. Since the time of the First Republic there have been parents' associations, in which school questions are discussed; only recently a parents' advisory board has been re-established to advise the Federal Ministry of Education.

The structure of the Austrian school system may be seen in the diagram on page 217.

THE DEVELOPMENT OF SECONDARY EDUCATION

The 1849 Plan for the Organization of General Secondary Schools (*Gymnasien* and *Realschulen*) has already been mentioned. From 1864 onwards 4-class *Realgymnasien* were introduced. The transformation of *Realschulen*, usually consisting of 6 classes and having a pre-vocational bias, into general secondary schools was brought about by the Secondary School Laws (*Realschulgesetze*) of 1869 and 1870; they were next turned into 7-class schools and became 8-class schools in 1927. These Secondary School Laws, with a few amendments introduced later, still form the basis of the secondary school system.

In 1890, hygiene and physical training became compulsory in secondary schools; the introduction of a school medical service followed in 1906.

Secondary education for girls was also introduced at the beginning of the century.

The Secondary School Reforms (*Marchetsche Schulreform*), carried out in 1908 when Marchet was Minister, constituted an important step forward in the development of the secondary education system. In addition to the existing *Gymnasien*, 4-class *Realgymnasien*, *Realschulen*, girls' general secondary schools (*Mädchenlyzeen*), etc., two other important new types of secondary school were then introduced: an 8-class *Realgymnasium*, where, in addition to Latin (beginning in the 1st class), a modern language was taught from the 3rd class upwards (instead of Greek, as in the *Gymnasien*); and a *Reformrealgymnasium*, providing a basic education without Latin, but with a senior section (5th to 8th classes) in which Latin and one modern language were taught.

These innovations were followed, in 1921, by the establishment of 4-class senior secondary schools for girls (*Frauenoberschulen*), following on, as a rule, from the first 4 secondary school classes (*Lyzealklassen*) or some other junior secondary school. Since 1919, however, girls have also been entitled to enrolment in the 1st class of boys' secondary schools as public pupils.

The organization of *Gymnasien*, *Realgymnasien*, *Realschulen* and girls' senior secondary schools, as decreed in 1908 (or 1921), remained the same in essentials until 1927. Mention must also be made of the state (now federal) schools, established under the Law of 28 November 1919, which are boarding-schools of the *Realgymnasium* type enabling gifted pupils, irrespective of their parents' income, to have the benefit of a complete secondary education, the full cost being borne if necessary by the State.

The whole of the general secondary school system in Austria was for the first time given a common legal basis by the Secondary School Law of 2 August 1927 (Federal *Official Gazette*, No. 244). Under this law, two special kinds of general secondary school were also established—the secondary schools for workers (*Arbeitermittelschulen*) and the post-primary continuation schools (*Aufbaumittelschulen*). The relevant curricula were published in 1928. This law was revised in 1934.

After the liberation of Austria in 1945, all the curricula

GLOSSARY

Berufsschule für Lehrlinge: part-time vocational training school providing 8 to 10 hours per week of compulsory supplementary schooling for apprentices in trades and commerce.

Bildungsanstalt für Arbeitslehrerinnen: specialized teacher training school for women teachers of needlework and sewing.

Bildungsanstalt für Gewerbelehrerinnen/ Bildungsanstalt für Hauswirtschaftslehrerinnen: specialized teacher training schools for women teachers of manual crafts for women and home economics.

Bildungsanstalt für Kindergärtnerinnen und Horterzieherinnen: specialized teacher training school for pre-primary teachers.

1–4jährige Fachschulen: full-time vocational training schools, each institution preparing for one particular trade.

Frauenoberschule: general secondary school for girls with a curriculum including modern languages and emphasizing subjects pertaining to feminine interests.

Gymnasium: general secondary school with obligatory study of Latin and Greek.

Handelsakademie: vocational secondary school of commerce.

Handelsschule: vocational secondary school of commerce.

Hauptschule: upper primary school.

Haushaltungsschule, Hauswirtschaftsschule: vocational training school of home economics.

höhere Abteilungen der technischen und gewerblichen Lehranstalten: vocational training schools each specializing in the teaching of a group of related trades or occupations.

höhere land- und forstwirtschaftliche Lehranstalten: vocational training schools of agriculture and forestry.

Kindergarten: pre-primary school.

Lehranstalt für gewerbliche Frauenberufe: vocational training school for women's occupations.

Lehranstalt für hauswirtschaftliche Frauenberufe: vocational secondary school of home economics.

Lehranstalt für soziale Frauenberufe: vocational training school for women social welfare workers.

Lehrerbildungsanstalt: teacher training school.

niedere land- und forstwirtschaftliche Lehranstalten: vocational training schools of agriculture and forestry.

Realgymnasium: general secondary school with obligatory study of Latin and one modern language.

Realschule: general secondary school with obligatory study of two modern languages.

Volksschule: public primary school.

HIGHER EDUCATION

A. *Katholische Theologie:* faculty of Catholic theology.

B. *Evangelische Theologie:* faculty of Protestant theology.

C. *Rechts- und Staatswissenschaft:* law and political science.

D. *Medizin:* medicine.

E. *Philosophie and Pharmazie:* philosophy (arts and sciences) and pharmacy.

F. *Technische Hochschule:* technical college.

G. *Hochschule für Bodenkultur:* agricultural college.

H. *Montanistische Hochschule:* mining college.

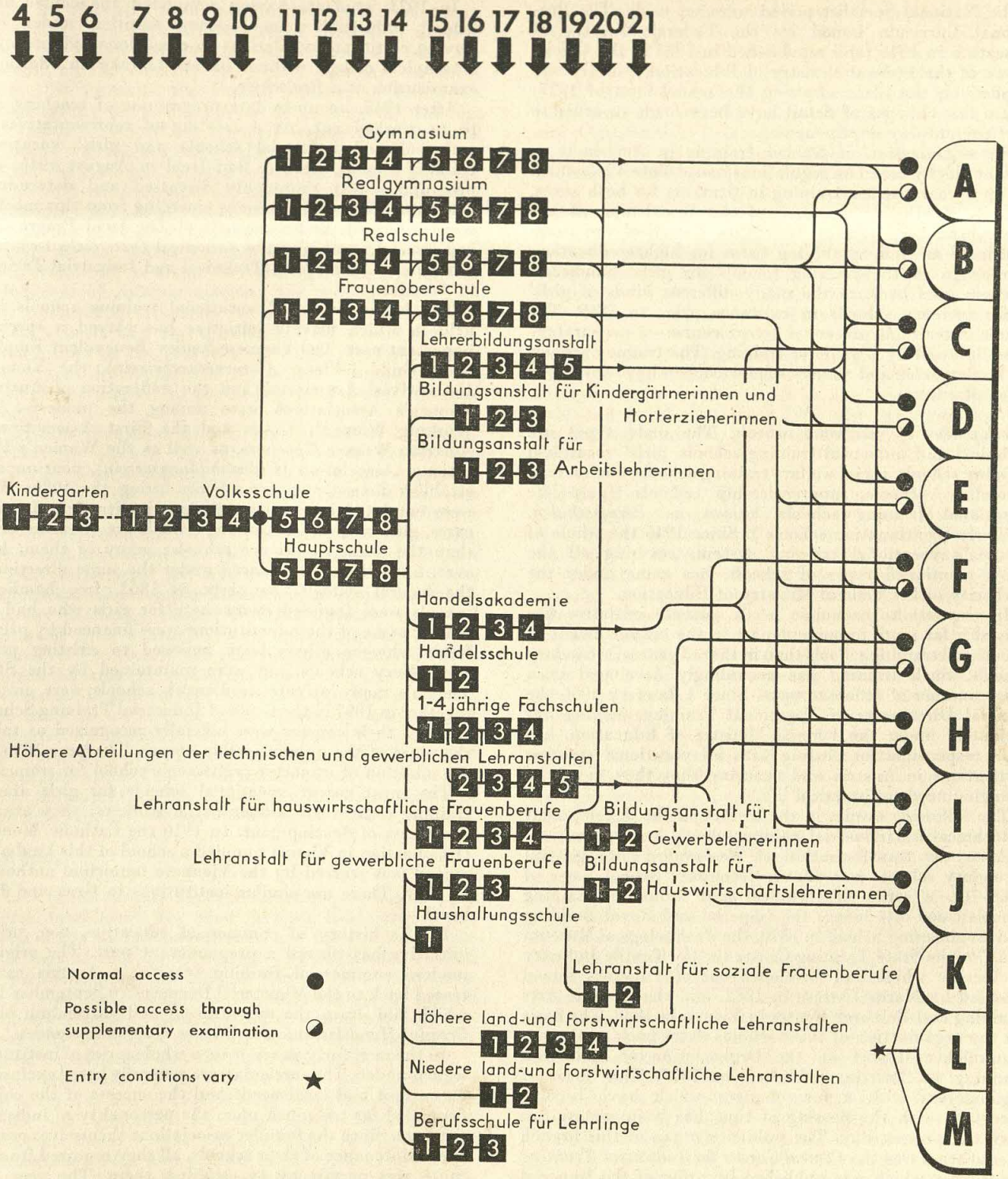
I. *Tierärztliche Hochschule:* college of veterinary science.

J. *Hochschule für Welthandel:* college of higher commercial studies.

K. *Akademie für bildende Kunst:* academy of fine arts.

L. *Akademie für angewandte Kunst:* academy of applied arts.

M. *Akademie für Musik und darstellende Kunst:* academy of music and dramatic art.


4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
Gymnasium
1 2 3 4 5 6 7 8
Realgymnasium
1 2 3 4 5 6 7 8
Realschule
1 2 3 4 5 6 7 8
Frauenoberschule
1 2 3 4 5 6 7 8
Lehrerbildungsanstalt
1 2 3 4 5
Bildungsanstalt für Kindergärtnerinnen und Hortерzieherinnen
1 2 3
Bildungsanstalt für Arbeitslehrerinnen
1 2 3
Kindergarten
1 2 3
Volksschule
1 2 3 4 5 6 7 8
Hauptschule
5 6 7 8
Handelsakademie
1 2 3 4
Handelsschule
1 2
1-4jährige Fachschulen
1 2 3 4
Höhere Abteilungen der technischen und gewerblichen Lehranstalten
2 3 4 5
Lehranstalt für hauswirtschaftliche Frauenberufe
1 2 3 4
Bildungsanstalt für Gewerbelehrerinnen
1 2
Lehranstalt für gewerbliche Frauenberufe
1 2 3
Bildungsanstalt für Hauswirtschaftslehrerinnen
1 2
Haushaltungsschule
1
Lehranstalt für soziale Frauenberufe
1 2
Höhere land-und forstwirtschaftliche Lehranstalten
1 2 3 4
Niedere land-und forstwirtschaftliche Lehranstalten
1 2
Berufsschule für Lehrlinge
1 2 3
A B C D E F G H I J K L M
Normal access
Possible access through supplementary examination
Entry conditions vary

of the National Socialist period were set aside. The Provisional Curricula issued by the Federal Ministry of Education in 1946 (and republished in 1955 in the *Official Gazette* of the Federal Ministry of Education, No. 87) 'are founded on the ideas inspiring the school laws of 1927; only a few changes of detail have been made in order to meet present-day requirements'.

The organization of teacher training in Austria is at present chiefly based on regulations issued since 1945 which set up 5-year teacher training institutions for both sexes, making it possible, because of the broadening of the curriculum, for trainees to obtain the *Realgymnasium* certificate as well, qualifying them for higher education. The origin of the training schools for girls' handicraft teachers goes back to the many different kinds of girls' senior primary schools in existence prior to 1869. The course is really at present a 3-year course—a preparatory class followed by 2 years of training. The training schools for kindergarten and nursery school teachers have developed on similar lines.

Development of vocational schools. The main types are technical and industrial training schools, girls' vocational training schools, social welfare training schools, commercial secondary schools, apprenticeship schools (part-time vocational training schools known as *Berufsschulen*, formerly 'continuation schools'). Since 1945 the whole of Austria's vocational training system, covering all the above-mentioned types of schools, has come under the authority of the Federal Ministry of Education.

In response to economic needs, private initiative has played a far more prominent part in the establishment of vocational training schools than in that of general secondary schools. Such training has accordingly developed in a great number of different ways. Since 1 January 1956 the General Directorate of Vocational Training, coming immediately under the Federal Minister of Education, has been responsible for dealing with all vocational training institutions in Austria and ensuring that they meet the changing needs of practical life.

The following events in the history of the development of technical and industrial training schools deserve mention.

After the transformation of *Realschulen* into general secondary schools (see above, Secondary School Laws of 1869–70), a series of technical and industrial training schools came into being: the Imperial and Royal Building and Engineering School in 1870, the Technological Museum in 1879, the State Training Centre for the Textile Industry in Vienna, which had developed out of a factory school founded by Maria Theresa in 1882, and the Graphic Arts Training and Research Centre in Vienna in 1888. The basis for the organization of these schools dates back to the von Dumreicher Report on the Organization of Industrial Training in Austria, published in 1875. This form of organization with a few changes which have become necessary with the passing of time has been maintained until the present day. The publicity organ of this branch of education was the *Central Gazette for Industrial Training in Austria*, which was published by order of the Imperial and Royal Ministry of Religion and Education and appeared from 1883 to 1918 (publication was resumed in 1947).

In 1921, students having completed the course at a federal industrial school became entitled under new leaving certificate regulations to conditional admission to a technical college without having to take an additional examination at a *Realschule*.

After 1945, an up-to-date programme of teaching had to be worked out. At a meeting of representatives of technical and industrial schools and girls' vocational training schools, held at Bad Ischl in August 1946, this programme was thoroughly discussed and determined. The time-tables and decisions emerging from this meeting were published, under the title of The Ischl Programme, in a special number of the periodical *Österreichs technisch-gewerbliches Schulwesen* (Technical and Industrial Training in Austria).

The history of girls' vocational training schools is a field in which private initiative has played a specially important part. The Viennese Ladies' Benevolent Employment Guild (*Wiener Frauenerwerbverein*), the Viennese Housewives' Association and the Federation of Austrian Women's Associations were among the pioneers. The Working Women's Union and the First Association of Austrian Women Teachers, as well as the Women's Educational Association (*Frauenbildungsverein*), continued to establish domestic science schools during the 1920s. They were emulated by various religious institutions. In some cases, girls' vocational training schools are of earlier origin than the domestic science schools; many of them, however, have since been placed under the same direction as the federal schools. As early as 1862, free handicraft schools were founded everywhere for girls who had left school; some of these institutions were financed by private funds whereas others were annexed to existing public compulsory schools and were maintained by the State. Vienna's many private needlework schools were grouped together in 1897 in the Guild of Industrial Training Schools. In 1907 their courses were officially recognized as taking the place of the apprenticeship course. The year 1936 saw the addition of a master craftsmen's school for women.

The most recent vocational schools for girls are the training centres for women social workers; they are still in process of development. In 1916 the Catholic Women's Organization in Vienna founded a school of this kind and a second was started by the Viennese municipal authorities in 1917. There are similar institutions in Graz and Innsbruck.

In the history of commercial education, too, private initiative has played a preponderant part. The origin of modern commercial training schools in Austria can be traced back to the Ministerial Decree of 26 September 1848, which laid down the organization and curriculum of the *Gremial-Handelsschule des Wiener Kaufmannstandes*.

In the next forty years or so, a whole series of institutions were founded. The curricula were generally based exclusively on current and local needs and the success of the courses depended far too much upon the personality of individual teachers. Since the founder associations themselves ensured the maintenance of their schools, all they required from the State was permission to establish them. The year 1873 saw the promulgation of the Commercial School Law of Lower Austria, which determined the whole course of development of the commercial training system.

The pressing need for a degree of uniformity was met in 1896, when the Federal Ministry of Education induced those responsible for running the schools to base the teaching on the officially established standard curricula. From 1896 onwards, the Federal Ministry of Education systematically devoted attention to commercial training, and thanks to its efforts a sound system of commercial education was methodically built up.

After the National Socialist regime the country reverted to the well tried commercial curricula and examination regulations laid down under the First Republic. The introduction of modern curricula (1952 and 1959), the grant of civil service status to the teachers (their numbers rising from 140 to about 900 federal teachers), the establishment of assistant teachers, the opening of over 20 new commercial secondary schools, the rebuilding of several schools and the introduction of a new type of school known as the *Lehrbüro*—all these measures testify to the rapid development of commercial training schools, in which the number of pupils has trebled over the past 5 years.

Part-time industrial schools were previously known as continuation schools. The Regulations for Trades and Industries (*Gewerbeordnung*) of 1897 made it compulsory for all apprentices to attend a continuation school; the Continuation School Law of 1907 provided for extensive specialization, combined with a practical workshop training suited to industrial needs. The Continuation School Law of 1923 introduced day-time classes generally in the continuation schools (apprentices have to spend one whole week-day attending classes, whereas formerly they had 'continued their education' at evening classes, or even on Sundays), so that it was possible to appoint specialists to teach full-time in continuation schools. The attempts to introduce improvements, for which this law paved the way, came to an end in 1938. Workshop training was supplanted by demonstration teaching and the specialists were replaced by general teachers (*Einheitslehrer*). In 1945 the reorganization of the continuation school system began. Today the apprenticeship schools are known as part-time vocational schools (*Berufsschulen*).

Legal basis

So far, the Austrian Federal Constitution has not, in general, established any final dividing line between the powers of the Central Government and those of the *Länder* in the field of education. Secondary education falls within the jurisdiction of the Federal Government, subject to the proviso that changes in the organization of general secondary schools in each of the nine *Länder* can be introduced only by means of concordant laws passed by the Federal Government and the *Land* concerned.

The legal bases of the various types of school have been referred to above. It is recalled that general secondary schools are governed by transitional administrative regulations based on the legal principles and systems of organization which had existed before 1938. These regulations are in conformity with the Secondary School Law of 1927, but there are certain divergencies, particularly as regards foreign language teaching. A decisive part in making Austrian secondary schools what they are today has been played by the curricula which were drawn up in 1945 and, with a few changes, were republished on 15 October 1955 in the *Official Gazette* of the Federal Ministry of Education (see Bibliography). Other important regulations deserving special mention are the Decree of 22 January 1949 relating to the secondary school leaving certificate, the Examination and Classification Ordinance of 22 May 1946, which is applicable to all secondary schools, and the Decree of 22 January 1949 governing holidays.

Teacher training (*primary school teachers*). Until 1937, the training of primary school teachers, girls' handicraft teachers, and kindergarten and nursery school teachers, was governed by a section of the Imperial Law on Primary Education of 1869. Since 1945, training schools for men and women teachers have been further developed by administrative decrees, particularly in the sense that the training schools' final examination has, since 1951, conferred the same university entrance qualifications as the *Realgymnasium* certificate. Here also, the new curricula published on 15 September 1957 and the regulations for the final examination, issued on 1 February 1950, deserve mention.

Vocational education. There are not now any laws governing commercial secondary schools (4-year commercial colleges—*Handelsakademien*—and 2-year commercial schools—*Handelsschulen*), technical and industrial training schools (5-year industrial schools and 2 to 4-year full-time vocational schools), and girls' vocational schools (2 to 3-year full-time training schools and 1 to 4-year domestic science schools). These schools were created by administrative decrees and have since been developed and adjusted to meet the needs of the economy. Reference has already been made to the Ischl Programme of 1946, which laid down directives for the organization and curricula of technical and industrial schools and girls' vocational schools. (See also under 'Types of secondary education'.)

The legal basis for the part-time continuation schools for apprentices was provided by the Continuation School Laws of the individual *Länder*, which were partially built up at the turn of the century and redrafted after 1920. These laws were made of no effect by a series of regulations passed during the National Socialist period and today represent only a very fragmentary foundation for the organization of these schools, which are now generally known as part-time vocational schools (*Berufsschulen*). In the Compulsory Schooling Act of 1938 (*Reichsschulpflichtgesetz*), enacted during the German occupation, compulsory attendance at a part-time vocational school was introduced for all young people who had completed their compulsory general education (compulsory primary schooling) and were not attending a secondary school, but in the absence of more precise regulations for its implementation this rule is in fact only applicable to apprentices within the meaning of the Austrian Regulations for Trades and Industries (*Gewerbeordnung*). The establishment and maintenance of public industrial and commercial schools, as well as the part-time domestic science schools at present existing only in the Vorarlberg province, were recently regulated by the federal law establishing principles for the maintenance of compulsory schools, dated 13 July 1955, and the relevant

directives for its implementation issued in each of the *Länder*.

Religious instruction. Until 1938 religious instruction was a compulsory subject in all Austrian general schools and in a number of vocational training schools. Under the National Socialist regime, however, it was first reduced, to an optional subject and later, to all intents and purposes abolished. In 1945, by administrative regulation, religious instruction was again made a compulsory subject, but the right to withdraw pupils from scripture lessons was recognized. The position in this respect was legally consolidated by the Law on Religious Instruction of 1949, which at the same time defined the legal status of scripture teachers. The latter are now either appointed as state teachers with the approval of the corresponding church or religious community, or are appointed by the church (or religious community); in either case, they are paid by the State. Supervision of religious instruction is carried out by appropriate inspectors appointed by the church (or religious community) and partly remunerated by the State.

Legislation governing the teaching profession. The conditions of service of federal teachers employed in Austrian state schools are governed by the Imperial Law of 1917 on the Teaching Profession (*Lehrerdienstpragmatik*); their remuneration is governed principally by the Law on Salaries of 1956, which covers the whole civil service. The individual branches of the teaching profession are dealt with in the Decree of 13 May 1958. Teachers under contract to the Federal Government are covered by the provisions of a special law of 1948 on contractual service.

Administration

Secondary schools are either public or private schools. According to the Law on Responsibility for School Maintenance (*Schulerhaltungs-Kompetenzgesetz*), of 13 July 1955, public secondary schools are those maintained by the Federal Government; all others are private schools [six convent *Gymnasien* are, for historical reasons, known as 'public endowed secondary schools' (*öffentliche Stiftsgymnasien*)]. Private schools may, however, be granted public school status by the Federal Minister of Education, which means that they are authorized to award state-recognized certificates on the same basis as public schools. The administration of public secondary schools comes under the immediate authority of the provincial board of education in each *Land* (in Vienna the Municipal Board of Education) and under the higher authority of the Federal Ministry of Education. The federal educational institutions, which were founded in 1919 and are a happy combination of secondary day-school and boarding-school, are in a special position, as are also the federal technical and industrial schools and girls' vocational training schools in Vienna; these schools, as central bodies, come under the immediate authority of the Federal Ministry of Education. So far as private schools are concerned, school supervision is the responsibility both of the immediate authorities (provincial educational authorities) and of the higher authorities (the Federal Ministry of Education).

Agricultural and forestry schools come under the Federal Ministry of Agriculture and Forestry.

The secondary school system (excluding agricultural and forestry schools) is planned and organized by the Federal Ministry of Education, while the administrative measures entailed are generally the responsibility of the provincial educational authorities. The Federal Minister of Education is a member of the Federal Government and is politically responsible to Parliament. In the Ministry, there is a Department of General Education, a Directorate-General of Vocational Education, and a Legal Department dealing with the whole system of general and vocational secondary education, and primary education. The Department of General Education is subdivided into: a division for primary, upper primary, and special schools and for teacher training; a division for secondary schools; a school methodology division (responsible particularly for the preparation of curricula and the approval of textbooks); a staff division (teachers); and a division of physical education and school medical and health services. The Directorate-General of Vocational Education is divided into various offices, dealing respectively with part-time vocational schools, technical and industrial schools, girls' vocational schools and commercial schools. There is also a special office for questions relating to general education in all vocational schools. The Legal Department includes a legislative division, divisions for the legal and administrative affairs of general and vocational schools respectively, and a division for school buildings, although the actual building work, of course, comes under the Federal Ministry of Trade and Reconstruction.

As advisory bodies to the Federal Ministry of Education, there is a conference of educational specialists and a parents' council, composed of representatives of the central organizations of parents' associations; these two bodies are periodically invited to hold discussions with the Federal Minister of Education and senior officials of his Ministry.

Supervision and inspection. Direct supervision of secondary schools is the responsibility of the provincial school inspectors, who are civil servants appointed by the Federal President upon the proposal of the Federal Minister of Education, who in turn receives proposals from the provincial school authorities; they are assigned by the Federal Minister of Education to the provincial boards of education for one or more categories of schools. The number of provincial school inspectors allotted to a provincial board of education depends upon the size of the province and the number of schools and categories of schools. Provincial school inspectors are recruited from the ranks of the most outstanding and experienced teachers. They exercise direct supervision over public and private schools and over all teachers, whose performance they are also responsible for judging. Administratively, the provincial school inspectors are on the staff of the provincial educational authorities, to which they have to report.

Finance. A proportion of the annual federal budget is set aside to finance the federal school system. Federal teachers are paid by a central Salary Office. School building is financed by the Federal Ministry of Trade and Reconstruc-

tion out of its own budget. Provision for school equipment and educational materials is generally made centrally by the Federal Ministry of Education or the provincial educational authorities; for smaller items of expenditure, school managers have available current expense funds, of which accounts have to be rendered.

An annual fee is charged in secondary schools amounting, in federal secondary schools, to 90 schillings (i.e. the price of 55 lb. of bread), but this sum may be reduced in certain cases.

Buildings and equipment. In contrast to the position as regards compulsory primary schools, there are no special regulations, apart from the general building regulations, for secondary schools. One of the main problems facing the Federal Ministry of Education is the need to make up for the shortage of school premises resulting from war destruction and from the interruption of building activities during the war.

School welfare services. The school health service in secondary schools, which generally includes regular medical examinations for preventive purposes, is the responsibility of the school doctors; a school doctor is assigned to each school and is treated as a member of the teaching staff.

In addition to their main purpose, which is to create a bond between school and home, parents' associations are principally concerned with charitable activities, which generally take the form of providing the school library with textbooks for the poorer pupils.

TYPES OF SECONDARY EDUCATION

This section will deal with education available for children who have terminated their 8 years of compulsory schooling. With most pupils, this means that they have successfully reached the end of the eighth primary school class, the fourth upper primary school class or the fourth class of a general secondary school, and that they are 14 or 15 years old.

In addition to the principal types of secondary school described below there is also what is known as 'the 1-year course'. This refers to special courses for children over school age which, according to paragraph 10 of the Imperial Law on Primary Education, are organized at primary, upper primary and special schools and are intended to consolidate the knowledge and skills acquired in those schools. The curricula, which are generally drawn up for individual schools, must provide both for the group of pupils who are to be articled as apprentices and for those wishing to go on to other schools (generally secondary). Since the number and type of such voluntary pupils vary at different times and in different places, these courses are held only on an *ad hoc* basis, and often only as occasion arises. By a Decree of 21 November 1953, the Federal Ministry of Education issued new directives on the organization of such courses.

The curriculum of a given type of school in Austria is the same for all pupils attending such a school, which means that all pupils who have selected a particular type of school take the same course, with the exception of optional subjects. (This is true for all secondary schools, with the exception of the *Gymnasien*.) There is therefore no question of choosing between different courses within the same type of school. Educational guidance at this stage is thus confined to the choice of the type of school. In general secondary schools, the task of giving educational advice to pupils and parents falls to the educational guidance counsellors (see below).

In all secondary schools and similar institutions, the summer holidays last two months, beginning on the first or second Monday in July (according to the province). The new school year begins on the Monday in September following the completion of the two months' holiday. The head of a secondary school can declare two days during the school year to be holidays (*Direktorstage*), and the provincial school authorities are entitled to prescribe one other day's holiday. In general and commercial secondary schools, the school year is divided into three terms, in all other schools it is divided into two. For secondary school pupils, a skiing course (lasting one week) is organized during the winter and during the summer months 'school country weeks' (*Schullandwochen*) are often arranged. Once a term (or half-year) an official parents' day is held, and throughout the school year at least one hour a week is set aside for receiving parents.

General secondary schools

Candidates generally enter the junior department of general secondary school (*Gymnasium*, *Realgymnasium*, *Realschule* or *Frauenoberschule*) after completing the fourth primary school class (at age 10), and taking an entrance examination. However, pupils may also transfer from a compulsory primary school to a secondary school at a later stage. In order to move up from the junior to the senior department of a general secondary school, it is not necessary to pass any examination. Pupils who have reached the end of the fourth upper primary school class can enter the senior department (fifth class) of a general secondary school (*Realschule* or *Reformrealgymnasium* Type C) without taking an examination, provided that they have obtained very good marks; but if their performance has been only average, they are obliged to take an entrance examination in all subjects. The general secondary school course ends with a school leaving examination (*Maturitätsprüfung*), which qualifies successful candidates for university entrance.

The 8-class secondary schools differ both from the primary and upper primary schools and from the full-time and part-time vocational training schools, in that they aim at carrying on general education up to a higher level. But this also means that all the pupils' intellectual, moral and physical powers have to be developed according to their own particular individual capacities and that they have to be equipped to take part in the various forms of cultural life. This education, by its nature, standard and breadth, is likewise intended to qualify pupils to devote themselves to higher studies at a later stage and there, at college or university, combining the advantages of professional training and general education to develop into personalities of a high intellectual and moral calibre.

A modern language is a compulsory subject in all four

types of secondary schools from the first to the eighth class (except that in *Gymnasien* it is an optional subject in the senior department); the languages taught differ from one type to another. In *Gymnasien* and *Realgymnasien*, Latin is taught from the third class upwards. (There are, however, *Gymnasien* where Latin is taught from the first class upwards.) Greek is started in the senior department of the *Gymnasium*, whilst, in that of the *Realschule*, a second modern language or Latin is studied as well as the first modern language, and in that of the *Frauenoberschule* a second modern language is begun.

The *Gymnasien* seek to achieve the educational aims outlined above by providing an education based on the ideals of humanism, bringing their pupils to an understanding of the ancient world and showing them how our modern culture is rooted in antiquity. The *Realschulen*, which have been general secondary schools since 1870, lay greater emphasis on the part played by the natural sciences and mathematics in the moulding of modern European thought, outlook and consequently way of life. Since 1908, the *Realgymnasien* have been original in that, within the same realm of ideas, they seek mainly to trace the connecting links in the history of intellectual development; the necessary historical basis is provided by studying Latin and ancient culture. Since 1921, it has been the aim of girls' senior secondary schools (*Frauenoberschulen*) to link up the modern, scientific, European concept of the world with the idea of personal service to one's fellow men, springing on the one hand from woman's natural role as a mother but deriving also from her position in family life.

According to its particular educational aims, each type of secondary school has its own curriculum and time-table and these are set out in the following table.

TIME-TABLES IN UPPER CYCLE OF GENERAL SECONDARY SCHOOLS
(in periods per week)

Subject	Class 5				Class 6				Class 7				Class 8			
	G	Rg	R	FOS	G	Rg	R	FOS	G	Rg	R	FOS	G	Rg	R	FOS
Religion	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
German	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
First modern language	—	3	2	3	—	3	2	3	—	2[1]	2	2	—	2[1]	2	2
Second modern language[2]	—	—	5	6	—	—	4	4	—	—	4	3	—	—	3	3
Latin	6	6	—	—	5	5	—	—	5	5	—	—	4	4	—	—
Greek	6	—	—	—	6	—	—	—	5	—	—	—	5	—	—	—
History	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Geography	2	2	2	2	2	2	2	2	2	2	2	—	2	2	2	2
Natural science	2	2	2	2	2	2	2	2	2	2[1]	2	2	2	2[1]	2	2
Physics	—	2	2	—	2	2	2	—	2	2	2	3	3	3	3	3
Chemistry	—	—	—	—	—	—	2	2	2	2	2	2	2	2	2	—
Mathematics	3	3	4	4	3	3	3	3	2	3	4	2	2	3	4	2
Descriptive geometry	—	—	2	—	—	—	2	—	—	2[3]	2	—	—	2[3]	2	2
Introduction to philosophy	—	—	—	—	—	—	—	—	2	2	2	—	2	2	2	—
Psychology and education	—	—	—	—	—	—	—	2	—	—	—	2	—	—	—	2
Art (drawing)	2[4]	2[4]	2	2	2[4]	2[4]	2	2	2[4]	2[4]	2[4]	2	2[4]	2[4]	2[4]	2
Handwork	—	—	—	4	—	—	—	4	—	—	—	—	—	—	—	—
Music	2[4]	2[4]	1	2	2[4]	2[4]	1	2	2[4]	2[4]	2[4]	1	2[4]	2[4]	2[4]	1
Gymnastics[5]	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2
Child care	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	2
Cooking and housekeeping	—	—	—	—	—	—	—	—	—	—	—	5	—	—	—	5
Total	31	30	32	35	32	29	32	36	33	33	33	36	33	33	33	36

G = *Gymnasium* Rg = *Realgymnasium* R = *Realschule* FOS = *Frauenoberschule*

1. In girl's classes, or mixed classes with at least 10 girls, this is increased by one period.
2. May be replaced by Latin in *Realschulen*.
3. In girls' classes, or mixed classes with at least 10 girls, this subject is dropped and the periods devoted to further teaching of the first modern language and natural science (see note 1).
4. Beginning at the 5th class in *Gymnasien* and *Realgymnasien*, or at the 7th class in *Realschulen*, pupils choose either art or music.
5. In classes 5 and 6 one period, and in classes 7 and 8 two periods, are spent out of doors whenever weather permits.

Educational and vocational guidance. Since 1949, most Austrian general secondary schools have had educational counsellors; they are members of the teaching staff who have taken special courses in vocational guidance and have had a psychological training which enables them, in co-operation with other teachers and the vocational guidance officers of the employment authorities, to give advice to the pupils in their school—generally those in the fourth class or those who are taking the school leaving certificate—on their future education (the choice being: for fourth class students, continuation of general secondary education or transfer to a vocational school; for those who are taking the school leaving examination, university studies or a non-academic profession). In this connexion, mention must be made of the system of Austrian Secondary School Leavers' Weeks (*Österreichische Maturandenwochen*). Whenever possible, all the leaving certificate candidates of a secondary school are brought together for some days

(in Vienna, they attend a series of lectures), when representatives of all sections of industry, the liberal professions and the civil service, in co-operation with the educational counsellors and vocational guidance officers, give lectures or act as discussion leaders with the object of helping school leavers to make a well considered choice of a profession. The educational counsellors also, however, have the important task of giving advice and psychological assistance in the case of educational troubles and difficulties. They provide liaison with the psychoeducational centres which are, to some extent, organized as child guidance clinics. The whole School Psychology Service in a *Land* comes under the *Land* officials in charge of vocational guidance services (*Landesreferenten für Schule und Beruf*) who, through the provincial school authorities, maintain liaison with the central officials in charge of vocational guidance services in the Federal Ministry of Education.

For the purposes of educational and psychological guidance, including advice on the choice of careers, individual graphs are made out for all pupils in Austrian schools up to 14 years of age (completion of compulsory schooling and the junior departments of secondary schools); when compulsory schooling comes to an end, these graphs serve as summary statements providing a basis for vocational guidance.

Achievement testing. For promotion purposes in Austrian secondary schools, a 5-grade scale of marks (very good, good, satisfactory, fair and unsatisfactory) is used. In order to move up from one class to another, a pupil must not have 'unsatisfactory' in any of the compulsory subjects. A distinction is made between 'guidance tests' and classification tests. Constant observation of the pupil's knowledge and abilities, and of his mental processes and behaviour in working through new programmes of study and making use of, and reference to, what he has already learnt, gives the teacher a basis for judging the pupil's capacities. Since tests and examinations are not essential features of education, there is a general instruction that classification tests shall be set only when absolutely necessary (see the Decree of the Federal Ministry of Education on 'Tests and Classification' of 22 May 1946, No. 13643).

Teachers. Teachers of general secondary schools have had a thorough academic education and have taken the Secondary School Teachers' Diploma at an Austrian university—most of them take it in conjunction with a Doctorate in Philosophy. After passing this examination, a candidate must next perform 1 year's probationary service in a secondary school; he then receives a certificate testifying that he is qualified for appointment as a teacher under contract (*Vertragslehrer*). After about 5 to 8 years of satisfactory service, he is finally established and has the title of *Professor* conferred upon him.

Special secondary schools

The following special types of *Realgymnasium* or *Gymnasium* have existed since 1927: secondary schools for workers, post-primary continuation schools, the *Werkschulheim Felbertal*, the Federal *Realgymnasium* for Slovenes at Klagenfurt (at which the language of instruction is Slovene), and the Federal Senior *Realschule* at the Military College at Wiener Neustadt.

The object of the secondary schools for workers is to enable pupils whose gifts warrant a secondary education and who, after completion of their compulsory schooling, have either taken a course of vocational training or have started on their careers (and are at least 17 years old), to reach the same standard as students who have obtained the *Realgymnasium* certificate. The course at these schools for workers consists of nine semesters, and the classes are usually held in the evenings.

The post-primary continuation schools provide a specially planned 5-year course designed to enable gifted young people who have completed their compulsory schooling to engage in secondary studies (these courses are intended primarily for the rural population). From the second year onwards, students at these schools can work for the *Gymnasium* or *Realgymnasium* certificates.

The *Werkschulheim Felbertal* was founded as a private school in the autumn of 1951. It provides a secondary education of the *Realgymnasium* type, combined with training in a trade, in a special kind of educational community (boarding school system). The students not only take the senior school leaving examination but also a journeymen's examination (locksmith's trade, carpentry or radio-engineering). The course lasts 9 years; the school has public school status and is assisted by the Federal Ministry of Education as a very important educational experiment. The institution is shortly to be recognized as an official industrial school by the Ministry of Trade.

The vocational school leaving examination was introduced in 1945. It gives people who have been unable to take an ordinary school leaving examination which would qualify them for university entrance, but who wish (at a riper age and after acquiring professional experience or pursuing an occupation involving serious studies in a particular field) to study their subject more thoroughly at a university, an opportunity to prove that they are suitably qualified and prepared for such studies.

Vocational and technical schools

Technical and industrial training schools. Candidates for admission must have completed the last year of compulsory primary schooling or the fourth class of a secondary school. Admission is subject to their passing an examination, which is supplemented by tests, employing the methods of industrial psychology, designed to establish suitability for a particular profession. Technical and industrial schools include the senior divisions of federal industrial schools or *Bundesgewerbeschulen* (5-year course leading up to a leaving certificate examination which, if the board of examiners is unanimous, qualifies students for entrance to a college of technology or similar institution of higher education, or qualifies them for a senior technical appointment and gives them the right, after 4 years' experience in the appropriate field, to the title of 'engineer'), and the full-time advanced vocational schools or *Fachschulen* (2 to 4-year course). Completion of this full-time course takes the place of the usual evidence that the candidate has duly completed his apprenticeship in the trade concerned.

For all schools coming under this head the Ischl Programme of 1946 (see above) provides, *inter alia*, as follows:

1. The official entrance examination designed to test candidates' knowledge (*Kenntnisprüfung*) is supplemented by a careful psycho-technical aptitude test in which the candidate must show his natural ability for a particular type of vocational training and at the same time for his later profession.
2. The principle of a basic division between the two parts of the 5-year senior departments of federal industrial schools has been adopted, and enables a further selection of pupils to be made in the light of their abilities and performance. These institutions have a 2-year junior section (which is run on the lines of a full-time vocational school) and a 3-year senior section. The junior section is mainly concerned with basic training in the various trades and helps pupils to acquire the necessary practical skills in the branch of study which they have chosen. The possibility of continuing studies in the senior sections (*Höhere Abteilungen*) is open only to pupils who during the first and second years have shown evidence of an intellectual aptitude conducive to further development.
3. Besides the technical training in trades and crafts which they provide, all technical and industrial schools also endeavour to broaden the mental horizon of their pupils by laying particular emphasis on general education; the subjects taught under this heading are German, history, geography, civics and a modern language, so that trained technicians will in future be able to play a greater part than hitherto, not only in economic life but also in the nation's cultural life, besides being able to gain a direct knowledge of neighbouring countries.
4. As it is desirable for a pupil to be acquainted, from the moment when he enters the school, with the atmosphere of his future profession, the schools are being developed as model industrial undertakings. Thus workshop training forms the core of every branch of specialized technical education.
5. The Ischl Programme further provides for the constant adjustment of workshops and curricula to technological progress and changing industrial needs. Technological branches of study have multiplied and expanded to such an extent that it is no longer possible to deal with them exhaustively in school, even as special subjects. Only part of the subject matter taught can remain unchanged for any length of time; more latitude will have to be allowed for future development in this respect.

It is impossible within the bounds of this report to describe all the technical and industrial schools providing a 5-year course. The time-tables of the full-time vocational schools (*Fachschulen*) and the senior sections (*Höhere Abteilungen*) for mechanical engineering, electrical engineering and over-ground building may be consulted in the publication *Das Schul- und Bildungssystem in Österreich* (The School and Educational System in Austria), 1958.

Full-time vocational training schools with courses lasting 2 or 3 years may either form part of a senior department (leading to the secondary school leaving examination) or exist as independent institutions from which students may, after taking an entrance examination, transfer to a senior department.

Girls' vocational training schools. Domestic science training schools admit pupils who have completed the upper primary school course or that of the junior department of a secondary school, and who have passed an aptitude test. These schools fall into four categories. The full-time domestic science training schools (*Hauswirtschaftliche Fachschulen*) endeavour in a 1-year course to ensure that their pupils acquire all the necessary knowledge and skills that will be required of them as domestic helps in a household. These are all boarding-schools. The housekeeping schools (*Haushaltungsschulen*), also providing a 1-year course, are by far the most common schools of this kind; they train pupils for their future duties as housewives and teach them how to run a small household economically and efficiently. The domestic economy schools (*Hauswirtschaftsschulen*), providing a 3-year course, give their pupils a broad general education as a basis for a specialized theoretical and practical training in housekeeping for large institutions; they also provide a very thorough training for all types of women's occupations—welfare workers and children's nurses, as well as domestic economy and handicraft teachers. Lastly, in a few experimental schools providing a 4-year course of domestic training, there are signs of a move towards a domestic economy training of secondary school standard (*Hauswirtschaftliche Mittelschule*); these courses should provide training for teachers, housekeepers and bursars in charge of large social welfare institutions, boarding schools and children's homes, sanatoria and homes for the aged, hospitals and convalescent homes.

Girls' industrial training schools run a few special training courses for the dressmaking trade, production of linen goods, art needlework, or millinery. Requirements for entry are the same as for domestic science schools. The courses are usually held in two-class full-time training schools, which take the place of the 3-year apprenticeship course. For dressmaking, there are also three-class full-time training schools, in the third class of which the pupil is already an assistant and has to work so hard that this class may be counted as equivalent to 2 years' work as an assistant.

The social welfare schools for women require candidates for admission to be at least 19 years old, to have completed secondary school or the 3-year course at a domestic economy school and to have passed an entrance examination or aptitude test. The course lasts 2 years and pupils are trained for posts as welfare workers and social assistants or nursery school and kindergarten teachers.

Part-time vocational training schools. These are compulsory schools for apprentices or girls who have left school. They may be divided into industrial schools, commercial schools, and domestic science schools. They can be considered as an integral part of the training given to apprentices in the workshop or business, and are designed to provide them with academic instruction calculated to supplement and improve their actual vocational training. The minimum duration of instruction is 3 school years, with 360 teaching periods. The domestic science training schools exist only

in the Vorarlberg province and count as compulsory schools offering a 2-year course.

Commercial secondary schools. These institutions comprise the 4-year commercial academies (*Handelsakademien*) and the 2-year commercial schools (*Handelsschulen*). They follow on from the course at an upper primary school or the junior department of a secondary school, and candidates for admission are required to pass an entrance examination in German and arithmetic. The commercial academy certificate not only replaces the certificate stating that candidates have duly served their apprenticeship in a given branch of commerce, but also entitles them, on presenting evidence of 1 year's service in a commercial firm, to employment as managers or to set up in business for themselves. Pupils who pass the final examination at a commercial academy also qualify for admission to the college of international trade and, on certain conditions, to the faculties of jurisprudence and political science of universities and also to agricultural colleges.

Attached to the commercial academies are special courses, known as *Abiturientenkurse*, designed for students who have passed the secondary school leaving certificate (qualifying them for higher education); these courses provide a full commercial training and lead to qualifications equivalent to those conferred by the commercial academies themselves.

The commercial school leaving certificate takes the place of the certificate of duly completed apprenticeship in a given branch of commerce.

The main objective of the commercial academies is to teach pupils economic reasoning, or the appraisal of expenditure and income, and for this purpose the subjects of commercial accounting, commercial correspondence and book-keeping, preparation of balance sheets and taxation are so grouped around the central subject of business management as to give pupils a practical and easily surveyed store of knowledge and to provide not only a sound business training but also a good groundwork of theory.

Teacher training schools

Teacher training schools for general teachers in primary schools. Nearly 90 per cent of the candidates for enrolment come from the fourth class of an upper primary school or junior secondary school, and only a small percentage (3 to 4 per cent) from the eighth primary school grade. Candidates for admission to teacher training schools are required to pass a written and oral examination in German and mathematics, and to supply proof both of their physical fitness and of adequate musical talent. Possibilities of acceptance are limited by the fact that only 40 new students can be enrolled each year and that, save in exceptional circumstances, schools are forbidden to provide parallel courses. Students who have successfully completed the 5-year course take a qualifying examination for the Primary School Teachers' Diploma; those who obtain it are eligible for provisional appointment in Austrian primary schools and also have qualifications equivalent, for university entrance purposes, to those of holders of the *Realgymnasium* leaving certificate.

Candidates for final appointment as primary school teachers must have had at least 2 years' practical experience of teaching and must take the primary teachers' qualifying examination before a Board of Examiners for general primary and upper primary schools (including special schools and special examinations). For final appointment to an upper primary school, candidates must take the qualifying examination for upper primary school teachers, and for final appointment to a special school the qualifying examination for special school teachers.

Demonstration schools are annexed to the training schools for men and women teachers, and students also take a 3 weeks' course in village school methods at rural demonstration schools.

Training schools for girls' handicraft teachers. Candidates for enrolment have to pass an entrance examination, give proof of physical fitness and be at least 15 years of age in the preparatory class or 16 years of age in the first-year class. The course lasts 2 years, or 3 years if the preparatory class, which is attended by almost all pupils, be counted. The qualifying certificate is awarded at the end of this training or can be obtained by means of an examination taken privately. For final appointment as handicraft teachers in upper primary schools, candidates must take an appropriate qualifying examination in the relevant subjects before a Board of Examiners for general primary and upper primary schools (including special schools and special examinations).

Training schools for kindergarten and nursery school teachers. In the training of kindergarten and nursery school teachers at the appropriate training schools, which now offer a 3-year course, account is taken of all the requirements of modern early childhood education and every aspect of child care. The training is based on the new curriculum for these institutions, dated 25 August 1958, which was published in the *Official Gazette* of the Federal Ministry of Education, No. 10a, 1958. The training concludes with the qualifying examination for kindergarten and nursery school teachers.

Other specialized schools

In Austria, the general secondary school leaving examination can also be taken by people who have studied for it privately. This procedure is most commonly adopted by adults, already working, who have had no opportunity to attend a secondary school and wish to obtain the school leaving certificate. These examinations (*Externistenreifeprüfungen*) are held by a special board of examiners. There are a number of private institutions preparing candidates for this examination, generally by means of evening classes. Another possibility is for students to follow a private course and then take a further examination, additional to the leaving certificate examination already passed. For example, the qualifications acquired at a technical or industrial training school can be followed up by studies leading to the *Realgymnasium* leaving certificate. For these examinations, too, the special boards of examiners operate.

Training schools for hospital and children's nurses come under the authority of the Federal Ministry of Social

Welfare, which is also responsible for midwives' schools (candidates for admission must be at least 20 years old) and the Federal Technical Training School, which is a special vocational training school for the physically handicapped. This school has specialized sections, providing a 3-year course designed particularly for adolescents and 1-year courses intended primarily for adults, and offers physically and mentally handicapped people (excepting the blind) an opportunity to train for some profession which they can take up despite their disability. Candidates for admission must be 14 years old and have reached the required standard at the end of the fourth upper primary or secondary school class or the eighth primary school class. (The blind are trained at the Federal Institute for the Blind, and the deaf and dumb at the Federal Institute for the Deaf and Dumb in Vienna.)

As regards schools coming under the jurisdiction of the Federal Ministry of Agriculture and Forestry, agricultural secondary schools provide courses lasting 4 or 5 years. The junior full-time agricultural training schools provide a 2-year course, but also hold 2-semester and shorter courses. The specialized agricultural training schools organize special courses, which are usually short (one winter or one summer), for forestry workers, tractor-drivers, milkers, weavers, those responsible for the care of agricultural implements, etc. The length of the course in junior full-time forestry schools is 2 years. The specialized forestry schools arrange courses lasting from 1 to 2 weeks.

Out-of-class activities

In many Austrian secondary schools there are 'school communities' (*Schulgemeinden*) which provide an opportunity for teachers and pupils to work together and for pupils to acquire experience of self-government. They represent one of the most promising means of training pupils for democracy. The organization and tasks of school communities may be briefly described as follows: a school community is a body consisting of the headmaster (or headmistress), teachers and pupils of a school. It is based on established 'class communities'. The representatives of the various classes are responsible for promoting a corporate spirit within the class group itself and good relations between teachers and pupils. It is their duty to draw the teachers' attention to any special difficulties experienced by their fellow-pupils and to endeavour to strengthen the latter's sense of duty so that they co-operate in efforts to achieve the school's educational goals. School communities are also responsible for helping in school government, organizing school events and co-operating in the installation of classrooms and school libraries. They are also expected to deal with leisure time activities, such as running school clubs, editing school magazines, helping to maintain relations with schools abroad, and so on.

School communities work in close contact with all bodies concerned with the out-of-school education of young people and with leisure time activities, notably the Youth Section of the Federal Ministry of Education and its offices in the provinces. These offices support and advise the school communities, in addition to other youth organizations, and also arrange further training courses for practical youth work. They are likewise concerned with the civic education of young people, the promotion of out-of-school sports and games, hiking, the protection of nature, and the influence of films (protection of young people from harmful films and promotion of good films). School communities also co-operate with the Youth Theatre (*Theater der Jugend*), which arranges for schoolchildren to attend the best plays and concerts at reduced prices.

Many secondary school libraries are also run by school communities. These are generally the large libraries which, in addition to good children's books, also include works illustrating and filling out the teaching given on Austrian and German literature and that of other countries. In addition to the *Theater der Jugend*, the movements known as *Das Burgtheater kommt in die Schule* and the *Länderbühne* also help in enabling children to see representative performances of classics in world drama. Well-known actors assist in educating their future audiences by giving performances in schools.

The school radio, which since the second world war has once more developed remarkably into an indispensable teaching aid, is not only an excellent medium for language teaching (every month as many as 10 modern language lessons are broadcast for the 5th to the 12th school grades) but also helps to make the teaching of other subjects more alive, particularly by music broadcasts, literature programmes, and history, geography and natural history broadcasts. There are also broadcasts on scientific and technical subjects and scripture, and special programmes for commercial schools. Educational films have become a very important factor, not only in actual teaching but also in other spheres of school life. School television is at present being developed.

TRENDS AND PROBLEMS

Preparations for the recodification of the whole system of school legislation in Austria, and the relevant efforts at reform in the field of secondary education, are among the main preoccupations of all the Austrian educational authorities. Proposals are at present being considered for converting all secondary schools to a 5-day week system—at the moment lessons are given on all 6 week-days, although lessons generally end on Saturdays at 1 p.m. at the latest—and taking the necessary measures to this end. Connected with this are the long-discussed and still unsolved problems of whether to extend the compulsory schooling period from 8 to 9 years, and how to organize the new ninth year of schooling to be introduced (as a 5th primary school class or a 9th school grade), and also whether to extend secondary education from 8 to 9 years. The Federal Ministry of Education has been endeavouring for years to achieve what is known as *Hinwendung zum Kind* (taking special account, in teaching and education, of child development). In this field noteworthy results have already been achieved.

[*Text prepared by the Austrian National Commission for Unesco in June 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 7,021,000.
Area: 32,374 square miles; 83,849 square kilometres.
Population density: 217 per square mile; 84 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, school enrolment totalled 1,127,380 pupils (not including some 191,000 persons enrolled in adult education courses). This represented about 16 per cent of the total population. Of these pupils, 8 per cent were in kindergartens, 64 per cent in primary schools, 7 per cent in general secondary schools, 19 per cent in full-time and part-time vocational education, and 2 per cent in higher education. The proportion of girls was 50 per cent in primary schools, 38 per cent in general secondary schools, 35 per cent in vocational schools, 63 per cent in teacher training schools, and 22 per cent in higher education. Women teachers were 51 per cent of the teaching staff in primary schools, where there was an average of 22 pupils per teacher. Between 1953 and 1957, primary school enrolment decreased by 12 per cent, while secondary enrolment increased by 36 per cent. (See Table 1.)

Enrolment trends in secondary education, 1930–57. In 1957, general secondary school enrolment was half as high again as in 1930, while teacher training enrolment was at approximately the same level. Between these years there were substantial fluctuations in both categories of secondary education. Furthermore comparable data are not available for the various types of secondary vocational education. For the period 1955–57, the ratio of secondary enrolment to the estimated population 15–19 years old was 16, excluding vocational education; with the inclusion of the latter it was about 53. (See Table 3.)

Examination results in secondary education, 1953–57. The number of pupils who passed the general secondary school leaving examination in 1957 was about double that in 1953. The proportion of girls passing this examination in 1957/58 was 39 per cent. The number of pupils who passed the various examinations on completion of vocational courses continued to increase between 1953 and 1957, this increase amounting to 63 per cent in the case of industrial courses, and 75 per cent in the case of girls' vocational courses. In the commercial courses, the increase was more than three and a half times. Only in the number of teachers' diplomas was there hardly any increase, the total number of such diplomas granted in 1957 being only 7 more than in 1953. (See Table 2.)

Educational finance, 1957. For the year 1957, total educational expenditure amounted to 3,611 million schillings, averaging 516 schillings per inhabitant. The Federal Government provided 68 per cent of the total, the provincial governments 5 per cent, local authorities 20 per cent, the rest coming from tuition fees, gifts, etc. Recurring expenditure, which was 89 per cent of the total, was distributed by level and type of education as shown in Table 4C.

Source. Austria: Statistisches Zentralamt, replies to Unesco questionnaires.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary[1]	Kindergartens, public	1957/58	838	1 814	1 814	44 791	22 145
	Kindergartens, private	1957/58	534	1 040	1 040	23 714	11 860
	Total	**1957/58**	**1 372**	**2 854**	**2 854**	**68 505**	**34 005**
	,,	1956/57	1 335	2 765	2 765	66 989	33 149
	,,	1955/56	1 289	2 811	2 811	66 989	33 243
	,,	1954/55	1 247	2 654	2 654	65 781	32 724
	,,	1953/54	1 202	2 952	2 952	65 950	32 786
Primary	*Volksschulen* (primary schools), public	1957/58	4 319	21 315	11 166	504 817	244 844
	Hauptschulen (higher primary schools), public	1957/58	748	10 104	4 570	187 054	91 955
	Volksschulen (primary schools), private	1957/58	99	610	493	13 709	10 296
	Hauptschulen (higher primary schools), private	1957/58	70	713	576	10 452	8 566
	Total	**1957/58**	**5 236**	**32 742**	**16 805**	**716 032**	**355 661**
	,,	1956/57	5 236	33 683	17 256	729 478	362 263
	,,	1955/56	5 235	34 559	17 696	746 959	370 853
	,,	1954/55	5 222	35 460	18 082	780 835	388 221
	,,	1953/54	5 202	35 935	18 300	813 310	405 087
Secondary							
General	Secondary schools, public	1957/58	143	[2]4 997	[2]1 617	71 177	26 755
	Secondary schools, private	1957/58	50	...	...	11 402	4 350
	Total	**1957/58**	**193**	**[3]4 997**	**[3]1 617**	**82 579**	**31 105**
	,,	1956/57	187	[3]4 756	[3]1 513	80 316	30 286
	,,	1955/56	180	[3]4 514	[3]1 410	79 302	30 006
	,,	1954/55	176	[3]*4 339	...	77 022	28 818
	,,	1953/54	171	[3]*4 004	...	72 025	26 486
Vocational	Technical and industrial schools, public	1957/58	26	[4]1 757	[4]84	14 573	1 028
	Berufsschulen, public	1957/58	309	4 447	619	[5]152 622	[5]46 577
	Commercial schools, public	1957/58	14	304	107	5 891	3 927
	Agricultural and sylvicultural schools, public	1957/58	74	[4]1 081	[4]...	6 667	1 396
	Schools of women's professions, public	1957/58	11	[4]1 429	[4]1 217	4 904	4 832
	Technical and industrial schools, private	1957/58	7	[4]...	[4]...	609	80
	Commercial schools, private	1957/58	57	874	373	13 603	9 729
	Agricultural and sylvicultural schools, private	1957/58	32	[4]...	[4]...	5 791	1 219
	Schools for social workers, private	1957/58	3	43	...	109	109
	Schools of women's professions, private	1957/58	65	[4]...	[4]...	5 078	5 078
	Schools of training of hotel personnel, private	1957/58	3	66	...	561	112
	Total	**1957/58**	**601**	**[6]10 001**	**...**	**[7]210 408**	**[7]74 087**
	,,	1956/57	596	[6]9 802	...	[7]205 246	[7]72 190
	,, [8]	1955/56	495	[6]8 179	...	[7]189 070	[7]*66 800
	,,	1954/55	619	[6]8 557	...	[7]171 237	[7]*59 300
	,,	1953/54	591	[6]7 685	...	[7]143 319	[7]*48 650
Teacher training	Teacher training institutions, public	1957/58	14	328	101	2 864	1 240
	Institutions of kindergarten teacher training, public	1957/58	5	11	11	384	384
	Institutions training handwork teachers, public	1957/58	4	6	6	135	135
	Teacher training institutions, private	1957/58	15	241	132	1 547	1 152
	Institutions of kindergarten teacher training, private	1957/58	9	80	66	411	411
	Institutions training handwork teachers, private	1957/58	5	19	16	132	132
	Total	**1957/58**	**52**	**[9]685**	**[9]332**	**5 473**	**3 454**
	,,	1956/57	53	[9]682	[9]329	5 272	3 407
	,,	1955/56	53	[9]666	[9]322	5 005	3 229
	,,	1954/55	53	[9]664	[9]323	4 744	3 000
	,,	1953/54	51	[9]641	[9]309	4 648	2 977

1. Including data on special kindergartens.
2. Not including 72 (F.48) part-time teachers.
3. Public schools only; not including part-time teachers whose number was: 72 (F. 48) in 1957/58, 99 (F. 46) in 1956/57, 126 (F. 69) in 1955/56, 146 (F. ...) in 1954/55, 205 (F. ...) in 1953/54.
4. Teachers in private schools are included with those in the corresponding types of public schools.
5. Part-time students only.
6. Including part-time teachers, whose number was: *4,615 in 1957/58, *4,750 in 1956/57, *3,924 in 1955/56, *4,482 in 1954/55 and *3,901 in 1953/54.
7. Including part-time students whose number was: 152,622 (F.46,577) in 1957/58, 151,490 (F.44,909) in 1956/57, 146,958 (F.42,403) in 1955/56, 125,854 (F.35,242) in 1954/55 and 106,758 (F.28,840) in 1953/54.
8. Not including data on agricultural and sylvicultural schools.
9. Including part-time teachers, whose number was: 235 (F.119) in 1957/58, 240 (F.126) in 1956/57, 236 (F.125) in 1955/56, 245 (F.132) in 1954/55, 218 (F.118) in 1953/54.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Higher							
General and technical	Universities	1957/58	3	1 540	117	13 720	3 835
	Theological faculty	1957/58	1	28	1	157	5
	Technical colleges	1957/58	2	477	7	5 526	213
	Mining college	1957/58	1	67	3	729	11
	Agricultural college	1957/58	1	112	1	642	40
	Veterinary college	1957/58	1	78	2	259	17
	Commercial college	1957/58	1	104	4	2 358	538
	Colleges of fine arts	1957/58	4	353	96	1 691	769
	Total	**1957/58**	**14**	**2 759**	**231**	**25 082**	**5 428**
	,,	1956/57	14	2 692	230	20 863	4 291
	,,	1955/56	14	2 632	225	19 124	3 763
	,,	1954/55	14	2 391	183	17 949	3 486
	,,	1953/54	14	2 387	...	18 015	3 595
Special	Schools for backward children, public	1957/58	77	731	487	[10] 9 286	[10] 3 825
	Classes for backward children in regular primary schools, public	1957/58	269			[10] 4 356	[10] 1 642
	Schools for blind and visually defective children, public	1957/58	3	51	30	305	151
	Schools for deaf-mute, speech defective and hard of hearing, public	1957/58	8	161	83	[10] 1 174	[10] 561
	Schools for crippled children, public	1957/58	11	142	89	[10] 1 376	[10] 592
	Classes for crippled children in regular primary schools, public	1957/58	18			[10] 368	[10] 174
	Schools for problem children, public	1957/58	14	135	54	[10] 1 874	[10] 427
	Schools for special education, private	1957/58	7	56	50	562	296
	Total	**1957/58**	**[11] 120**	**1 276**	**793**	**19 301**	**7 668**
	,,	1956/57	[11] 113	1 236	761	18 315	7 267
	,,	1955/56	[11] 117	1 209	741	17 256	6 964
	,,	1954/55	[11] 111	1 157	705	16 177	6 624
	,,	1953/54	[11] 99	1 089	650	14 831	6 022
Adult	Folk high school courses	1957/58	8 529	...	...	189 208	...
	Arbeitermittelschulen, secondary education for workers	1957/58	4	[12] ...	[12] ...	1 203	190
	Aufbaumittelschulen, secondary education	1957/58	3	[12] ...	[12] ...	384	20
	Total	**1957/58**	**8 536**	**...**	**...**	**190 795**	**...**
	,,	1956/57	7 753	...	...	167 975	...
	,,	1955/56	7 017	...	...	153 367	...
	,, [13]	1954/55	7	[12] ...	[12] ...	1 055	111
	,, [13]	1953/54	7	[12] ...	[12] ...	995	91

10. Including enrolment in special classes attached to primary schools.
11. Number of schools only; in addition there were special classes attached to regular primary schools (303 in 1957/58, 278 in 1956/57, 229 in 1955/56, 195 in 1954/55, 149 in 1953/54).
12. Teachers in *Arbeitermittelschulen* and in *Aufbaumittelschulen* are included with those of regular general secondary schools.
13. Not including data on courses in folk high schools.

2. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
General secondary school leaving examination	3 330	1 072	3 079	998	3 214	1 128	4 938	1 775	6 166	2 387
Industrial (senior section) leaving examination	717	...	762	...	741	...	909	...	1 172	...
Girls' vocational training school leaving examination	191	191	184	184	237	237	354	354	334	334
Commercial academic leaving examination	408	...	505	...	747	...	1 077	...	1 489	...
Kindergarten teachers' diploma	272	272	70	70	188	188	284	284	272	272
Primary schools teachers' diploma	798	486	626	352	670	423	601	342	853	496
Vocational teachers' diploma	141	141	57	57	22	22	160	160	93	93

3. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education				Average[1] total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary[1] enrolment ratio
	General		Teacher training				
	Total	Per cent female	Total	Per cent female			
1930	55 648	31	5 591	54			
1931	59 194	32	5 577	54			
1932	62 433	33	5 509	53	67	391	*17*
1933	64 171	33	5 155	54			
1934	64 967	33	4 810	54			
1935	63 798	32	4 592	56			
1936	63 094	31	4 770	59			
1937	62 825	30	4 877	60	*65	499	**13*
1938	57 029	30	...	...			
1939	55 212	30	...	...			
1940	53 726	31	...	...			
1941	51 833	30	...	...			
1942	50 171	34	7 553	70	*58	476	**12*
1943	...	...	8 696	70			
1944	...	...	8 201	77			
1945	...	...	6 575	61			
1946	48 547	36	7 714	60			
1947	47 820	36	6 625	59	*55	461	**12*
1948	46 853	35	5 712	62			
1949	49 616	35	5 127	62			
1950	54 393	35	4 930	62			
1951	60 691	36	4 724	64			
1952	66 214	36	4 438	63	71	436	*16*
1953	72 025	37	4 648	64			
1954	77 022	37	4 744	63			
1955	79 302	38	5 005	65			
1956	80 316	38	5 272	65	[2]86	538	[2]*16*
1957	82 579	38	5 473	63			

1. General and teacher training only, excluding vocational education.

2. With the inclusion of pupils enrolled in vocational education, the average becomes 288 and the ratio 53.

4. EDUCATIONAL FINANCE, 1957 (in million schillings)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**3 611.3**
Federal Government	2 450.2
Provincial governments	196.2
Local authorities	727.0
Tuition fees	237.9
Other receipts from parents	
Gifts, endowments, etc.	
Other sources not specified	

1. Official exchange rate: 1 schilling = 0.0385 U.S. dollar.

B. EXPENDITURE BY PURPOSE

		Amount
Total expenditure[2]		**3 611.3**
Recurring expenditure		3 201.9
For central administration	51.9	
For instruction		
Salaries to teachers, etc.	1 913.4	
Other instructional expenditure	1 134.7	
Other recurring expenditure	101.9	
Capital expenditure		409.4

2. Closed accounts.

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**3 201.9**		**100.0**
Central administration		51.9		1.6
Instruction		3 048.1		95.2
Primary education	899.8		28.1	
Secondary education	1 288.0		40.2	
General	703.2		22.0	
Vocational	554.2		17.3	
Teacher training	30.6		0.9	
Primary and secondary education not distributed by level	456.3		14.3	
Higher education	329.6		10.3	
Special education	46.3		1.4	
Adult education	27.8		0.9	
Other education	0.3		0.0	
Other recurring expenditure		101.9		3.2
Further education for youth (*Jugendförderung*)	7.8		0.2	
Maintenance of schools, land, etc.	65.9		2.1	
Other not specified	28.2		0.9	

BAHRAIN

The great demand for education in Bahrain has always been motivated by the national aspirations of the people and is part of the general demand for education among the Arab countries of the Middle East. The immediate cause, however, of the remarkable expansion of the school system was the improvement in the country's economic situation as a result of the discovery of oil in 1932, an event which brought about a revolutionary change in the Bahraini way of life.

THE EDUCATIONAL SYSTEM

The present educational system was developed as a result of co-operation between the Egyptian Ministry of Education and the Bahrain Education Department, which began in 1944. Since then the number of schools and the number of pupils enrolled have increased rapidly. In 1937 there were 10 schools at primary level, including 2 for girls, and some classes giving elementary training in carpentry and workshop; the total enrolment was about a thousand. By the end of the school year 1958/59 there were 49 primary schools, 3 of them large enough to accommodate 1,000 pupils each, the boys' secondary school, and the technical school, with a total enrolment of 17,883 pupils, boys and girls.

There has been a corresponding expansion of administrative and supervisory services. The Director of Education, as head of the Education Department, is assisted by a secretariat division and a staff division. In 1957 an Assistant Director was appointed, and a Superintendent of Primary Education whose duties include supervision of primary school organization and the planning and supervision of certificate examinations. The actual supervision of teaching is carried out at present by inspectors from the Egyptian educational mission. A Council of Education was also established in 1957 with seven members, four representing the four municipal councils and three nominated by the Government. In the same year the post of Superintendent General was created, the functions of this official include the supervision of secondary education.

SECONDARY EDUCATION

There are three government institutions providing education at this level: a technical school for boys, opened in 1937; a secondary school for boys, opened in 1940 and transferred to its present well-equipped premises in 1950; and a secondary school for girls, opened in 1951.

General secondary schools. The course of study at the boys' secondary School lasts 4 years, during the first 2 of which

there is a common curriculum of general subjects. In the third year pupils choose one of three streams: academic—with two sections, literary and scientific; commercial; and teacher training. The only qualification required for admission to the school is possession of the Primary School Leaving Certificate but applicants for the teacher training stream are selected with the personal qualities of a good teacher in mind.

The curricula and textbooks are almost identical with those used in the Egyptian region of the United Arab Republic. The main subjects—Arabic, English and mathematics—are studied in all sections, though not to the same standard nor with the same number of periods per week. Each stream or section has its own special subjects: commercial—Arabic and English typing, book-keeping, economics and business methods; teacher training—psychology, teaching method and hygiene; literary—literature, language and history; scientific—physics and chemistry.

The course at the girls' secondary school also lasts 4 years, and is very much the same as the academic stream at the boys' school, but with special emphasis on subjects like domestic science.

The technical school. Since coming under the supervision of the Education Department in 1955 the technical school has been undergoing a number of essential improvements. Prior to 1958 the school admitted pupils who had completed only the third or fourth primary grade, but since then the Primary School Leaving Certificate has been required for entry and the technical school has thus been brought into line with the boys' secondary school. Pupils without this entrance qualification attend a preparatory class at the school.

The technical school offers courses in lathe mechanics and bench work, forging and welding, casting and modelling, carpentry, motor mechanics or electricity. In 1959 the school was endowed with a well-equipped chemistry laboratory.

TRENDS AND PROBLEMS

The ever-increasing demand for secondary education is a problem for which the Education Department has to find a solution, and another secondary school is needed.

In other Arab countries the course of study which brings the student to University Entrance level lasts 12 years but in Bahrain only 10. The extension of the secondary school course to 5 years is now under consideration.

One of the greatest difficulties is the shortage of trained teachers. As in other countries, many of the best students choose to study medicine or engineering, for which the financial rewards are so much more attractive. The educational authorities are doing their best to remedy this by (a) increasing the number and improving the quality of training courses for the local teachers, and (b) by sending every year an increasing number of students to universities and higher institutes in Beirut, Cairo and the United Kingdom.

[*Text prepared by the Education Department, Bahrain, in April 1960.*]

STATISTICS

Population (mid-year 1958 estimate): 139,000.
Area: 231 square miles; 598 square kilometres.
Population density: 602 per square mile; 232 per square kilometre.

Summary of school statistics, 1953–59. In 1959/60, there were 17,831 pupils enrolled in all public schools, representing about 13 per cent of the total population. The proportion of girls was 31 per cent. The teaching staff consisted of 688 teachers, with an average number of 26 pupils per teacher. (See Table.)

Examination results in secondary education, 1958/59. One hundred boys and 14 girls passed the secondary school leaving examination in 1958/59, and 16 boys received the technical school leaving certificate.

Educational finance, 1957/58. In 1957/58, total expenditure for education amounted to 6,728,000 rupees, representing an average expenditure of Rs.48 per inhabitant. (Official exchange rate: 1 rupee = 0.21 U.S. dollar.) Of this sum Rs.5,257,900 was spent on boys' schools, equivalent to Rs.475 per pupil, and Rs.1,470,100 on girls schools, or Rs.290 per pupil.

Source. Bahrain: Education Department, reports.

SUMMARY OF SCHOOL STATISTICS, 1953–59[1]

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens for boys	1959/60	[2] ...	[2] ...	[2] ...	6 049	—
	Kindergartens for girls	1959/60	[2] ...	[2] ...	[2] ...	[2] ...	[2] ...
	Total	**1959/60**	[2] ...	[2] ...	[2] ...	[3] **6 049**	—
	,,	1958/59	[2] ...	[2] ...	[2] ...	[3] 5 630	—
	,,	1957/58	[2] ...	[2] ...	[2] ...	[2] ...	[2] ...
	,,	1956/57	[2] ...	[2] ...	[2] ...	[2] ...	[2] ...
	,,	1955/55	[2] ...	[2] ...	[2] ...	[2] ...	[2] ...
	,,	1954/55	23	154	11	4 515	524
	,,	1953/54	21	128	14	3 439	461
Primary	Primary schools for boys	1959/60	[4] 34	[4] 486	...	5 432	—
	Primary schools for girls	1959/60	[4] 16	[4] 202	...	[5] 5 467	[5] 5 467
	Total	**1959/60**	[4] **50**	[4] **688**	...	[5] **10 899**	[5] **5 467**
	,,	1958/59	[4] 49	[4] 616	...	[5] 9 703	[5] 5 019
	,,	1957/58	[6] 31	[6] 423	...	[6] 9 767	—
	,,	1956/57	[6] 28	[6] 377	...	[6] 8 506	—
	,,	1955/56	[6] 25	[6] 314	...	[6] 7 374	—
	,,	1954/55	13	193	89	4 268	2 094
	,,	1953/54	13	172	68	4 025	1 838
Secondary							
General	Secondary school for boys	1959/60	1	[7] (53)	...	626	—
	Secondary schools for girls	1959/60	[2] ...	[2] ...	[2] ...	[2] ...	[2] ...
	Total	**1959/60**	[3] **1**	[3] [7] **(53)**	...	[3] **626**	—
	,,	1958/59	[3] 1	[3] [7] (49)	...	[3] 566	—
	,,	1957/58	[2] ...	[2] ...	...	[2] ...	...
	,,	1956/57	[2] ...	[2] ...	...	[2] ...	...
	,,	1955/56	[2] ...	[2] ...	...	[2] ...	...
	,,	1954/55	2	[8] 29	[8] 4	327	22
	,,	1953/54	2	[8] 24	[8] 3	234	14
Vocational	Technical school for boys	1959/60	1	(20)	...	100	—
	Commercial courses for boys	1959/60	...	[9] ...	...	71	—
	Total	**1959/60**	**1**	[10] **(20)**	...	**171**	—
	,,	1958/59	1	[10] (15)	...	163	—
	,,	1957/58	[2] ...	[2] ...	...	[2] ...	—
	,,	1956/57	[2] ...	[2] ...	...	[2] ...	—
	,,	1955/56	[2] ...	[2] ...	...	[2] ...	—
	,,	1954/55	2	12	—	83	—
	,,	1953/54	1	9	—	76	—
Teacher training	Teacher training course for boys						
	Total	**1959/60**	(1)	[9] ...	...	**86**	—
	,,	1958/59	(1)	[9] ...	...	51	—
	,,	1957/58	(1)	[2] ...	...	[2] ...	—
	,,	1956/57	(1)	[2] ...	...	[2] ...	—
	,,	1955/56	(1)	[2] ...	...	[2] ...	—
	,,	1954/55	(1)	[9] ...	...	14	—
	,,	1953/54	(1)	[9] ...	...	8	—

1. Public education only. In 1955/56, the number of pupils in private and foreign schools was as follows: primary, 505 (F.140); general secondary, 314 (F.153); vocational secondary, 140 (F.0).
2. Included in primary education.
3. Boys' education only.
4. All public schools.
5. Including pre-primary, primary and secondary girls' education.
6. All boys' education.
7. Including teachers of the commercial and teacher training courses.
8. Including teachers of the teacher training courses.
9. Included in general secondary education.
10. Technical school only.

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BELGIUM

THE EDUCATIONAL SYSTEM

The Constitution of 1831, which laid the political foundations of modern Belgium, proclaimed the freedom of education. Article 17 states: 'Education shall be free, and all obstructive measures shall be forbidden. Offences shall be punishable only in accordance with the law. Public instruction provided at the expense of the State shall likewise be governed by the law.'

Two main teaching systems have evolved during the past 130 years within the compass of the Constitution. They embrace all degrees of education and give particular importance to secondary education. One is the public system: it consists of institutions founded and administered by the State, the provinces and the local authorities. The other is the private system, *enseignement privé* or *enseignement libre*. The immense majority of the institutions in this system are Catholic.

As regards organization, the schools of the two systems have a very similar and often identical structure.

Education is, as a rule, in the language of the area, that is, in French in the southern part of the country, Flemish in the north and German in certain parts of the east. In the Brussels area, however, and in communes on the linguistic frontier which the law describes as bilingual, the rule is that the pupil shall be taught in his maternal or usual language.

The structure of Belgian education is shown in the diagram on page 237.

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary education (*enseignement du second degré*) for boys and girls between the ages of 12 and 18 comprises general secondary education (*enseignement moyen*), technical education, teacher training and artistic education. Mention should be made here, as belonging to the same level, of the *quatrième degré*, a 2-year terminal course which still exists in some primary schools. School attendance is compulsory until the age of 14 but is, in practice, voluntarily prolonged to 16 years by more than half the school population. A bill has been introduced for the extension of compulsory school attendance to the age of 15 years.

Historical and legal basis

The structure of secondary education is determined by the Organic Law of 1 June 1850 which has been amended many times since. All these amendments were recently co-ordinated by the Royal Order of 30 April 1957. The syllabus is laid down by the Act of 10 April 1890 and the amendments thereto which determine the conditions for admission to a university with a view to obtaining a degree.

Technical secondary education now has as many pupils as the *enseignement moyen* and is still expanding. It was the outcome, during the past century, of local action based on the immediate economic needs of the day, and has expanded to embrace a great variety of schools. Its origin explains why it has had its own type of organization from the beginning; but as it developed it came nearer to general secondary teaching, into the structure of which it has been made to fit more and more closely in order to facilitate transfers from one branch to another. Courses on general subjects are stressed in the revised curricula. The Organic Act of 29 July 1953 has given a more unified, more rational structure to technical education. This Act deals with structures, curricula, diplomas, staff, conditions for teaching certificates, etc. The changes since made were co-ordinated by the Royal Order of 13 April 1957. Other important measures have been issued more recently, in particular the Royal Order of 1 July 1957 to regulate studies in technical secondary education.

For a long time, the legal position of teacher training was not unified. Each of its branches was defined in the organic law of the teaching for which it was intended. The Organic Act of 23 July 1952 respecting teacher training was the first to establish a legal regrouping of the three levels of teacher training: training for pre-primary (*froebelien*), primary and secondary teaching. Later provisions were co-ordinated by the Royal Order of 30 April 1957. The training of teachers for technical schools continues to form part of technical education, whereas teachers for higher secondary schools are trained in the universities.

Artistic education is being brought under regulation. An Organic Act of 14 May 1955 enumerates the categories of schools where this education is given and contains regulations applicable to teachers, inspection, grants in aid, etc.

Lastly, the Act of 29 May 1959 issued rules governing the general structure of education with the exception of higher education.

Administration

For each of the above-mentioned four branches—general secondary school, teacher training, technical and artistic education—there is a general directorate which administers the State schools where this teaching is given and maintains services for grant-aided institutions of the same category. Since 1957, general secondary education and teacher training have been placed under the same general directorate, but they keep their separate services.

The directors-general are assisted in their task by administrative services, inspectorates and *Conseils de Perfectionnement* (improvement or advisory boards). There is a board for each of the four branches (general secondary, teacher training, technical and artistic); it gives its opinion on all questions submitted to it. Its competence is limited

to State, provincial and communal institutions, and its members are appointed by the Crown.

A higher council of technical education (*Conseil Supérieur de l'Enseignement Technique*) has been set up at the Ministry of Education. It consists of representatives of major enterprises, the Ministries concerned and teachers' unions. This council has an advisory role and ensures co-ordination with economic and social interests.

The provinces and communes with fairly extensive school systems also have their own organization.

The national secretariat for Catholic education (*Secrétariat National de l'Enseignement Catholique*) ensures co-ordination and unity in all matters connected with Catholic education.

Just as the Ministry of Education is assisted by various specialized boards in the task of drawing up regulations applicable to all schools, so each educational establishment has an administrative board which proposes whatever measures are needed for its proper functioning.

Thus each official general secondary institution has a *conseil scolaire* (school board) consisting of three groups of 3 members chosen respectively from the communal council, from parents of pupils and from among persons interested in education.

Each technical school also has an administrative commission of 5 or more members. They are appointed by the Minister (in the case of State schools) or by the authority responsible for the institution (if it is an approved establishment). At least 3 of these members must represent the economic and social life of the region of the school. The purpose of the commission is to help the director in his work of management. It draws up reports on school regulations, financial matters, curricula and the equipment of the institution. It submits proposals to the Minister for the proper conduct and improvement of the school.

In technical schools, the administrative commission is sometimes assisted by a *conseil d'orientation* (guidance board) comprising specialists in the industrial trades (employers and workers) and teachers or former pupils of the school. The guidance board studies means of adapting the teaching to general or regional economic needs.

Although almost all technical education has been brought under the Ministry of Education, first through the Office of Technical Education (1932), and then directly by the creation of the general directorate of technical education within the Ministry (1946), some specialized courses are still wholly or partly subordinate to other Ministries. The teaching of child-care thus comes under the Ministry of Public Health, instruction in fishing is under the Ministry of Communications, and the *secrétariats d'apprentissage* (apprenticeship centres) (for handicrafts and other fields) are under the Ministry of the Middle Classes.

Also every state school for artistic education has an administrative commission whose powers are wide, including for example the approval of all appointments.

Supervision and inspection. The State inspects its own schools and those to which it makes grants. In the latter case, the state inspection is completed by visits of provincial, local or private inspectors, according to the rules applicable to the establishment in question.

There are 2 inspectors-general of ordinary secondary education, one for each linguistic region, together with inspectors of general (literary and scientific) courses and special courses (drawing, manual work, music, domestic work, technical and agricultural courses, etc.).

The inspectors visit each school at least once a year and draw up a report to the authorities on each teacher and each institution which they have inspected. They are recruited from both men and women members of the teaching body.

Two inspectors-general are assigned to teacher training and there are special (teacher training) inspectors for pedagogy; the other subjects are within the competence of the inspectorate of general secondary education.

Technical education has its own corps of inspectors consisting of 2 inspectors-general and various principal inspectors and specialized inspectors for technical subjects or general courses. In this branch, boys' schools are inspected by men and girls' schools by women. It is the duty of these inspectors to judge whether the teaching level is adequate, to report to the authorities on the teachers and schools and, if need be, to give advice on the purchase of whatever special equipment each school needs.

State artistic education does not come under the inspectors. The director and supervisory board are entirely responsible for each establishment under their charge. Four State inspectors (2 for music and 2 for drawing), however, visit the subsidized schools.

State inspection does not play such an important part in subsidized education, and specially in private schools, and it is much less decisive than in state education.

Finance. State-organized education is paid for entirely by the State. In certain circumstances the State also grants subsidies to provincial, communal and private institutions.

The history of these subsidies is too long and complex to be recalled here. Generally speaking, primary education and teacher training were the first to receive aid, followed by artistic education (1869 for drawing and 1881 for music), technical education and lastly, secondary education in 1951. All these measures were revised and to some extent co-ordinated by the Pacte Scolaire of 20 November 1958 and by the Act of 29 May 1959, for the application of the law on education, which carried Belgian education some distance along the road to school pluralism.

The salaries and pensions of the staff of grant-aided schools are paid by the State. These institutions also receive an operating subsidy, at a lump sum rate for each pupil (3,250 Belgian francs for secondary education, 3,750 francs for teacher training, from 3,250 to 4,250 francs for full-time technical education), as well as grants for equipment representing 60 per cent of the value of the equipment purchased.

In 1958, the annual education budget was 12,365 million Belgian francs or 11.7 per cent of the total state budget; in 1959, it was 16,198 million francs or 14.4 per cent of the total state budget.

In 1958, the state school building fund was replaced by two other funds: the fund for the construction of state schools and related buildings (Fonds de Constructions Scolaires et Parascolaires de l'État) and the fund for the construction of state buildings for higher education and

university group and communal buildings (Fonds des Constructions de l'Enseignement Supérieur et des Cités Universitaires de l'État).

The Pacte Scolaire (Act of 29 May 1959) increased the previous appropriation of 600 million Belgian francs for building secondary schools by an additional 400 million a year mainly intended for building new schools.

In addition to these funds, there is the National Study Fund (Fonds National des Études) which awards scholarships. The sums vary considerably, the average being about 4,800 Belgian francs; but the total has risen steadily, from 14,750,000 Belgian francs in 1955 to 80 million in 1959 for secondary education alone. Scholarships are awarded regularly by juries of teachers representing all types of education and all specialities. Grant-aided schools receive generous treatment.

Secondary education is as a rule free of charge. In the schools the book loan services supported by gifts or by profits from entertainments or various collections, practically ensure the supply of large numbers of textbooks free of charge. Such methods, formerly exceptional, are now spreading rapidly and tend to become general.

There used to be sharp variations in teachers' salaries, but they are becoming standardized in accordance with pilot scales. The salary of a *régent* or teacher in lower secondary education, is from 88,000 to 135,000 Belgian francs, or with the present 17.5 per cent increase, from 103,000 to 159,175 francs, after 26 years of service. The other scale, that for a teacher in upper secondary education (university degree), ranges from 114,000 to 205,000 francs, or with the present 17.5 per cent increase, from 133,950 to 240,875 francs, after 26 years of service. Salaries of teachers in special subjects follow one or other of these pilot scales according to the level.

Buildings and equipment. After the war and despite the construction of many new schools, the spontaneous prolonging of school attendance, especially at the secondary level, produced an increase in enrolment and consequently a shortage of school premises. The remedies have been, not only to put up many new buildings, as mentioned above but also to have recourse to such makeshifts as mobile schools (bus-classrooms, etc.). Standardized, prefabricated installations are now being used more and more.

On the whole, there has been a great effort to make school buildings more agreeable for pupils and teachers (general arrangements, cleanliness, decoration, heating, lighting, comfort, etc.). The movement has led to reforms in boarding schools and of school restaurants; these latter are rapidly becoming generalized.

In Belgium, the Ministry of Public Works is responsible for the construction of buildings for state schools.

TYPES OF SECONDARY EDUCATION

Secondary education comprises two stages (*degrés*), a lower secondary and an upper secondary.

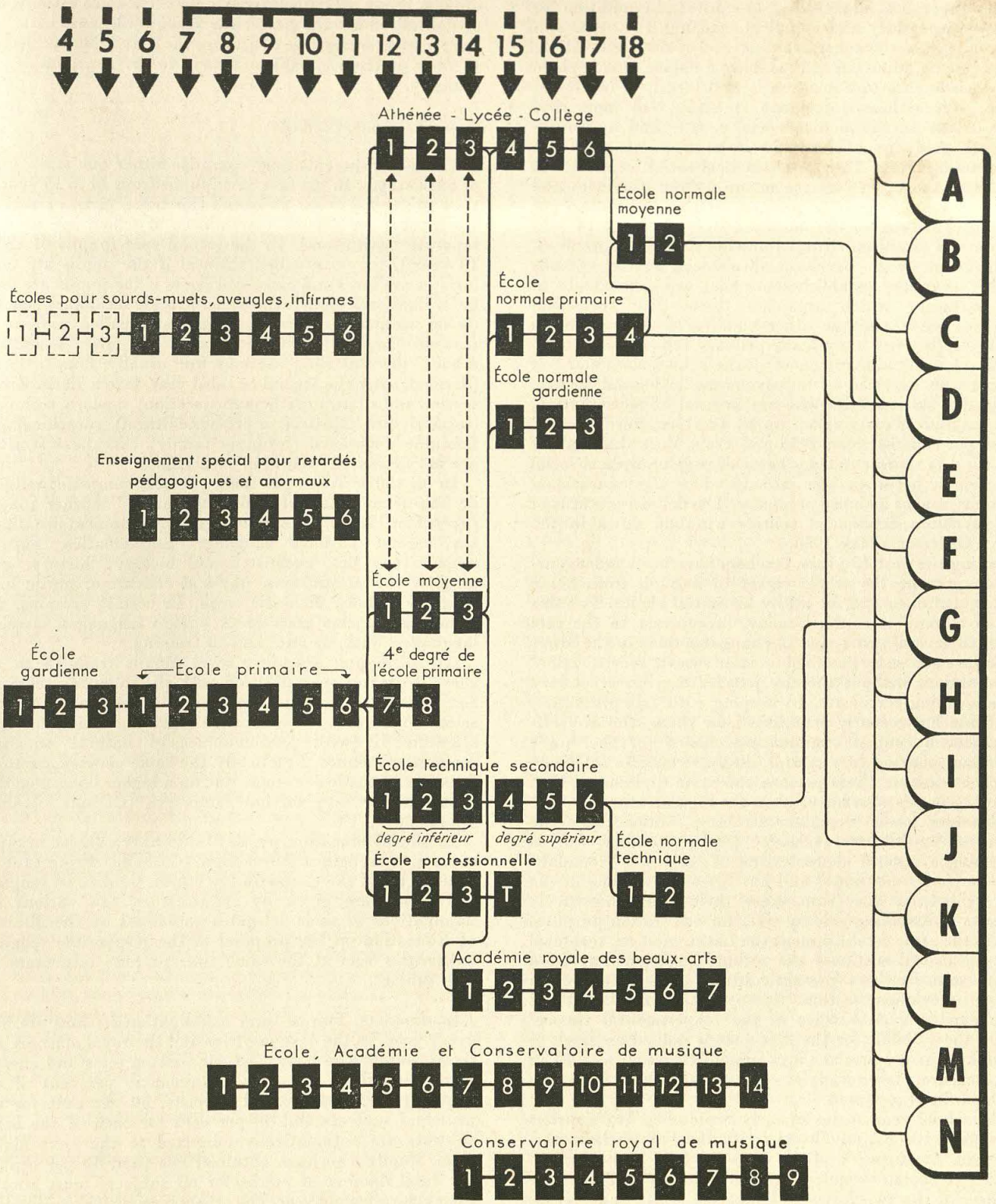
The lower stage includes general secondary education and technical education and the last 2 years (*quatrième degré*) of primary education. Technical training is given in the technical schools, where there is more thorough general instruction, and in the essentially practical vocational schools. After the 3 years of the lower stage of secondary or technical school, properly so-called, the pupil receives a diploma giving him access to the upper secondary cycle. Admission is not, however, guaranteed to pupils from the *quatrième degré* of primary school or to those from vocational schools.

GLOSSARY

académie royale des beaux-arts: vocational training school of fine arts.
athénée: state general secondary school for boys.
collège: private general secondary school for either sex.
conservatoire royal de musique: vocational training school of music.
école, académie et conservatoire de musique: vocational training schools of music receiving pupils from the age of 8.
école gardienne: pre-primary school.
école moyenne: lower secondary school offering both general and pre-vocational education.
école normale gardienne: teacher training school for pre-primary teachers.
école normale moyenne: teacher training college especially for teachers in the *école moyenne.*
école normale primaire: teacher training school.
école normale technique: teacher training college for vocational school teachers.
école primaire: primary school.
école professionnelle: vocational training school.
école pour sourds-muets, aveugles, infirmes: special schools for deaf and dumb. blind or crippled children with course corresponding to that of the *école primaire* and sometimes including pre-primary school.
école technique secondaire: vocational secondary.
enseignement spécial pour retardés pédagogiques et anormaux: special schools for backward and abnormal children.
lycée: state general secondary school for girls.
4e *degré de l'école primaire:* two top classes (seventh and eighth years) of the primary school providing a suitable terminal course generally with vocational bias for pupils who have not transferred to general or vocational secondary education at end of sixth year.

HIGHER EDUCATION

A. *Facultés de l'Université:* university faculties.
B. *École vétérinaire:* veterinary college.
C. *Institut agronomique:* college of agronomy.
D. *Institut supérieur de pédagogie:* institute of education.
E. *Institut universitaire des territoires d'outre-mer:* college for overseas territories.
F. *École spéciale d'ingénieurs techniciens:* special college of engineering.
G. *École technique supérieure:* technical college.
H. *Institut supérieur de commerce:* commercial college.
I. *École supérieure du secrétariat:* secretarial college.
J. *École de service social:* social science college.
K. *École nationale supérieure d'architecture et des arts décoratifs:* national college of architecture.
L. *École supérieure de navigation maritime:* college of marine navigation.
M. *École militaire:* military college.
N. *École supérieure des textiles:* college preparing for careers in the textile industry.


4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
Athénée - Lycée - Collège
1 2 3 4 5 6
École normale moyenne
1 2
École normale primaire
1 2 3 4
Écoles pour sourds-muets, aveugles, infirmes
1 2 3 1 2 3 4 5 6
École normale gardienne
1 2 3
Enseignement spécial pour retardés pédagogiques et anormaux
1 2 3 4 5 6
École moyenne
1 2 3
École gardienne
1 2 3
École primaire
1 2 3 4 5 6
4e degré de l'école primaire
7 8
École technique secondaire
1 2 3 4 5 6
degré inférieur
degré supérieur
École normale technique
1 2
École professionnelle
1 2 3 T
Académie royale des beaux-arts
1 2 3 4 5 6 7
École, Académie et Conservatoire de musique
1 2 3 4 5 6 7 8 9 10 11 12 13 14
Conservatoire royal de musique
1 2 3 4 5 6 7 8 9
A B C D E F G H I J K L M N

The upper secondary level comprises, in addition to ordinary secondary and technical teaching, the other two main categories: teacher training and artistic education.

It must be admitted that making a choice among these various branches of education is still largely a matter of chance. Nevertheless, recourse is being had more and more to the psycho-medical-social centres and to the vocational guidance offices (104 institutions in all). The State administers 28 psycho-medical-social centres and subsidizes the other services set up by the provinces and communes and by private persons. Neither the centres nor the offices belong to the administrative structure of education, and are often situated outside the school premises.

The scope of the psycho-medical-social centres extends to the secondary establishments that are subordinate to the authority which organizes them. The vocational guidance offices, on the other hand, give their attention to all pupils when they leave primary school and also to pupils of a secondary school if the school does not yet receive the services of a psycho-medical-social centre. They also assist adults who are in need of reorientation. The number of cases taken up by these centres increased by 35 per cent between 1956 and 1959. More than half of this total is represented by cases of psycho-medical-social care which occur at the periods when the educational structure makes a choice necessary. The definitive status of the psycho-medical-social centres was laid down in the Royal Order of 4 May 1956.

During the past 15 years, teachers have been endeavouring to prevent the whole career of a pupil from being determined once and for all by his initial choice. For this reason a pupil is enabled today, in contrast to the rule enforced several years ago, to change sections in the lower secondary course by passing in certain cases a 'reorientation' examination, without thereby jeopardizing his secondary school-leaving certificate. In keeping with this procedure, the State has recently established for those who are self-educated, a central examinations board for the lower secondary course (*Jury central, dit du secondaire inférieur*) which confers on these persons the same diploma as that issued to pupils who have taken the regular course.

This new lower secondary structure, which takes the form of 'multilateral schools' (*écoles multilatérales*) is becoming a general characteristic of the lower secondary schools (*écoles moyennes*) and has been in evidence in the new schools, at any rate, since their establishment. It consists of installing side by side, for orientation purposes and in the same establishment the Latin, modern, technical and vocational sections; the technical section may be a 'wood and iron' or pre-agricultural section or even a feminine technical section. Recently, the experiment has been carried even further in the 'experimental classes' where the syllabus for the first year is unified as much as possible so as to produce a common first year; as part of this measure, closer study is given to each child, for whom a school file is prepared.

The school year begins in early September. It comprises 3 terms, with holiday breaks (10 days at Christmas, a fortnight at Easter and 60 days in July and August). The Pacte Scolaire requires that the holidays shall be made uniform in the two forms of education (state and private schools). Provided that they respect the minimum number of class hours prescribed by law for all schools established or subsidized by the State, the responsible authorities of each institution are free to arrange the time-tables according to their preference, subject always to the approval of the Ministry.

General secondary schools

These establishments may comprise either one stage only or both stages. In the first case (pupils from 12 to 15 years), they are called *écoles moyennes* (for boys, girls, or mixed, when there are not enough children of school age for two separate institutions). In the second case (pupils of 12 to 18 years), they are called *athénées* if the pupils are only boys or are boys and girls, and *lycées* if the pupils are only girls. The curriculum is the same. Private secondary schools (*écoles secondaires libres*) are generally called *collèges* or *instituts*. In the first cycle, that is the lower secondary school, the following sections are usually found: Latin (divided, after the second or third year, into a Latin-Greek section and a Latin-mathematics section), modern, technical (formerly pre-industrial or pre-agricultural), vocational and feminine vocational (formerly family). All these sections are not necessarily found in each school.

In all the sections, the main subjects comprise: religion or non-denominational ethics, the pupils' mother tongue (French or Flemish, according to the geographical situation), the second national language, mathematics, natural sciences (physics, chemistry and biology), history, geography, the plastic arts, physical education, music and, in girls' schools, domestic work. In certain sections, the following subjects are added: foreign languages, classical languages, business and manual training.

At the upper secondary level (pupils from 15 to 18) there is greater specialization with the following sections: Latin-Greek, Latin-mathematics, Latin-science, modern scientific A (with predominance of mathematics), modern scientific B (with predominance of natural sciences), modern economics. Practically the same courses are to be found as in the lower stage, but on a higher level, together with one or two foreign languages (German, Italian, Spanish).

In official education, pupils always have a choice between courses in religious instruction (Catholic, Protestant or Israelite) and the course in lay ethics. Courses in religious instruction are given by ministers of the various denominations or their delegates appointed by the Minister of Education on the proposal of the responsible religious authorities who at the same time propose inspectors for this subject.

Examinations. Two or three examination sessions are held every year. In the *école moyenne* and the royal *athénées* and *lycées*, pupils who have, in their written tests and current work throughout the year, obtained 50 per cent of the aggregate of marks for all subjects, 50 per cent for the principal subjects and 40 per cent for each of the other subjects are automatically admitted to the next higher class. Pupils who have obtained less than 40 per cent of the total number of marks for all subjects must stay in their class a second year. The others may sit for a promotion examination.

At the end of the lower secondary stage, there is a final examination giving the *Diplôme d'école moyenne*. In the complete course at the *athénées* (6 years), this examination was always considered optional, but is now becoming a general practice.

The final examination at the royal *athénées* and *lycées*, as well as at *collèges*, leads to a *Certificat d'humanités* delivered by the head of the school and confirmed by an examinations board (*jury d'homologation*). The board, which consists of an equal number of teachers of private schools and teachers in state secondary schools is entitled to verify candidates' studies, but only on the basis of written evidence. The *Certificat d'humanités*, duly confirmed, entitles the student to be admitted to the university, usually at the age of 18. At this level also, the State organizes an examination by a central board, so that the same certificate may be issued to self-educated persons or to students whose schooling was irregular; this examination also enables candidates to pass certain additional tests required by the university.

Teaching staff. At the lower secondary level (*école moyenne*), the teaching staff, including the school heads, must, as a rule, hold the diploma of *agrégé de l'enseignement secondaire inférieur* (lower secondary teaching certificate). This certificate is conferred after 2 years of secondary teacher training following the secondary course itself. Candidates may choose from among the following specialities: mother tongue-history, modern languages, mathematics-physics-business, natural sciences-geography, physical education, plastic arts, domestic economy, farm domestic economy, technical subjects for women. Music teachers and religious instructors are still the only exceptions to the general rule.

At the higher secondary level, the teaching staff at *athénées* and *lycées* must hold the diploma of *agrégé de l'enseignement secondaire supérieur* (higher secondary teaching certificate) which is conferred after 4 years of university studies following secondary education. Candidates may choose among the following specialities: philosophy, classical philology, Romance philology, Germanic philology, history, physical sciences and mathematics, natural sciences, geography, physical education, business. Music teachers (who hold a qualifying certificate) and religious instructors are still the only exceptions to the general rule.

The law requires that as a rule general subjects shall be taught, in *athénées* and *lycées*, only by those who hold the higher secondary teaching certificate; for some time, however, because of the shortage of university graduates, the first 3 years of teaching in the *athénées* and *lycées* have been handed over more and more to *régents* (lower secondary school teacher) whose status is exactly the same as in the *école moyenne* or lower secondary school.

Outside the teaching itself, certain educational and supervisory tasks are entrusted to supervisor-educators (*surveillants-éducateurs*).

Teachers in state education, excepting religious instructors, are appointed under a Royal Order.

Vocational and technical schools

Through the extensive reforms applied during the past 20 years, Belgian technical education has deliberately broken with old apprenticeship traditions and broadened into a form of education that provides both a general training and a direct preparation for a specific trade.

At the present time, trade preparation is given in: technical schools properly so-called, technical sections of general secondary schools, and apprenticeship centres (*secrétariats d'apprentissage*), where it has a special, more traditional character.

In technical education, several other important distinctions must be made:

1. According to the mode of attendance: 'full-time' schools, where attendance is of the current type, are to be distinguished from 'part-time' schools for adolescents or adults who are already employed (these latter are usually open in the evening and on Sunday).
2. According to the study level a distinction is made between 'technical schools' in the strict sense, where the level is comparable with that of secondary education, a condition which makes it possible to give a fairly advanced theoretical and scientific training (and so such schools often prepare for higher studies), and 'vocational schools', where the level of theoretical study is not so high but more emphasis is placed on practice.
3. Technical education, like the corresponding general secondary school (see diagram on page 237), is divided, according to degree, into lower technical secondary school (3 years of technical studies equivalent to the 3 years of lower secondary school, or 3 years of vocational studies, with an extra final year in some sections) and higher secondary technical school (3 years of study for pupils from 15 to 18 years). In technical education, properly so-called and in vocational education, each of these two degrees may be supplemented by a year of more advanced work during which the pupil completes his specialization.
4. Lastly, according to the category to which they belong and the special branches for which they prepare, technical schools vary greatly. In particular, there are: industrial and craft schools (principally metal work, electricity, woodwork, but also mining industries, building, chemistry, bookbinding, textiles, clothing, leather, food, hotel-keeping); commercial schools; agricultural schools; schools for home economy, women's occupations and nursing; schools of applied arts; schools preparing for the para-medical professions (very few at secondary level); schools for maladjusted pupils.

Curriculum. According to law, the King decides on the minimum curriculum common for both state and approved institutions. The curriculum enumerates the subjects to be taught, determines the level to be reached and establishes a time-table for each type of institution. However, the authorities of each school can employ at least 20 per cent of the maximum authorized time-table in order to achieve a better adaptation of the teaching to the particular aims of the establishment.

On the advice of the Higher Council, the Minister issues time-tables to serve as guides to the different sections.

Theoretical teaching is limited to a weekly maximum of 30 lessons of 50 minutes each. The weekly course in full-time technical schools must include at least 28 lessons of

50 minutes. The weekly maximum may not exceed 36 lessons for first-year pupils and 40 lessons for the others (most schools apply the maximum time-table). In the lower secondary cycle of technical schools, a certain number of lessons (20 to 28) are given over weekly to general training, including religious instruction (Catholic, Protestant or Israelite) or non-denominational ethics and civics, the pupil's maternal language, history, geography, mathematical sciences, natural sciences, physical training, musical education and education in the plastic arts. In the higher secondary section, from 18 to 30 lessons a week are given over to general training, which includes the second national language in addition to the subjects enumerated above. In vocational schools, much less room is given to theoretical training after the pupil is 14.

For some time a great effort has been made to get technical education out of its isolated position. Today, a pupil in technical school who does not feel he is taking the right course may transfer not only to vocational school, where there is less theoretical training, but even to general secondary education, after a reorientation test. Transfers are made from general secondary to technical school under the same conditions.

Teaching staff. The teachers in a technical school include a head, teachers for general subjects (working under the same conditions as their colleagues in other types of institutions, except that instructors may also teach in vocational sections) and specialized teachers (technicians preferably recruited from among holders of diplomas for technical teaching who have had professional experience). The recruitment age limit for teachers is 50 years.

For girls, technical teacher training already exists and covers feminine specialities (domestic economy, dressmaking, decorative arts) as well as business. For young men, most of the teacher training courses are part-time; however, there are two full-time state teacher training sections at Morlanwelz and Deurne.

Teacher training schools

At the higher secondary level, teacher training schools include schools for pre-primary teachers, which prepare for teaching in the *écoles gardiennes* (kindergarten) and are reserved for girls, and schools for primary teachers which train primary schoolmasters and schoolmistresses.

Each teacher training establishment has a practice school where its pupils may obtain experience in teaching.

Until 1957, these normal schools always had an autonomous curriculum based to a great extent on that for the humanities in general culture, but in which after the second year the special needs of teaching took first place. Since the reform measures, schools for kindergarten and primary teachers have had a 4-year course after lower secondary school.

Schools for kindergarten teachers have again found a certain degree of autonomy; they have their own time-table and curriculum. In primary teacher training the programme for the first 2 years is made to correspond with that of secondary education; work of a pedagogic character is left to the last 2 years, where it fills one-third of the time-table. General subjects are entrusted to teachers with qualifications similar to those of their colleagues in secondary school; they are remunerated on the same scale.

Primary teacher training studies lead to a twofold diploma, the schoolmaster's diploma and the certificate for the corresponding section of the humanities.

Schools for artistic education

Artistic education is now being reorganized and rationalized; it includes musical education and the teaching of the plastic and graphic arts.

Music education is intended not only to train professional musicians but also to give many amateurs a general introduction to music. The courses are given in 5 royal schools of music (state institutions), in communal schools of music and academies and schools of music (grant-aided institutions).

Teaching in the plastic and graphic arts comprises three sections: architecture; painting, sculpture and engraving; decorative arts.

TRENDS AND PROBLEMS

The first problem which secondary education faces today and will continue to face in the coming years is certainly the increase in the school population and in the enrolment rate. These movements, however, affect in the main the general secondary and technical schools which attract the largest number of pupils from 12 to 18 years of age, whereas the other branches remain fairly stable. According to present forecasts, the enrolment in various types of secondary education, which stands at present at 428,229 pupils will amount to 600,000 pupils about 1965. This figure may even be exceeded if the period of compulsory school attendance is extended. This expansion of education doubtless entails many difficulties as regards financing, equipment and staff. It is, however, to be welcomed, first, from the social standpoint, since it is evidence of better opportunities for the young, secondly, from the economic angle, because the fact is becoming more and more obvious that better qualified young people represent a real investment, of profit to the whole community.

The second problem, which is linked to the first, is that of making studies more democratic. A series of measures must be carried out in order to give children access to education which suits the tastes and aptitudes of each child and to prolong such teaching as long as possible. Such a policy involves doing away with many obstacles of a financial, psychological, pedagogic, legislative and social character which too often prevent children from following their own natural bent.

In this respect, many measures have been adopted and are being applied: the number and value of the scholarships has been increased; the structure of secondary education which was considered too rigid has been made much more flexible and now allows, under specific conditions, for reorientation in the middle of the course of study; curricula are being carefully revised; many teaching experiments are being made. Serious efforts are also being made to find new patterns for the valid vocational and human training of pupils whose aptitudes are mainly practical. In short,

the whole of secondary education is evolving and is under the impact of the profound transformation of the modern world. One of the consequences of this movement has been the reopening of the discussion concerning the conditions of admission to higher education, with a view to a wider recruitment of students.

Lastly, the *Pacte Scolaire* has provided a new solution to a problem which, for many years, has had a profound influence on the social and political life of the country: that of the coexistence of official and private education. This agreement, concluded between the three main political parties on 20 November 1958 and put into effect by the Law of 29 May 1959, tends to put the two forms of education on an equal footing. It is mainly concerned with the rights of the public authorities and of private bodies with respect to education and with the salaries and pensions of staff and grants for the conduct of schools. Moreover, for the greater benefit of education, the *pacte* provides for an extension of the compulsory school age, free primary and secondary education and an extension of the scholarship system. It also makes provision for special credits for the construction and equipment of official educational establishments.

[*Text prepared by the Ministry of Education, Brussels, in February 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 9,053,000.
Area: 11,779 square miles; 30,507 square kilometres.
Population density: 769 per square mile; 297 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, school enrolment exceeded 1.8 million pupils, which represented about one-fifth of the total population. Of these pupils, about 20 per cent were in nursery schools, 48 per cent in primary schools, 14 per cent in general secondary schools, 16 per cent in vocational schools, less than 1 per cent in secondary-level teacher training schools, 2.4 per cent in higher education, and 0.6 per cent in special schools. The proportion of girls was 49 per cent in nursery schools and primary schools, 45 per cent in general secondary schools, 41 per cent in vocational schools, 67 per cent in secondary teacher training schools, and 27 per cent in higher education. Between 1953 and 1957, primary school enrolment increased by 24 per cent, and secondary enrolment by 13 per cent. (See Table 1.)

Enrolment trends in secondary education. For lack of comparable data for periods before 1953, it is not possible to show the trends in pupil enrolment at the secondary level of education. For the period 1955–57, total enrolment in general, vocational and teacher training secondary schools, including part-time students, averaged 517,000 which represented 92 per cent of the estimated population 15–19 years old.

Examination results in secondary education, 1953–57. Between 1953 and 1957 the number of pupils who passed the general secondary examinations increased by 23 per cent. Girls received one-fourth of these certificates in 1957/58. Between 1953 and 1956 the number of vocational certificates increased by 17 per cent, and the number of teaching certificates by 29 per cent. Girls received all the certificates for kindergarten teachers, and 60 per cent of the certificates for primary school teachers in 1956/57. (See Table 2.)

Educational finance, 1957. For the fiscal year which began in January 1957, the budget of the Ministry of Education amounted to 11,282 million Belgian francs, averaging 1,255 francs per inhabitant. In addition, some 2,000 million francs were spent by the *communes* and a further 650 million francs by the provincial authorities. Data are not available on expenditure for private education, or for public education not under the Ministry of Education. (See Table 3.)

Source. Belgium: Ministère de l'instruction publique, Services des études statistiques et sociologiques, replies to Unesco questionnaire.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools, public	1957/58	1 863	...	...	117 678	56 599
	Nursery schools, private	1957/58	2 712	...	...	244 884	121 662
	Total	**1957/58**	**4 575**	...	...	**362 562**	**178 261**
	„	1956/57	4 549	...	...	352 741	173 671
	„	1955/56	...	...	...	344 005	169 906
	„	1954/55	4 375	*9 500	*9 500	334 213	164 942
	„	1953/54	4 328	*9 300	*9 300	332 048	164 407
Primary	Primary schools, public	1957/58	5 251	...	...	425 426	159 198
	Primary schools, private	1957/58	3 753	...	...	449 160	265 439
	Total	**1957/58**	**9 004**	...	...	**874 586**	**424 637**
	„	1956/57	9 058	...	...	859 185	417 437
	„	1955/56	...	...	...	838 671	...
	„	1954/55	...	...	...	813 641	...
	„	1953/54	...	...	...	786 179	...

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Secondary							
General	Secondary classes in public primary schools	1957/58	850	...	...	23 823	9 004
	Secondary schools (lower stage), public	1957/58	351	...	...	61 009	29 122
	Secondary schools (upper stage), public	1957/58				15 864	5 035
	Secondary classes in private primary schools	1957/58	1 634	...	...	48 808	33 879
	Secondary schools (lower stage), private	1957/58	592	...	...	74 411	30 064
	Secondary schools (upper stage), private	1957/58				24 999	6 129
	Total	**1957/58**	**3 427**	**...**	**...**	**248 914**	**113 233**
	"	1956/57	3 533	...	...	244 985	...
	"	1955/56	...	...	...	238 808	...
	"	1954/55	...	...	...	234 524	...
	"	1953/54	...	...	...	233 906	...
Vocational	Vocational schools (lower stage), public	1957/58	460	...	...	[1]126 301	[1]40 108
	Vocational schools (upper stage), public	1957/58				[2]18 129	[2]5 953
	Vocational schools (lower stage), private	1957/58	886	...	...	[3]118 251	[3]60 415
	Vocational schools (upper stage), private	1957/58				[4]20 372	[4]10 492
	Total[5]	**1957/58**	**1 346**	**...**	**...**	**283 053**	**116 968**
	"[5]	1956/57	...	...	...	248 545	109 462
	"[5]	1955/56	...	...	...	237 589	...
	"[5]	1954/55	...	...	...	236 285	...
	"[5]	1953/54	...	...	...	234 779	...
Teacher-training	Schools for kindergarten teachers, public	1957/58	14	...	...	1 262	1 262
	Schools for primary teachers, public	1957/58	32	...	...	5 121	2 593
	Schools for kindergarten teachers, private	1957/58	28	...	...	2 414	2 414
	Schools for primary teachers, private	1957/58	56	...	...	6 653	4 136
	Total	**1957/58**	**130**	**...**	**...**	**15 450**	**10 405**
	"	1956/57	...	...	...	17 749	12 944
	"	1955/56	...	...	...	15 042	...
	"	1954/55	...	...	...	14 615	...
	"	1953/54	...	...	...	...	...
Higher							
Teacher training	Colleges for secondary teachers, public	1957/58	15	...	...	1 832	757
	Colleges for vocational teachers, public	1957/58	34	...	...	1 191	1 178
	Colleges for secondary teachers, private	1957/58	30	...	...	1 561	970
	Colleges for vocational teachers, private	1957/58	50	...	...	1 863	1 805
	Total	**1957/58**	**129**	**...**	**...**	**6 447**	**4 710**
	"	1956/57	...	...	...	6 144	4 510
	"	1955/56	...	...	...	6 054	...
	"	1954/55	...	...	...	6 028	...
	"	1953/54	...	...	...	[6]2 473	...
General and technical	Universities and university colleges, public	1957/58	12	...	...	9 509	1 575
	Technical colleges, public	1957/58	50	...	...	3 570	395
	Colleges of fine arts	1957/58	9	...	...	1 381	463
	Universities and university colleges, private	1957/58	10	...	...	17 587	3 344
	Technical colleges and colleges of fine arts, private	1957/58	73	...	...	5 843	1 602
	Total	**1957/58**	**154**	**...**	**...**	**37 890**	**7 379**
	"[7]	1956/57	...	...	...	34 185	6 395
	"[7]	1955/56	...	...	...	32 339	...
	"[7]	1954/55	...	...	...	30 670	...
	"[7]	1953/54	...	...	...	29 535	...
Special	Primary schools for handicapped children	1957/58	325	...	...	8 122	3 616
	Secondary vocational schools for handicapped children	1957/58	48	...	...	3 002	1 292
	Total	**1957/58**	**373**	**...**	**...**	**11 124**	**4 908**
	"[8]	1956/57	298	...	...	11 668	5 386
	"[8]	1955/56	287	...	...	10 613	4 973
	"[8]	1954/55	262	...	...	10 589	4 847
	"	1953/54	...	...	...	...	...

1. Including 81,144 (F. 24,447) part-time students. This number includes those attending teacher training courses for primary school teachers.
2. Including students of fine arts (plastic art) and 6,093 (F. 517) part-time students.
3. Including 17,070 (F 12,416) part-time students. This number includes those attending teacher training courses.
4. Including 2,765 (F. 375) part-time students.
5. Including part-time students, i.e., 119,488 (F. 37,755) in 1957/58; 101,428 (F. 35,327) in 1956/57; 99,819 in 1955/56; 100,543 in 1954/55; 101,756 in 1953/54.
6. Enrolment in teacher training schools for vocational school teachers only.
7. Not including colleges of fine arts.
8. Primary education only.

2. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
General secondary examinations	8 744	1 875	9 238	2 005	10 142	2 381	...	...	10 758	2 691
Vocational secondary examinations	5 874	...	6 245	...	6 908	...	6 878	...	...	...
Teacher training examinations:										
For kindergarten teachers	984	984	1 169	1 169	1 242	1 242	1 180	1 180	...	...
For primary school teachers	1 704	977	1 885	1 093	2 096	1 226	2 276	1 365	...	...

3. EDUCATIONAL FINANCE, 1957 (in thousand Belgian francs)[1]

A. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**11 282 137**
Recurring expenditure		10 394 137
For central administration	133 824	
For instruction		
Salaries to teachers, etc.	9 078 300	
Other instructional expenditure	566 523	
Other recurring expenditure	615 490	
Capital expenditure		[3]888 000

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount			Per cent		
Total recurring expenditure[2]			**10 394 137**			**100.0**
Central administration			133 824			1.3
Instruction			9 644 823			92.8
Pre-primary and primary education[4]		3 941 437			37.92	
Secondary education		4 857 573			46.73	
General	2 424 789			23.3		
Vocational[4 5]	2 094 109			20.1		
Teacher training	338 675			3.3		
Higher education[6]		741 204			7.13	
Art and music education		104 609			1.00	
Other recurring expenditure						
Scientific research Educational services Cultural relations Miscellaneous			615 490			5.9

Note. Precise data for receipts by source concerning the financing of education are not available. The total receipts of the Central Government, the provinces and the *communes* are paid into the Treasury (from various taxes and fees) forming a general budget and it is not possible to specify the exact source of funds covering educational expenditure.

1. Official exchange rate: 1 Belgian franc = 0.02 U.S. dollar.
2. Budget estimate of the Ministry of Public Instruction only. In addition, *2,000 million francs were spent by the *communes* and *650 million francs by the provinces. Data concerning expenditure by Ministries other than Education and by private educational authorities are not available.
3. In addition, a certain amount was reserved for education from the total sum of 362 million francs allocated for construction and alterations of state-owned buildings.
4. Includes special education.
5. Includes higher vocational education.
6. Not including higher vocational education.

BELGIAN CONGO

THE EDUCATIONAL SYSTEM

The first schools proper in the Independent State of the Congo were opened in 1906. In that year, a school for clerks (*école de candidats-commis*) was opened at Boma, a decree was issued establishing industrial vocational schools attached to the state workshops at Boma, Leopoldville and Stanleyville, and a convention was concluded between the Independent State of the Congo and the Holy See, whereby each establishment run by the Catholic missions undertook to open a school for Africans, in accordance with a programme drawn up in agreement with the Governor-General. Protestant mission schools were also established and contributed largely towards eradicating illiteracy and educating the people.

In 1908, when the Congo was ceded to Belgium, Article 2 of the Law of 18 October 1908, relating to the Government of the Belgian Congo, proclaimed the freedom of education: 'Private instruction shall not be restricted; all measures interfering with it are forbidden; the repression of offences shall be regulated by law.'

Pursuant to these legal provisions, the following schools were opened: state schools, established and administered by the public authorities; official congreganist schools, established by the public authorities and administered by private associations; government-aided private schools; private schools receiving no aid from the public authorities and completely independent of the latter.

The teaching was mainly utilitarian, for it had to meet the primary needs of a community in process of organization. It was essential to train clerks, semi-skilled workers, instructors (*moniteurs*) for the primary school classes and for the local agricultural services (*moniteurs agricoles*).

At this initial stage, educational development was closely combined with missionary work; it was thanks to the religious missions, which were protected and encouraged by the State, that literacy and elementary education were gradually extended throughout the country.

During the 1914–18 war, the question of education inevitably took second place, but immediately afterwards the Minister in charge, Mr. Franck, resolved upon a first systematic study with a view to evolving a plan of action for the wide extension of education and the improvement of its quality. In 1922, a commission was set up for that purpose. It emphasized in general that the curricula and teaching methods should be more closely adapted to the environment, that priority should be given to strictly educational efforts, that instruction should be given preferably in the vernacular languages, that fundamental importance should be attached to teacher training and that the religious missions should be asked to co-operate in the promotion of education. In 1929, effect was given to these recommendations by a first series of regulations, which fixed the main structural features of the African educational system and launched it vigorously upon its course.

During the following years, however, these regulations were to be considerably modified and adapted. They were thoroughly revised by the regulations of 1948 and were again modified in 1952. Since then, the structure of the educational system has undergone further important innovations and modifications: a considerable extension of state education and of teaching in French for Africans; the gradual 'inter-racialization' of schools; the spread of technical education; the opening of several social schools; the provision of specialized training for administrative officials, and lastly, the development of university education. These modifications and additions to the structure of education call for a new and comprehensive set of official regulations defining the State's educational policy; these regulations are now being prepared.

The vocational training schools established by industrial and agricultural associations have also made great strides.

Educational development is closely related to economic development at its different levels. This has led the Government to make a clear distinction between schools designed to promote the progress of the rural inhabitants by facilitating the establishment of a class of independent artisans within rural communities, and schools opened for the benefit of industrial, urban and non-tribal communities. Rural economy must evolve if it is not sooner or later to disappear, for the rural population would inevitably be attracted towards the centres with their higher standard of living. But because artisans, recently trained in trade schools, are usually unable to set themselves up at their own expense, 'social workshops' have been created (similar to co-operatives), in which rural tradesmen can complete their training within a tribal environment. In an industrial, urban and non-tribal environment, the organization of vocational training does not raise so complex a problem.

Agriculture as now practised by most of the indigenous population has not yet become a truly 'professional' activity; it has hardly passed beyond the subsistence stage. In the provision of agricultural education, a distinction must be made between the agricultural training of rural youth and the training of agricultural instructors.

The training of young farmers is promoted by the general primary schools, thanks to agricultural guidance centres. The Government hopes that these will eventually produce a class of small independent farmers, in possession of land of their own. As early as 1908, an agricultural school was established by the Government-General to this end. There are also farm schools which enable young people to improve their primary agricultural training if they so desire.

The task of the agricultural instructors is to train the adult members of the rural population. As a rule, their activities are rather scattered, but they tend more and more to concentrate their efforts on organizations known as *paysannats*, which were created for the purpose of rationalizing the use of land and increasing farmers' output,

and which have their own producers' co-operatives. The first school for *moniteurs agricoles* was established in 1926.

So far, the main objectives of the network of agricultural secondary schools established (since 1938) throughout the Belgian Congo have been to train those responsible for branches of agricultural propaganda, the assistants attached to the *paysannats*, and the crop and plantation supervisors of private companies. The agricultural instructors in charge of local activities pursue their studies (2 or 3 years) at the secondary level in agricultural vocational training schools. The agricultural assistants, who directly aid the Government agricultural propaganda services, receive technical instruction (4 years) in the higher secondary schools; their functions are more far-reaching and more responsible.

Since 1912, in addition to a network of schools for the African population, the Government has had to provide for the instruction of young Europeans. At that time, this question was quite separate from that of instruction for Africans, for the Europeans concerned were the children of settlers, civil servants and representatives of private firms, who had already received part of their education in Europe or were at least intended to continue their studies there.

Hence the dualism still to be found in the educational system of the Belgian Congo. Alongside schools providing instruction for Africans in accordance with curricula designed to promote the assimilation of the local inhabitants were schools for European children, who were taught in accordance with the curricula applied to Belgium. Until a few years ago, these two types of instruction developed independently of each other.

However, with the general development of the country and the extension of education, the level of the schools for Africans gradually rose to such an extent that, in some cases, it approached very closely—and even equalled—the level of the schools for European children. Since then, the Government, abandoning discrimination, has resolutely sought to suppress all forms of school segregation. Every year an increasing number of Congolese attend schools which but lately were open only to European children.

In Brussels, the Ministry for the Congo and Ruanda-Urundi has a directorate of education comprising four sections. Its services are concerned mainly with research with a view to working out the school policy to be applied in Africa.

In the Belgian Congo, the administration and general control of education are entrusted to a Directorate-General of Education, consisting of four Directorates: Directorate of Primary Education and Teacher Training, Directorate of Secondary and Higher Education, Directorate of Technical and Agricultural Education and a Directorate of School Inspection. Each of these Directorates is subdivided into sections and offices, each having its own special and well-defined tasks. In each provincial capital there is an educational service under the Governor of the province. Each service can take the initiative at the provincial level and is responsible for the execution and supervision of the directives issued by the Government-General. Its staff includes primary school inspectors.

Large private companies or associations (mostly mining and transport concerns or religious associations) set up and administer their own schools and bear all the costs. Such schools are mainly at the primary or post-primary level, and are usually organized to meet the needs of the founder organization.

The diagram on page 247 shows the structure of the educational system in the Belgian Congo.

GLOSSARY

NOTE. The arrows indicate various possibilities of transfer from general to technical education.

classe de liaison: transitional primary class enabling pupils to transfer from the ordinary upper primary school to the selective (pre-secondary) upper primary schools.

cycle secondaire inférieur: lower secondary stage.

cycle secondaire supérieur: upper secondary stage.

cycle supérieur (projet): advanced technical stage (projected).

école artisanale: vocational training school for rural trades.

école d'apprentissage: vocational training school for industrial and urban trades.

école d'apprentissage pédagogique: teacher training school for teaching assistants in the *école primaire du Ier degré.*

école d'auxiliaires: vocational training school for clerical and administrative assistants.

école ménagère périprimaire: homecraft school with courses, adapted to local conditions, at lower primary level (*Ier degré*) for girls who have never attended school and are above school age, and at upper primary level (*2e degré*) for older girls who have not completed primary school.

école ménagère postprimaire: post-primary vocational training school in home economics with courses adapted to local conditions.

école moyenne de moniteurs: teacher training school for teachers in lower primary and ordinary upper primary school.

école moyenne ménagère: vocational secondary school of home economics.

école normale secondaire: teacher training school for teachers in selective upper primary schools.

école primaire du Ier degré: lower primary school.

école primaire du 2e degré ordinaire: ordinary upper primary school, usually leading to vocational training but with possibility of access to general secondary education after a year's extra study in a *classe de liaison* or *classe de 6e préparatoire.*

école primaire de 2e degré selectionné: selective upper primary school leading to general or vocational education at secondary level.

école professionnelle: vocational training school.

école secondaire générale: general secondary school.

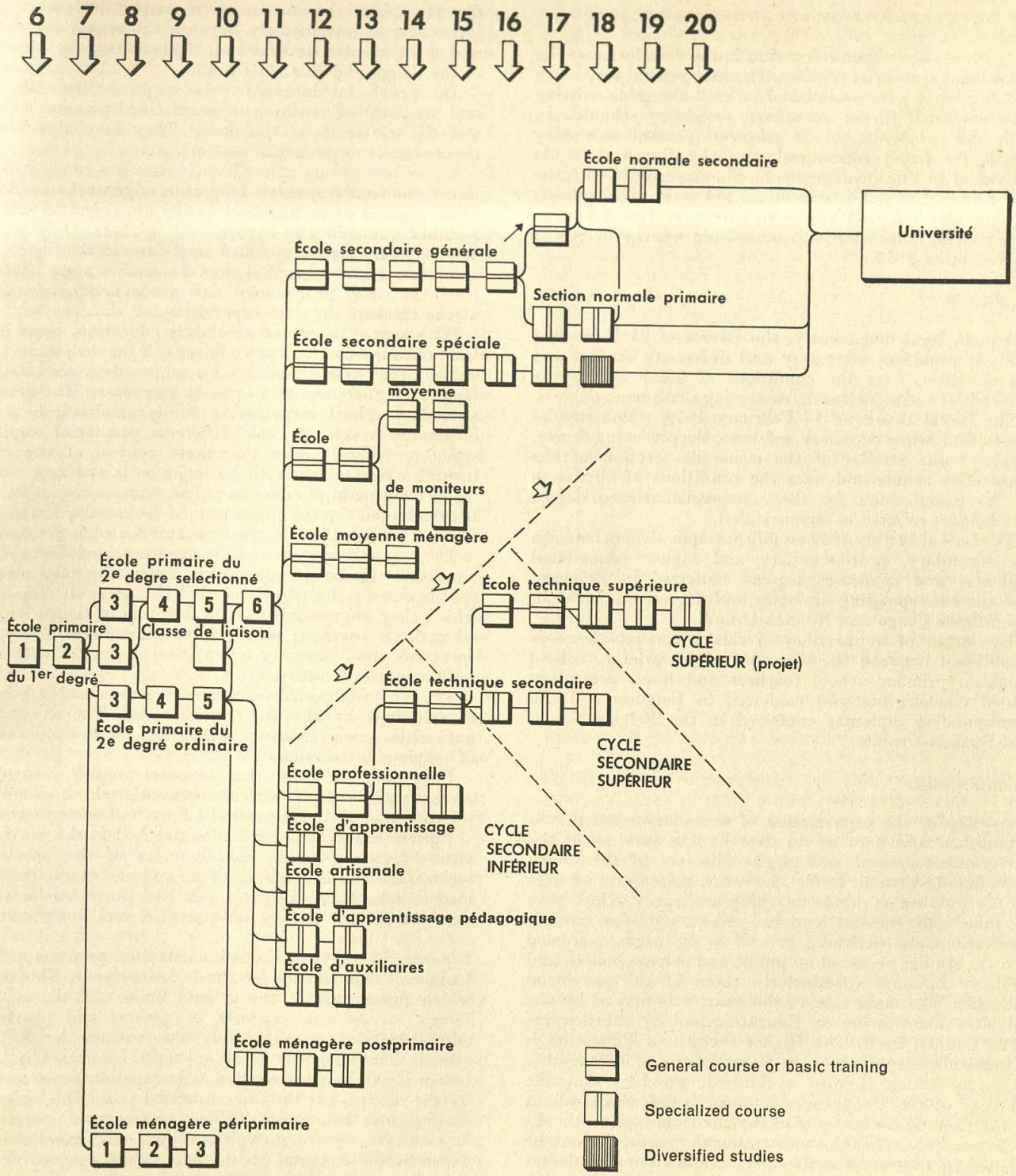
école secondaire spéciale: secondary school organized in two cycles, the lower cycle providing general education, the upper preparing for careers in commerce, administration, surveying agriculture, teaching, physical education, medical and veterinary sciences.

école technique secondaire: vocational secondary school of technical training.

école technique supérieure: vocational school providing advanced technical training.

section normale primaire: teacher training section in secondary school.

université: university.


6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
École normale secondaire
Université
École secondaire générale
Section normale primaire
École secondaire spéciale
moyenne
École
de moniteurs
École moyenne ménagère
École primaire du 2e degre selectionné
École primaire
Classe de liaison
du 1er degré
École primaire du 2e degré ordinaire
École technique supérieure
CYCLE SUPÉRIEUR (projet)
École technique secondaire
CYCLE SECONDAIRE SUPÉRIEUR
École professionnelle
École d'apprentissage
École artisanale
École d'apprentissage pédagogique
École d'auxiliaires
CYCLE SECONDAIRE INFÉRIEUR
École ménagère postprimaire
École ménagère périprimaire
General course or basic training
Specialized course
Diversified studies

THE DEVELOPMENT OF SECONDARY EDUCATION

Early events have been referred to in the description of the educational system as a whole. The first general secondary schools proper were established in 1948 alongside existing *écoles moyennes* (lower vocational secondary schools). In 1955, the establishment of *athénées* (general secondary schools for boys) introduced into the Congo curricula equivalent to European curricula. Simultaneously with the establishment of public education, the grant-aided schools (*collèges*) also adopted European curricula. This evolution of secondary education was completed by the decree of 25 November 1958.

Legal basis

The main legal document is the Decree of 25 November 1958; it organizes secondary and university studies and examinations, fixes the conditions of admission to the universities and regulates the conferring of academic degrees.

The Royal Decree of 17 February 1959, which supplements, and, when necessary, refers to, the preceding decree, regulates the studies of the economics section of the humanities course and fixes the conditions of admission to the examination for the commercial science degree (*candidature en sciences commerciales*).

The Law of 14 July 1959 establishes equivalences between the secondary, post-secondary and higher educational diplomas and academic degrees conferred in Belgium, and the corresponding diplomas and degrees conferred in the Belgian Congo and Ruanda-Urundi.

By virtue of a provision of this law, equivalence is established between the diplomas of pre-primary school teachers, primary school teachers and lower secondary school teachers (*agrégés*) conferred in Belgium and the corresponding diplomas conferred in the Belgian Congo and Ruanda-Urundi.

Administration

The plan for the organization of secondary education is established and kept up to date by the services of the Government-General and of the Ministry of the Congo and Ruanda-Urundi. In fact, however, these State services do not propose or decide anything arbitrarily. They have to take into account various wishes, opinions, recommendations and petitions, as well as the needs expressed and the studies prepared by public and private bodies, and advisory opinions (particularly those of the provincial councils). The main role in this matter is played by the Advisory Commission on Education and by the Government Council itself. The Higher Council of Education is of particular importance; the Royal Decree of 8 November 1954, by which it was established, provides that the Minister of the Congo and Ruanda-Urundi shall submit to the Council for its opinion the curricula and textbooks to be used and the rules concerning the exemptions to be granted in respect of nationality, examinations, diplomas and certificates.

Control. At the head of each public secondary school there is a director (*directeur* or *préfet d'études*), who comes directly under the provincial education authority. The latter acts as intermediary between the school concerned and the Governor-General and, if necessary, the Minister of the Congo and Ruanda-Urundi.

The provincial authorities also supervise the curricula and standard of teaching in grant-aided private schools and the use made of the grant. They may also advise these schools on technical matters.

Supervision and inspection. Inspectors of general secondary, technical and agricultural education are recruited among suitably qualified and experienced teachers. Only where there is a shortage of qualified candidates in the Congo are inspectors recruited in Belgium. Inspectors must have at least the same professional and academic qualifications as the teachers they are supervising.

With regard to general secondary education, there is at least one inspector for each subject and for each important subject, such as mathematics, French, modern and classical languages, there are two or more inspectors. The general secondary school inspectorate is decentralized, i.e., the inspectors reside in the different provincial capitals while remaining under the direct control of the chief inspector for secondary education, who is assistant to the inspector-general of education. The same organization has been adopted for the inspection of technical schools, but for this branch there is one inspector for each province.

The inspector-general and the chief inspector of secondary education organize the inspection of secondary schools and participate in the supervision of the general courses in which they are specialists. The directors of the provincial educational services, although not members of the inspectoral staff, may, in exceptional cases, be entrusted with inspectoral duties.

The territorial jurisdiction of secondary school inspectors is delimited by the Governor-General. The missionary authorities are exclusively responsible for the supervision of religious instruction.

Inspectors see to it that teachers employ recognized methods and comply with the curricula, check on pupils' progress and also give general advice and encouragement.

Agricultural school inspectors attached to the provinces ensure liaison between the directors of the provincial services for education, agriculture and native affairs. They inspect schools, of all categories and at all levels, whose curricula include courses and practical work in agriculture.

Finance. Every year, the Administration prepares a draft budget of expenditure for the following year. This draft, which forms part of the general budget of the Belgian Congo, covers the expenses of general and provincial administration, inspection at the various levels, and schools. The budget must be approved by both Chambers before it can be implemented. The expenditure is covered by the receipts for the same financial year. The budget is divided into two main sections: ordinary or operational expenditure, covering a calendar year, and extraordinary expenditure or capital investments, which may cover two calendar years. Education has its own revenue, which accrues from school fees, boarding fees, etc. but these receipts are extremely small compared with the expenditure, for school education is almost entirely free of charge.

Private vocational training schools (trade and agricultural schools), however, derive revenue from the workshops, gardens, plantations or cattle-breeding farms attached to them.

The General Administration has control of the funds for the remuneration of teachers, whose salaries are paid monthly in advance. Some of these funds are allocated to the state schools and to the official congreganist schools, which thus administer them directly. This procedure enables the schools to meet certain local expenses and to pay their non-teaching staff without need of an intermediary.

At the beginning of each financial year, private schools receive an advance equal to 80 per cent of the previous year's grant. The balance is paid after discussion of the annual report.

State schools are constructed at government expense wherever they are needed. The costs of the construction and equipment of official congreganist schools, which remain the property of the State, are also borne entirely by the Government, as far as capital investments are concerned. With regard to private schools, the Government pays a large part of the costs of their construction and equipment, provided they have been officially recognized. This preliminary recognition depends on the number of schools actually needed in the region. In large centres, the State defrays 80 per cent of the expenditure. Outside the large centres, the grants made for the construction of primary schools represent 70 per cent of the expenditure, those for the construction of secondary schools 80 per cent.

Teachers in state schools are civil servants and are appointed by the State; they are governed by the rules established by the Administration for its staff in general and by the special rules relating to educational services. Their rate of pay depends on their academic qualifications and the nature of their services, the latter being determined by the former. In addition to their salaries proper, they receive substantial allowances: cost-of-living allowances, family allowances, all varying with length of service and the reports of their supervisors.

Teachers in grant-aided private schools enjoy the same advantages; but there is a difference between lay teachers and teachers belonging to religious orders. European lay teachers are entitled to the above benefits provided they do not constitute more than two-thirds of the total number of teachers in any of the secondary schools, except in the case of technical, vocational, agricultural, medical, and apprenticeship schools, where the entire staff may consist of lay teachers.

Subventions payable in respect of teachers belonging to religious orders are limited to a smaller proportion of the staff.

There are usually no tuition fees for secondary education and pupils have only to pay for school books and other necessary school materials. In some schools which possess a stock of books, the latter are loaned for a small charge, and even free of charge to needy pupils. But free education is not extended to pupils whose parents are well-to-do; the latter must pay school fees and purchase school books and other necessary school materials. In principle, parents must pay boarding fees, but in fact, most of them are granted considerable exemptions and bear only a small part of these fees.

Buildings and equipment. School buildings are erected in healthy localities in the centres they serve, or as near to them as possible. They are constructed so as to benefit from the coolness accompanying the prevailing winds. Schools may not be constructed near markets or other places lacking the peace and quiet necessary to efficient teaching. The size of the building site, classrooms and other premises is proportionate to the number of pupils, due regard being had to future needs. To ensure efficient teaching, however, the number of pupils per class must not exceed a certain figure.

On the basis of this maximum number of pupils per class, standard dimensions have been established in accordance with the following rules: each classroom must be rectangular in shape and, as a rule, its length must be six and a half feet greater than its width; its area is calculated on the basis of 13 square feet per pupil; it must be at least 13 feet high, and each pupil is entitled to 176.5 cubic feet of air.

Many schools, particularly vocational and technical schools, are equipped with showers. In technical schools, the rooms for theoretical teaching must satisfy the above-mentioned conditions, whereas the rooms for practical work (laboratories) are planned to meet the special needs of the particular subject.

School welfare services. Once a year, schools are visited by a doctor who examines the pupils and prescribes the necessary treatment. The most serious forms of illness, whether epidemic or not, particularly tuberculosis, malaria, sleeping sickness, diseases due to intestinal parasites, skin diseases and malnutrition, are the object of special medical control. Medical attention and medicaments are free of charge to teachers and pupils.

TYPES OF SECONDARY EDUCATION

Pupils who have completed the third-year class of the ordinary upper primary school (*école primaire du 2e degré ordinaire*) have access to post-primary schools, where the teaching time is shortened: *école d'auxiliaires* (school for clerical assistants), *école d'apprentissage pédagogique* (student teachers' training school) and *atelier d'apprentissage artisanal* (trade apprenticeship school), *école ménagère post-primaire* (post-primary home economics school), as well as schools which provide training for medical and veterinary assistants, agricultural instructors, etc.

After completing the fourth-year class of the selective upper primary school (*école primaire du 2e degré sélectionné*) pupils may choose between the various branches of general and special secondary education, schools for *moniteurs*, vocational and technical schools for nurses and midwives, etc.

The most gifted pupils who have completed the third-year class of the ordinary upper primary school have access to classes similar to the selective upper primary school classes, namely, the sixth and seventh preparatory classes.

Pupils and parents are guided in their choice of a branch of secondary education; older pupils are advised to undertake studies of short duration, and account is also taken

of the pupils' aptitudes. By offering judicious advice, teachers, headmasters and inspectors assist pupils and parents in making their choice. In the Congo, the school vocational guidance service, assisted by a psychotechnical service, is still in its infancy. It has already aided various schools to draw up a systematic programme, based on scientific experimentation, with a view to advising parents, pupils and teachers.

Organization of the school year

In the Congo, the school year begins at the end of August or during the first fortnight of September and closes at the end of June or during the first fortnight of July. In order to facilitate transition from one school to another, it has been standardized and is divided into three terms, each of which is followed by holidays: 10 to 15 days at Christmas and the New Year, a fortnight at Easter and approximately two months' summer holidays in July and August. At certain schools, there is a break of two or three days in the school term, particularly if it is long. The schools also observe public holidays.

The school week begins on Monday morning and ends on Saturday at noon: often there is a half-holiday on either Wednesday or Thursday afternoon. The lessons proper usually begin early in the morning; they are sometimes preceded by prayers, manual work and half an hour's preparatory study. Each lesson lasts from 45 to 60 minutes. Lessons requiring the greatest mental concentration are given at the beginning of the morning or immediately after a recess period. The afternoons on which there are no classes, and Sundays and other holidays are devoted to revision, the preparation of examinations, sport, leisure activities, walks, excursions, etc.

General secondary schools

General secondary education is in process of reorganization and the curricula are being improved with a view to facilitating admission to the university. This important reform, begun some years ago, was given a legal basis by the decree of 25 November 1958, which regulates the conferring of academic degrees. Secondary schools will henceforth teach the classical and modern humanities. Each of these parallel branches of teaching is divided into two stages, lower and upper. For the modern humanities, the lower stage is the same for all pupils and the upper stage is divided into an economics section, a scientific section A and a scientific section B. The classical humanities are subdivided into the Latin-Greek section, the Latin-science section and the Latin-mathematics section. After successfully completing these two stages, the pupil receives the Humanities Certificate, which qualifies him for immediate admission to most of the university faculties and schools, and other institutions at the higher or post-secondary level.

Secondary school pupils are recruited by competitive examination in the main subjects taught during the last year of primary studies. The capacities, aptitude and age of each candidate are also taken into consideration.

The pupils' work—lessons, home-work, exercises, personal research—is controlled by daily appraisals and by terminal examinations. It is the total result—i.e., the sum of the terminal results—which determines whether the pupil is entitled to promotion from one class to another. According to the importance of the subject, the pupil must, in general, obtain 6, 5 or 4 out of 10 in order to be promoted. The pupil must also obtain a satisfactory average mark for his work as a whole, namely 5 out of 10. The terminal examinations are written and oral. In the higher classes, greater importance is attached to the oral examinations than in the lower classes. Teachers draw up reports not only on the pupil's school progress but also on his social behaviour. At the end of each stage, a final examination is held and the board of examiners issues a certificate or diploma to the successful candidates.

If a pupil fails to obtain a pass in a particular subject, he must sit for a further examination (*examen de passage*) at the beginning of the following school year. If he fails to pass in too many subjects, he must remain in the same class for another year, or he is sent to another type of school corresponding more closely to his particular aptitudes and intellectual abilities.

On the same level as the general secondary schools there are special secondary schools which provide training for administrative assistants, clerks and typists, medical assistants, health assistants, veterinary assistants, agricultural assistants, men and women nurses, midwives, foresters, veterinary officials, health officials, agricultural instructors (*moniteurs*), etc.

Vocational and technical schools

In the Belgian Congo, vocational and technical education is all at the secondary level. The original curricula, which took into account the fact that many of the pupils had not completed their primary schooling, can now be revised so as to attain the level of courses in Belgium. However, one important distinction must still be made in the organization of technical education. Whereas the vocational schools designed to meet urban and industrial needs are rapidly approaching European standards, the schools which train artisans for rural districts are handicapped by the fact that tribal customs change slowly. Social centres and *paysannats* (see above), where agricultural work is planned, offer trainees of the trade schools a protection they do not get from the traditional social environment and provide a market for their products.

Boys' vocational training schools. The trade schools (*écoles artisanales*) are open to pupils who have completed 5 years' primary education. The object of these schools is to train artisans for rural areas. Most of them are organized and run by missionaries and teaching is almost entirely in the vernacular. At the same educational level, farm schools (*fermes-écoles*) also encourage young people to remain in the villages.

The time-tables of the trade schools are adapted to local needs. As a rule, they comprise 6 hours' general training and 33½ hours' workshop practice and technical drawing. The farm schools have similar time-tables but workshop practice is replaced by practical work on the farm, in the gardens and nurseries, in the fields, in reafforestation and stock-breeding.

At present, the trade schools for rural artisans comprise the following sections: carpentry, rural building, native sculpture, basket-making, forging and rural mechanics, the manufacture of ready-made clothes, and shoemaking. As a rule, the course lasts 2 years. Pupils in the carpentry and building sections sometimes co-operate in the construction of small buildings outside the school. Pupils are required to be at least 12 years of age, the actual age-range being usually from 14 to 17.

The vocational training schools (*écoles professionnelles*), both trade and agricultural, are open to pupils who have completed their primary education (6 years), possess a good knowledge of French and are physically fit. In principle, pupils should be between 12 and 15 years of age, but in practice they are between 14 and 17.

The course lasts 4 years (3 years at the agricultural vocational training schools). Specialization is intensified in the last 2 years.

The vocational training schools train future skilled workers. The curricula of these Congolese schools are similar to the corresponding Belgian curricula. The level of studies is that of the lower stage of secondary education.

In addition to their practical training in the workshops, pupils receive a sound theoretical training, which enables them later on to increase their knowledge of their trade and to improve their professional qualifications.

There is little specialization at the vocational training schools, for the Congolese economy cannot yet offer highly specialized workers the same wide prospects of employment as exist in highly developed countries.

At present, these schools comprise the following sections. fitting, turning and machine tools, maintenance mechanics, motor mechanics, electric assembling, carpentry and cabinet-making, building, mining and public works, weaving, manufacture of ready-made clothes, sculpture, painting, ceramics, cutting and dressmaking (for girls). The pupils of the mining and public works section and those of the building section occasionally co-operate in work outside the school during the period of their studies.

The standard work plan comprises general courses, a mathematics course (in the first, second and third years), science and technical courses, technology and practical work. Teaching is in French. The vocational training schools are normally directed by engineers and technicians holding diplomas granted by the metropolitan higher technical schools.

Teachers in these schools must be specialists in the various subjects taught and possess recognized technical and teaching ability.

The agricultural vocational training schools (*écoles professionnelles agricoles*) provide a 3-year training course for the subordinate auxiliary staff of agricultural services. They are open to older pupils who pass the entrance examination (at the level of the sixth class of the selective upper primary school) even, for example, married pupils, recruited among the uncertificated *moniteurs* who have been appointed under contract by the *chefferies* (tribal administrations). These schools train agricultural instructors, market gardeners, foresters, fishery instructors, plantation workers, and subordinate staff for the veterinary service.

The first year of agricultural education is the same for all pupils; thereafter they choose between the various sections. There is a tendency to extend the course of the agricultural vocational training schools to 4 years in order to bring them into line with the trade vocational training schools.

For apprenticeship schools (*écoles d'apprentissage*) conditions of admission are the same as for the vocational training schools, but certain exceptions are allowed. Lessons are given by certificated specialists in vocational training who possess teaching ability and have had recognized practical experience. In order to be entitled to promotion, teachers must follow a summer course at a special teacher-training centre in Belgium.

The sole purpose of these schools, some of which are annexed as sections to vocational training schools, is to teach industrial and urban trades. Today the apprenticeship schools comprise the following sections: motor mechanics, carpentry, masonry, mechanical weaving, electric assembling, maintenance mechanics, printing, shoemaking, book-binding, forging, fitting, soldering and welding. The course usually lasts 2 years, rarely 3 years and, exceptionally, 4 years. The time-tables are the same as those of the trade schools (*écoles artisanales*).

The technical schools (*écoles techniques*) train technicians for the industrial trades, fine arts and agriculture.

They correspond to the upper stage of secondary education and are open to pupils who have completed the lower stage of the secondary school or a course at one of the trade vocational training schools; candidates must pass an entrance examination.

There are two technical schools in the Congo, one at Leopoldville and another at Jadotville, and the number of Congolese pupils is increasing every year. When the Congolese system of vocational and technical schools is completed by the creation of advanced technical schools, technical pupils will have access to higher education.

Lower technical sections were recently established (1958) in order to facilitate the transfer of pupils from Congolese-syllabus vocational training schools to metropolitan-syllabus secondary technical schools (pre-technical schools).

Each of these secondary technical schools has a preparatory section. One of them also has an electro-mechanical section and the other a technical and mechanical section. The curricula are the same as those of the secondary technical schools in Belgium. The teaching staff is composed of university teachers and certificated teachers of higher technical education and part-time specialists who give lectures.

There are two academies of fine arts; the course lasts 4 years, made up of 2 years of preparatory study and 2 or 3 years of specialization. The preparatory studies comprise general studies, as well as the study of drawing in all forms, including decoration. The specialized studies are divided into two sections: an easel-painting section (3 years of study) and a decoration and publicity section (2 years). One of the existing academies has a sculpture and modelling section (2 years).

There are also agricultural schools at the upper secondary level, namely, the agricultural assistants' schools (*écoles d'assistants agricoles*), which correspond to the Belgian schools for agricultural technicians. The course lasts 4 years. Candidates must have successfully completed the

lower 3-year secondary course and must pass an entrance examination. These schools were established mainly for the purpose of training subordinate agricultural staff (assistant agronomists) and, in the second place, agricultural assistants for private companies.

Commercial education is still provided only within the framework of general secondary education, namely in the economics sections of the humanities course and the administrative and commercial sections in schools which apply a Congolese curriculum.

The industrial schools at Elisabethville and Jadotville provide evening courses in accountancy, shorthand and typing; these courses consist of preparatory studies and 3 years of specialized study.

The evening courses for adults are under the various directorates-general. They are designed chiefly to meet the local needs of the large centres, and provide instruction in languages, accountancy, commercial organization, etc. There are no rigid or uniform curricula for these courses.

Girls' vocational training schools. Vocational training for girls has now passed the experimental stage. In addition to the two schools for cutting and dressmaking (4 years of study) already opened, other girls' vocational training schools will be established in all the important centres and the number of subjects taught there will be increased.

Besides the vocational training schools, there are girls' commercial and technical training sections attached to the humanities sections in general secondary schools; they are open to girls who have completed the third year of the lower secondary stage. At the end of the 4-year course, these sections issue diplomas, under the patronage of the Belgian Central Board for Commerce and Accountancy, for assistant accountants, accountants and private secretaries.

There are also sections known as family sections, which are attached to the *athénées* and *lycées* (3 years of study) or operate independently (4 years).

Throughout the Congo, there are numerous home economics schools at the primary, post-primary and secondary levels. Courses last from 2 to 4 years, and are adapted to the local environment (urban or rural). Their chief aim is to prepare girls for their future role of wives and mothers.

Teachers. The training of technical school teachers raises an important problem. Except in the trade schools, the present teaching staff is almost exclusively European, but the number of Congolese teachers will increase as the quality of the teaching in the various subjects improves. A few teacher training sections are already training future African teachers for vocational training schools. A teacher training course is organized in Belgium for the benefit of technical school teachers in service in the Congo and of certain specialists who are recruited in Belgium and who do not hold the teacher's qualifying certificate.

Teacher training schools

Ecole d'apprentissage pédagogique (student teachers' training school). In principle entrants are required to have completed the third year of the ordinary upper primary school, but, in fact, there is an increasing tendency to recruit pupils with a more advanced primary education, particularly as the age of admission to the primary school is being gradually lowered. These schools are designed to fill a gap until the regular teacher training schools can provide an adequate number of certificated instructors. Their main object is to train supplementary teachers for village schools; the pupils admitted to them must be sufficiently able, and old enough to take charge of a class on completion of their training. The course consists in a revision of the subjects learnt at the primary school and in an introduction to primary school teaching methods. The methodological course is essentially practical.

Ecole de moniteurs (school for the training of instructors). The object is to train lower primary school and ordinary upper primary school teachers. Accessorily, until the teacher training schools are able to provide enough fully qualified teachers, the *écoles de moniteurs* provide teachers for the classes of the selective upper primary schools. The curriculum is organized so as to ensure the training of teachers within the four years following the fourth year of the selective upper primary school, or the sixth primary school year, or the seventh preparatory class. During the whole of this 4-year period, students receive general training corresponding to the curriculum of the lower stage of the modern humanities course. Teacher training proper and teaching practice are distributed over the last two years of the course. At the end of the fourth year, students receive the certificate of the lower stage of the humanities course and the instructor's diploma.

Ecole secondaire normale (secondary teacher training school). This school trains teachers who are destined, in principle, for the selective upper primary school. It comprises two stages: a lower stage (3 years of study), which provides general training, and an upper stage (also 3 years), which completes the general training and provides teacher training proper. At the end of this 6-year course, students receive the secondary teacher training school diploma.

Ecoles normales primaires (primary teacher training schools). The teacher training sections in secondary schools will shortly be converted into primary teacher training schools, at a level equivalent to that of the corresponding Belgian schools. The course will last 7 years. There will be a preparatory section, corresponding to the lower stage of the modern humanities course. The upper stage will comprise 2 years' general training, the curriculum of which will be identical with that of the third and second classes of the humanities, and 2 further years devoted to courses of the first class of the humanities and to courses and practical work in teaching and psychology. At the end of their studies at the primary teacher training schools, student teachers will receive the primary teacher's diploma and the Humanities Certificate.

Ecole normale moyenne (secondary teacher training college). Shortly, the Congo will be provided with several secondary teacher training colleges. These will be either state or grant-aided private schools, established in the most important localities but covering the whole country, for

students will be recruited from all regions. To be admitted to these schools, candidates will have to be in possession of the Humanities Certificate or of the teachers' diploma; ortherwise they will have to pass an entrance examination. The course will last 2 years.

Professeurs agrégés de l'enseignement moyen du degré supérieur (higher secondary school teachers) must have completed 4 years' university studies, including 2 years' studies for the *candidature* and 2 years for the *licence* and *agrégation*. They teach the subjects which they studied at the university.

Other schools

Schools for handicapped persons. The school for deaf and dumb children and adolescents, founded at Beno (Kwango district) by Italian nuns, may be mentioned as an example of schools of this kind.

Social art workshops. Handicraft schools of this type exist in certain regions where the artistic tradition, although still strong, is in danger of declining. These small workshops, which are attended by local artisans, train pupils in the handicrafts. Most of them are directed by artists, free of charge, and are aided by the Government and local authorities (grants, co-operatives for the sale of hand-made products, etc.).

Special schools of a technical nature are organized directly by certain governmental services to meet their own needs. Mention may be made of the following: the postal school, the telecommunications school, the police school, various schools run by the Force Publique, the aerial navigation technical school of the Kamina metropolitan base, and the school for petty officers of the naval service. The last named trains a number of civilians to meet the needs of certain private or semi-governmental firms and the navigable waterways service; marine engineers and deck hands are also trained here (2 years of study). Reference may also be made to the school of meteorology, which trains skilled observers for meteorological and aviation purposes, the school of public works and the school for surveyors.

The Government medical service organizes schools for medical assistants (upper secondary level) and schools for male nurses, midwives, etc.

Accelerated vocational training courses have been established in order to meet the needs of certain centres. These courses provide from 7 to 9 months' training organized on French lines, for skilled workers (masons, carpenters, plumbers), and surveyors.

Out-of-class activities

Pupils take an active part in the internal organization and social life of the school. They are entrusted with various activities and assume certain responsibilities. Activities are both manual and intellectual, collective and individual, and cover the most varied fields; their chief object is to develop the pupil's sense of responsibility, from the educational, social and civic standpoints. The most diversified means are used for the purpose, particularly sports and games, as well as intra or inter-school competitions.

TRENDS AND PROBLEMS

The secondary education system in the Belgian Congo, as described above, has not yet received its final form. Among the Government's present aims are the following:

1. To speed up as far as possible the transition from schools organized on the old basis to schools organized on the new basis, i.e., providing instruction of a level comparable with that of metropolitan schools. This will entail changes in the curricula and in the structure of education.
2. To develop secondary education, so that all gifted pupils may continue their studies, thus meeting the country's needs.
3. To improve the recruitment and training of teachers, in order to improve the quality of teaching; to train an adequate number of teachers.
4. To construct and adapt school buildings and encourage the production of textbooks and teaching materials, in order more nearly to meet educational needs.
5. To adapt teaching to the character, mentality, needs and way of life of the African people.

[*Text prepared by the Belgian National Commission for Unesco in October 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 13,559,000.
Area: 905,381 square miles; 2,344,932 square kilometres.
Population density: 15 per square mile; 6 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment of 1.7 million pupils (not including adult education or special education) represented approximately 13 per cent of the total population. Of these pupils, 4 per cent were receiving pre-primary education, 92 per cent were enrolled in primary schools, 1 per cent in middle and secondary schools, nearly 2 per cent in vocational schools, and 1 per cent in teacher training schools. There were altogether 317 students receiving university education. Between 1953 and 1957, primary enrolment had increased by 61 per cent. (See Table 2.)

Enrolment trends in secondary education, 1950–57. Between 1950 and 1957, each of the three types of secondary education showed rapid increase in enrolment. Thus, enrolment in middle and secondary schools more than doubled during this period, and more than tripled in teacher training schools. The average total enrolment at the secondary level of education for the period 1955–57 was about 3.6 per cent of the estimated population 15–19 years old. (See Table 1.)

Educational finance, 1959. For the year 1959, total recurring expenditure on education amounted to 2,469,300,000 Congolese francs. This represents an average expenditure of 176 francs per inhabitant. (Official exchange rate: 100 Congolese francs = 2 U.S. dollars.)

Sources. Belgium: Ministère des colonies, *Enseignement et éducation au Congo belge et au Ruanda-Urundi*, Bruxelles 1958; Chambre des représentants, *Rapports sur l'administration de la colonie du Congo belge pendant l'année 1956*; *Annuaire statistique de la Belgique et du Congo belge*, Tome 78, 1957. Belgian Congo. *Bulletin mensuel des statistiques générales du Congo belge et du Ruanda-Urundi*, no. 1 (janvier 1960).

1. TRENDS IN SECONDARY EDUCATION, 1950–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1950	6 953	...	4 125	...	4 828	...			
1951	7 826	...	4 655	...	6 042	...			
1952	8 585	...	5 169	...	7 058	...	21	1 119	*1.9*
1953	9 569	...	6 229	...	7 732	...			
1954	10 205	...	7 656	...	9 292	...			
1955	11 738	...	16 174	...	10 651	...			
1956	10 020	...	18 007	...	10 712	...	44	1 218	*3.6*
1957	16 486	...	22 069	...	16 131	...			

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools, public	1957/58	38	...	...	3 148	...
	Pre-primary schools, aided private	1957/58	849	...	...	53 396	...
	Pre-primary schools, unaided private	1957/58	209	...	...	10 702	...
	Total	**1957/58**	**1 096**	**...**	**...**	**67 246**	**...**
	„ [1]	1956/57	1 338	...	...	55 227	...
	„	1955/56	827	[2]941	...	39 540	...
	„	1954/55	762	1 083	...	39 991	...
	„	1953/54	888	1 074	...	37 433	...
Primary	Primary schools, public	1957/58	127	...	...	50 031	...
	Primary schools, aided private	1957/58	17 355	...	...	1 167 302	...
	Primary schools, unaided private	1957/58	10 959	...	...	355 491	...
	Total	**1957/58**	**28 441**	**...**	**...**	**1 572 824**	**...**
	„	1956/57	24 504	...	...	1 185 697	...
	„	1955/56	24 488	39 915	...	1 164 153	...
	„	1954/55	22 890	39 593	...	1 059 629	...
	„	1953/54	23 161	37 433	...	974 287	...
Secondary *General*	Middle schools, public	1957/58	3	...	...	322	...
	Secondary schools, public	1957/58	53	...	...	4 420	...
	Preparatory school to higher education, public	1957/58	1	...	...	8	...
	Middle schools, aided private	1957/58	15	...	...	1 825	...
	Secondary schools, aided private	1957/58	61	...	...	4 466	...
	Preparatory school to higher education, aided private	1957/58	1	...	...	74	...
	Middle schools, unaided private	1957/58	26	...	...	1 043	...
	Schools for the clergy, unaided private	1957/58	111	...	...	4 328	...
	Total	**1957/58**	**271**	**...**	**...**	**16 486**	**...**
	„	1956/57	180	...	...	10 020	...
	„	1955/56	169	[3]405	...	11 738	...
	„	1954/55	172	822	...	10 205	...
	„	1953/54	165	775	...	9 569	...
Vocational	Secondary technical schools, public	1957/58	3	...	...	93	...
	Trade and crafts schools, public	1957/58	111	...	...	6 031	...
	Administrative and commercial schools, public	1957/58	3	...	...	78	...
	Agricultural schools, public	1957/58	19	...	...	805	...
	Trade and crafts schools, aided private	1957/58	209	...	...	7 177	...
	Administrative and commercial schools, aided private	1957/58	5	...	...	157	...
	Agricultural schools, aided private	1957/58	14	...	...	1 048	...
	Domestic science schools, aided private	1957/58	209	...	...	10 770	...
	Domestic science schools, unaided private	1957/58	11	...	...	1 458	...
	Other schools, unaided private	1957/58	16	...	...	661	...
	Total	**1957/58**	**600**	**...**	**...**	**28 278**	**...**
	„	1956/57	582	...	...	22 543	...
	„	1955/56	480	[4]1 404	...	20 573	...
	„ [5]	1954/55	247	724	...	7 656	...
	„ [5]	1953/54	221	583	...	6 229	...
Teacher training	Teacher training schools, public	1957/58	12	...	...	1 487	...
	Teacher training schools, aided private	1957/58	210	...	...	15 043	...
	Total	**1957/58**	**222**	**...**	**...**	**16 530**	**...**
	„	1956/57	179	...	...	10 712	...
	„	1955/56	186	743	...	10 651	...
	„	1954/55	173	351	...	9 292	...
	„	1953/54	155	345	...	7 732	...
Higher	Universities						
	Total	**1957/58**	**2**	**...**	**...**	**317**	**...**
	„	1956/57	2	...	...	199	...
	„	1955/56	...	...	...	42	...
	„	1954/55	2	...	...	21	...
	„	1953/54	1	...	...	...	...

Note. Data referring to special schools are not included here.

1. Including adult education pupils in unaided private schools.
2. Excluding teachers of 66 pre-primary Protestant Mission schools.
3. Not including teaching staff of schools for the clergy (3,753 pupils).
4. Not including teachers for 3,002 pupils.
5. Some domestic science schools have not been included.

RUANDA-URUNDI

Trust Territory

The Territory of Ruanda-Urundi was placed under Belgian mandate by a decision of the League of Nations dated 31 August 1923, and was approved by the Law of 20 October 1924. The authority entrusted with the administration defined the status of the Territory in the Law of 21 August 1925 and the Royal Decree of 11 January 1926 providing for the latter's execution.

Following the resolution adopted by the General Assembly of the United Nations in London on 9 February 1946, and at the Assembly's invitation, Belgium deposited a draft trusteeship agreement which was accepted on 13 December 1946.

The organic law of 21 August 1925 states that Ruanda-Urundi is administratively united to the Belgian Congo. It raises the status of the Territory to that of a Vice-Government-General and stipulates that Ruanda-Urundi shall be deemed a separate legal and financial entity.

THE EDUCATIONAL SYSTEM

Education is organized on the same lines as in the Belgian Congo; certain problems, however, are peculiar to Ruanda-Urundi and are resolved in accordance with the special circumstances of the Territory.

At Astrida, an important institution of the official congreganist type, there has been set up, alongside the traditional sections, a school of administration which provides training for posts in the territorial civil service as well as for other public appointments. The courses given have reference to the laws, regulations and customs of Ruanda-Urundi. In the field of technical education, this institution has an agricultural assistants' school and a school for training veterinary assistants. A preparatory section trains candidates for these schools. It also has a pre-university section, which prepares students for higher education, that is to say, for the Faculty of Agriculture, which was opened in 1958. There is also, at a lower level, a school which provides training for subordinate posts, particularly the posts of clerk and accountant.

There are two vocational and technical training schools, one at Kigali and the other at Usumbura. The Kigali school has a preparatory section, a vocational training section (for carpentry) and an apprenticeship section (motor mechanics, masonry and dressmaking). The Usumbura school has a vocational training section (carpentry, cabinet-making and maintenance mechanics) and an apprenticeship section (motor mechanics, masonry and carpentry).

The two agricultural vocational training schools in Ruanda-Urundi are situated at Kigali and Karuzi.

The Ruanda-Urundi Institute of Arts, Commerce and Trades provides evening courses at Usumbura.

Lastly, 18 handicraft sections are distributed throughout the Territory: 9 carpentry sections, 1 indigenous art section (ceramics), 5 masonry sections and 3 ready-made clothing sections. All these schools are organized on exactly the same lines as the corresponding schools in the Belgian Congo, except for a few differences in detail due to their adaptation to local conditions.

TRENDS AND PROBLEMS

The qualitative improvement of secondary education and its development in general, the improvement of teacher training, the construction of new school buildings, the adaptation of textbooks and, lastly, the working out of curricula with special reference to African needs are matters to which the authorities are now devoting special attention.

[*Text prepared by the Belgian National Commission for Unesco in October 1959.*]

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See also: Belgian Congo.

STATISTICS

Population (mid-year 1958 estimate): 4,700,000.
Area: 20,916 square miles; 54,172 square kilometres.
Population density: 225 per square mile; 87 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58 there were 246,229 pupils enrolled in school, not including twice as many adults attending 'catechism schools' and literacy courses. The school enrolment represented about 5 per

cent of the total population. Ninety-six per cent of all pupils were enrolled in primary schools, where there was an average of 41 pupils per teacher. The proportion of girls in the total school enrolment was less than 30 per cent. Between 1953 and 1957, primary school enrolment increased by 19 per cent. (See Table 1.)

Enrolment trends in secondary education, 1945–57. All three types of secondary education showed rapid increase between 1945 and 1957, particularly vocational schools and teacher training. Nevertheless, the average total enrolment for 1955–57 represented barely 1 per cent of the estimated population 15–19 years old. (See Table 2.)

Educational finance, 1959. In the 1959 budget, recurring expenditure on education amounted to 287,400,000 Congolese francs. This represented an average expenditure of 63 francs per inhabitant. (Official exchange rate: 100 Congolese francs = 2 U.S. dollars.)

Sources. Belgium: *Rapports soumis par le gouvernement belge à l'Assemblée générale des Nations Unies au sujet de l'administration du Ruanda-Urundi.* Belgian Congo: Direction de la statistique. *Bulletin mensuel des statistiques générales du Congo belge et du Ruanda-Urundi* (janvier 1960).

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1957/58	3	[1] ...	[1] ...	307	127
	Kindergartens, aided private	1957/58	2	[1] ...	[1] ...	[2] 3 468	[2] 1 639
	Total	**1957/58**	**5**	[1] ...	[1] ...	**3 775**	**1 766**
	„	1956/57	[1] ...	[1] ...	[1] ...	[1] ...	[1] ...
	„	1955/56	[1] ...	[1] ...	[1] ...	[1] ...	[1] ...
	„	1954/55	[2] 42	62	30	1 853	...
	„	1953/54	[2] 37	56	24	1 658	...
Primary	Primary schools, public	1957/58	17	95	19	3 358	385
	Primary schools, aided private	1957/58	2 800	5 727	738	234 130	66 946
	Total	**1957/58**	**2 817**	[3] **5 822**	[3] **757**	**237 488**	**67 331**
	„	1956/57	[3] 2 700	[3] 5 642	...	[3] 236 992	61 848
	„	1955/56	[3] 2 624	[3] 5 315	[3] 664	[3] 230 915	61 718
	„	1954/55	2 366	4 980	730	211 328	57 479
	„	1953/54	2 199	4 661	623	199 039	49 618
Secondary							
General	Secondary schools, public	1957/58	2	36	4	431	32
	Secondary schools, aided private	1957/58	6	45	19	316	47
	Total	**1957/58**	**8**	**81**	**23**	**747**	**79**
	„	1956/57	4	...	...	584	...
	„	1955/56	4	41	7	516	31
	„	1954/55	2	28	—	369	—
	„	1953/54	2	34	—	352	—
Vocational	Trade and craft schools, public	1957/58	...	43	—	222	—
	Vocational schools for apprentices, public	1957/58	...			221	—
	Agricultural schools, public	1957/58	...	6	—	42	—
	Domestic science schools, public	1957/58	1	2	2	8	8
	Specialized secondary schools, public	1957/58	...	...	...	135	—
	Trade and craft schools, aided private	1957/58	...	38	—	599	—
	Domestic science schools, aided private	1957/58	13	56	56	871	871
	Other schools, aided private	1957/58	2	4	—	59	—
	Total	**1957/58**	**...**	**149**	**58**	**2 157**	**879**
	„	1956/57	32	...	...	1 870	...
	„	1955/56	34	95	35	1 679	688
	„	1954/55	37	[4] 146	[4] 44	*1 985	*779
	„	1953/54	31	[4] 129	[4] 40	*1 620	*555
Teacher training	Teacher training schools, public	1957/58	2	9	—	123	4
	Teacher training schools, aided private	1957/58	24	110	29	1 939	516
	Total	**1957/58**	**26**	**119**	**29**	**2 062**	**520**
	„	1956/57	25	126	...	2 002	...
	„	1955/56	25	96	44	2 060	623
	„	1954/55	32	96	51	1 776	571
	„	1953/54	24	72	39	1 288	522
Adult	Catechism schools	1957/58	...	...	...	*462 000	...
	Literacy courses for men	1957/58	6	...	...	330	—
	Literacy courses for women	1957/58				219	219
	Total	**1957/58**	**...**	**...**	**...**	***462 549**	**...**
	„	1956/57	...	...	...	*630 485	...
	„	1955/56	...	...	...	*630 417	...
	„	1954/55	5 575	7 824	...	642 776	...
	„	1953/54	5 535	7 871	...	536 061	...

1. Included in primary education.
2. Kindergarten and preparatory classes.
3. Including kindergartens.
4. Including part-time teachers.

2. TRENDS IN SECONDARY EDUCATION, 1945–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1945	122	...	48	...	...	...			
1946	141	...	88	44	...	...			
1947	153	...	97	35	...	...	[1]0.3	369	[1]*0.1*
1948	199	...	216	19	...	...			
1949	215	...	218	28	...	...			
1950	247	...	498	10	905	24			
1951	286	—	863	*18	712	31			
1952	309	—	*1 045	*26	1 238	29	2.7	410	*0.7*
1953	352	—	*1 620	*34	1 288	41			
1954	369	—	*1 985	*39	1 776	32			
1955	516	6	1 679	41	2 060	30			
1956	584	...	1 870	...	2 002	...	4.6	446	*1.0*
1957	747	11	2 157	41	2 062	25			

1. General and vocational secondary education only.

BHUTAN

In Bhutan there are a few widely-scattered schools in the rural areas of the country where the children receive their primary education. These primary schools are entirely maintained and controlled by the Government. Tuition, board and lodging, textbooks and stationery are provided free of charge by the Government to encourage the people to send their children to school. School uniforms are also given to the children every year. The medium of teaching is Bhutanese though Hindi and English are also taught.

On completion of primary education the children are generally sent to India by the Government for further studies. This system has been in operation for the last fifty years. At present there are about a hundred boys and girls studying in different schools and colleges in India. This includes also the students who have received Government of India scholarships.

The Government of Bhutan now feels keenly the necessity of establishing secondary and higher secondary schools throughout the country to promote better education and economize on the heavy expense incurred every year in sending the children outside. Great importance is therefore being given to this and it is hoped that very rapid progress will be achieved in this sphere.

Bhutan is making 'ten-year plans' for the rapid development of the country. It is expected that besides schools providing general education, some vocational institutions will also be installed by the end of the Second Ten-Year Plan.

[*Information provided by the Ministry of Education, Government of India, December 1959.*]

STATISTICS

Population (mid-year 1958 estimate): 650,000.
Area: 19,305 square miles; 50,000 square kilometres.

Population density: 34 per square mile; 13 per square kilometre.

THE EDUCATIONAL SYSTEM

Article 6 of the Constitution of 24 November 1945 states that every person has the right to receive and to give instruction under the supervision of the State. Other provisions include the following:

'Education is the highest function of the State. Public instruction shall be organized on the basis of the single school for all children. Attendance at school shall be compulsory from 7 to 14 years of age. State primary and secondary education is free.' (Article 157.)

'The State shall give financial assistance to promising pupils who, for lack of means, would be unable to attend courses of higher education, so that vocation and ability may be the accepted criteria rather than the individual's social or economic status.' (Article 158.)

'Private school shall be subject to the same state authorities, plans, syllabuses and regulations as public schools. They shall be free to give religious instruction.' (Article 159.)

'Schools maintained by welfare institutions shall receive assistance from the State.' (Article 160.)

'Education in primary, secondary, teacher training and specialized schools shall be controlled by the State, through the appropriate Ministry and in accordance with the Education Act. Teaching posts are permanent, under the conditions laid down by law.' (Article 161.)

'The public universities are autonomous and equal in status; their autonomy resides in their freedom to use their funds as they see fit, their power to appoint Rectors and teaching and administrative staff, to frame their statutes and courses of study.' (Article 162.)

'The public universities shall and must be subsidized by the Treasury out of national funds, independently of their regional, municipal and individual resources, whether present or future.' (Article 164.)

'Education at all levels is subject to state supervision exercised through the Ministry of Education.' (Article 165.)

'The State shall promote the culture of the people.' (Article 167.)

'The State shall promote the education of the rural population through rural school centres for Indians, which shall be comprehensive, providing instruction in economic, social and academic subjects.' (Article 170.)

Role of public authorities

Since April 1952, the Bolivian educational system has comprised two distinct sectors—urban and rural. The existence of the rural school system is due to the fact that there are 2,125,000 peasants in the country speaking Quechua and Aymara. There is at present an increasing tendency to unify these two sectors.

Urban education. This is directed by the Ministry of Education, acting through two central bodies: the Directorate-General of Education, a body with technical and administrative functions, which supervises educational institutions, and the Higher Office of Education, which has general administrative functions. A third body, set up in November 1959—the Higher Office of Culture, to which is attached the Directorate-General of Culture—is in charge of cultural extension activities and all specifically cultural matters.

The Directorate-General of Education is responsible for the planning and execution of the country's educational work. Under the chairmanship of the Ministry of Education, it comprises the Director-General of Education, and the Directors of pre-primary and primary education, secondary education, technical education (professional and vocational), literacy and adult education, pre-service and in-service training for teachers, physical education and sport, musical education, visual arts, and Catholic education (Article 199 of the Education Code). The Directorate of Technical Education for Women was added in February 1959.

For the control and administration of education, the Republic is divided up into educational districts and zones. Each district education office is staffed by a head (the district education officer) and the required number of district inspectors. They are under the authority of the Directorate-General of Education, which they represent in the area in which they operate.

Rural education. The Ministry of Rural Affairs is the supreme authority for the direction and promotion of the State's educational policy in this field. The Directorate-General of Rural Fundamental Education is responsible for the planning and execution of educational and social work in rural areas. Under the chairmanship of the Ministry of Rural Affairs, it comprises the Director-General of Rural Fundamental Education, the Supervisor of Literacy and Adult Education, the Technical Supervisors of Rural Welfare and of Rural Teacher Training Schools, the Supervisor of Planning and Curricula, the Inspector-General of Fundamental Education, the Assistant Supervisors of Hygiene and Health Education, of Rural Industries, and of Statistics and Personnel. (Article 205 of the Education Code.) The Directorate-General controls rural education throughout the country, through the District Fundamental Education Officers.

Role of private agencies

Private initiative in the educational field is entitled to state support, provided that it complies with existing legal requirements.

Employers, firms and proprietors having in their work area 25 or more children of school age are obliged to set up and support, at their own expense, primary courses or schools meeting a satisfactory teaching standard.

Under the provisions of the Constitution (Article 6), any individual or private body has the right to teach, and, consequently to found and direct educational establishments, under state supervision, without other restrictions than those prescribed by the laws in force.

The opening and operation of schools, their curricula, their internal organization, etc., must be approved by the Ministry of Education, following a detailed report by the Directorate-General of Education.

Private primary and secondary schools are subject to the state authorities, planning, curricula and regulations; they are, however, allowed freedom of religious instruction under the Constitution. At least 60 per cent of the teaching staff in such establishments must hold a state teacher's certificate; the remaining 40 per cent, even if they do not hold teachers' certificates, must have received some professional training, proof of which will be furnished to the competent authorities by means of an examination. The deputy head must be Bolivian. (Article 168.)

Exercising their rights under the foregoing provisions, independent bodies such as the Bolivian Mining Corporation and the Bolivian State Petroleum Deposits have organized primary and secondary schools in the areas where they are engaged in industrial production.

Some trade unions, for instance, the National Confederation of Railway Workers and allied trades, maintain schools for the children of their members.

For industrial and commercial education, financial resources are provided by a Law of 7 January 1948, which imposes a 2½ per cent contribution. These funds are administered by the Higher Council of Technical Education.

THE DEVELOPMENT OF SECONDARY EDUCATION

The Law of 12 October 1892 authorized the introduction of the 'concentric' method for secondary schools and the university, the purpose being to unify the teaching systems.

On 6 June 1909, the first National Co-educational Teacher Training College (Escuela Normal Mixta de Profesores y Preceptores de la República) was founded at Sucre, under the direction of the Belgian professor Georges Rouma.

On 24 May 1917, the Higher Teacher Training Institute (Instituto Normal Superior) for the training of secondary teachers was founded at La Paz.

In January 1929, the first general reform of secondary education was officially introduced. Credit for the initiation of this reform is mainly due to the Belgian professor Adhemar Gehain, then Director-General of Education.

In 1930, the 'University Revolution' occurred. The Statute of 25 July proclaimed the complete autonomy of education, taking educational policy out of the hands of the politicians.

Article 154 of the Constitution of 1938 modified this principle of complete autonomy; the university was left to manage its own affairs, but school education was placed under the responsibility of a National Council of Education enjoying administrative and technical independence.

In 1942, a movement for experimentation, study and organization in regard to technical education began with the founding, in La Paz, of the Pedro Domingo Murillo National Industrial School, industrial departments of the latter being also set up in certain secondary schools in other parts of the country.

The Constitutions of 1945 and 1948 did away with the autonomy of school education; Article 161 stipulated that 'the Ministry of Education shall resume exclusive control over primary, secondary teacher training and special education'.

On 20 January 1955, the new Bolivian Education Code was promulgated.

Legal basis

Chapters VI and VII of the Bolivian Education Code (1955) relate to secondary, vocational, technical and professional education.

Attendance at school is compulsory between the ages of 7 and 14. But the constitutional provision is not sufficiently clear, and as yet what the law requires has not been generally realized, namely, that Bolivian children must begin attending school at the age of 7 and must remain there throughout the next 6 years until they have completed their primary education. This situation has given rise to three serious consequences: (a) late enrolment of many children in primary school, creating age variations in all courses; (b) a high rate of absenteeism; (c) wastage.

Secondary education is not compulsory, but it is free of charge in the state *colegios* (for boys) and *liceos* (for girls). Encouragement has been given to private initiative in the matter of secondary education, but this has only attained full development in La Paz, Cochabamba, Santa Cruz and Oruro. Throughout the country, secondary education is for the most part in the hands of the State.

Administration

Administration is centralized in the Ministry of Education and the Directorate-General of Education, the structure and functions of which have been referred to above. At the present moment, ways are being studied of strengthening certain essentially technical functions performed by the Ministry of Education. They are to be incorporated in the Service for the Comprehensive Planning of Education, which is to come under the authority of the Directorate-General of Education. This step has already been taken in respect of the Educational Statistics Department which, following a Decree of 1 June 1955, has been placed under the Directorate-General.

In certain technical matters the Ministry is assisted by the Institute for Educational Research, a scientific establishment for the study, recording and solution of the educational problem in its bearing on development of a sounder knowledge of the Bolivian schoolchild, educational organization, educational resources, and the learning and teaching processes.

Control and inspection. The Directorate-General of Education conveys its technical and administrative instructions through the various district education offices. District or zone inspectors act as intermediaries between the district

education office and educational establishments. They are mainly concerned with classroom teaching and with improving teaching methods and ensuring that general and specific educational aims are achieved.

The inspectorate for secondary education covers secondary schools (*colegios* and *liceos*) and vocational, commercial and professional schools. A secondary school inspector may be appointed when a district has eight or more secondary schools, whether public or private; otherwise the schools are supervised directly by the district education officer. The inspectors give guidance in teaching matters to principals and class teachers and expound the programmes, methods and technical instructions received from higher authority. They supervise the work done in public and private schools and ensure that uniform standards are maintained.

Finance. The funds for maintaining and developing public education are controlled by the national budget. Expenditure incurred for educational purposes, whether in respect of buildings, properties, land furniture, equipment and school supplies, teachers' salaries, grants for teachers and pupils, or general operating expenses, is controlled by the Office of the Comptroller-General of the Republic, which has branches in every Department of the country. The principal purpose of the Office of the Comptroller-General is to ensure compliance with the national budget and to see that there is no allocation of funds not provided for in that budget.

School buildings are the responsibility of the State, but Decree No. 03624 of 4 February 1954 requires prefectures and municipalities to appropriate 10 per cent of their revenues for school buildings in their own districts. In addition, Decree No. 5333 of 27 October 1959 states that parents' associations, teachers' federations and civic bodies shall contribute materially to the building of their schools. For this purpose, the aforesaid bodies must conclude, with the National Committee or the Departmental Committees for School Buildings, contracts for the construction and repair of schools.

School welfare services. School medical and dental services have been set up. Suggestions based on the findings of social welfare workers are also tried out in experimental schools. A school meal service for children and young people in state primary and secondary schools has been in operation for several years.

TYPES OF SECONDARY EDUCATION

The highly centralized Bolivian school system does not allow for a great diversity in types of secondary education. However, the following may be noted: complete (6 year) and incomplete (3 and 4 year) secondary schools; secondary schools for girls (*liceos*) and boys (*colegios*); co-educational secondary schools; secondary schools with both vocational and purely academic sections; institutions providing the middle level of vocational and professional education.

The school year begins on 3 January and ends on 25 October; it comprises 200 teaching days.

General secondary schools

The aims of secondary education are as follows: (a) to preserve and develop the physical and mental health of young people; (b) to guide them in the intensive study of the basic subjects, and in the use of methods of self-education; (c) to perfect their cultural training and the full development of their personality; (d) to prepare them to play their part in economic life and engage in productive work; (e) to develop in them a sense of responsibility as individuals and as members of society; (f) to provide them, through a vocational guidance service, with a programme of studies adapted to their individual abilities and propensities; (g) to inculcate in them a respect for democratic principles and guide them in putting those principles into practice, thereby preparing them for the conscious exercise of citizenship.

No examination is required for entrance into boys' or girls' secondary schools, but candidates must have successfully completed the 6-year primary course. On completion of the 6-year secondary course, pupils receive a secondary-school leaving certificate, which entitles them to apply for a diploma of *Bachiller en Humanidades* at any of the universities in the country.

Secondary education is a continuation of primary education and is aimed at raising the adolescent's cultural level. Its subject matter and methods are so framed as to explore and guide the pupil's vocational, manual and intellectual capacities. The same curriculum is applied throughout the country.

The 6-year course is divided into a lower secondary cycle (4 years) and an upper secondary cycle (2 years).

The lower cycle provides instruction in the basic subjects as well as an initiation in studies for the *bachillerato* and, in *colegios* with industrial departments, in technical, commercial and other vocational studies. In these industrial departments, which will be dealt with more fully below, attention is also given to the general cultural subjects that are traditionally part of secondary education.

The upper cycle offers additional studies in preparation for the *bachillerato;* each subject is taught systematically and there is a tendency towards specialization. This cycle is divided into two sections—one for the natural sciences and the other for the social sciences; they have a common curriculum plus an optional compulsory syllabus providing intensive instruction in the subjects pertaining to the section chosen. Students may then go on to the university.

A model time-table, showing the number of periods per week, is given on the following page.

Teaching staff. Secondary school teachers are trained at the Escuela Nacional de Maestros at Sucre and at the Instituto Normal Superior in La Paz. The course lasts 4 years, following the completion of secondary schooling. Some universities (Sucre, for instance) train teachers of French and English. About half the teachers are teacher training college graduates; the rest are technical experts holding either established or temporary posts. Appointments are made by the Directorate-General. Teachers from teacher training colleges are listed in the register as soon as they take up their posts. Temporary teachers (i.e. those who are not established) may have themselves listed in

TIME-TABLE FOR GENERAL SECONDARY SCHOOLS

Subject	Lower cycle (year)			*Bachillerato*[1]		
				5th and 6th (each year)		
	1st and 2nd (each year)	3rd	4th	Natural sciences	Common	Social sciences
Mathematics	4	4	4	—	4	—
Spanish language and literature	4	4	4	—	1	4
General science	2	2	2	3	—	1
Physics	—	2	2	4	—	1
Chemistry	—	2	2	4	—	1
Philosophy	—	—	2	1	—	4
Civics	2	2	2	—	2	—
History	2	2	2	—	3	—
Geography	2	2	2	—	3	—
English[2]	2	2	2	—	3	—
French[2]	2					
Music	2	1	1	—	2	—
Visual arts	1	1	1	—	2	—
Physical education and and hygiene	2	2	2	—	2	—
Religious instruction	1	1	1	—	1	—
Manual training	12	12	10	—	—	—
Total	38	39	39	35	—	34

1. Fifth and sixth years, divided into two sections, for the social sciences and the natural sciences respectively, with a common curriculum plus specialized subjects.
2. From the third year these are alternative subjects.

the register after 5 years of service, provided they fulfil certain requirements. Registered teachers must, after 10 years of service, take an examination to prove their aptitude before being permanently established in the teaching profession. If they fail to pass this examination, their established status is suspended for one year; if they fail a second time, they lose the guarantees accorded to them under the regulations.

Vocational and technical schools

Vocational, technical and professional education constitute one of the major concerns of the State, which is seeking to fit the adult population of the country to perform useful work, and to train skilled workers and technicians so that the economic development of Bolivia may be ensured.

Vocational education, as an integral part of general education and a logical complement thereto, is intended: (a) to foster an interest in and appreciation of productive manual work through manual training given in basic courses as part of the general educational system; (b) to offer pupils the assistance they need so as to discover and cultivate their natural aptitudes, ideals, ambitions and hopes; (c) to make each individual an asset to the community, producing more than he consumes and giving more than he receives; (d) to provide the human resources required by industry, agriculture, trade and all the technical activities relating to production.

According to the Education Code, industrial vocational education is intended: (a) to prepare suitable personnel for the operation and advancement of industry; (b) to provide additional instruction, through special courses, for apprentices and workers; (c) to make modern methods of work widely known; (d) to give guidance and information concerning the organizational and operational needs of industry; (e) to encourage in the community an appreciation of productive manual work; (f) to develop character; (g) to spread principles and promote practices calculated to improve the way of life of the working class; (h) to inculcate the principles of health and safety in industry.

A beginning is made with industrial vocational education in the last two years of some primary schools; it is then developed and intensified either in the first four years of certain *colegios* (those with industrial departments) or in the first four years of industrial schools. Thereafter it may be continued in the last three years of industrial schools and, finally, at a university.

Pre-vocational courses. These courses are given in the fifth and sixth years of primary schooling. After successfully completing them, pupils whose circumstances permit may, following selection by special bodies, go on to the first year of an industrial school or of some other specialized institution suited to their aptitudes.

The Department of Vocational Guidance set up by the Inter-American Co-operative Service for Education (Servicio Cooperativo Interamericano de Educación) which operates in the Pedro Domingo Murillo National Industrial School, takes a direct part in the selection of the pupils who are to go on from pre-vocational courses or from ordinary primary schools to *colegios* with industrial departments or to industrial schools. It also selects pupils who have completed the fourth secondary year to be admitted to the preparatory courses for the technician's grade (*grado de técnicos*); and those who, after completing the fourth year of the specialization grade (*grado de expertos*), wish to be admitted to the first year of the technician's grade.

Vocational courses in secondary schools. These courses are given in *colegios* with industrial departments, during the first four years. In these secondary schools, vocational education has, since 1947, been included in the lower cycle. The first two years are a period of vocational guidance, during which time the pupils attend various workshops so as to discover the manual as well as the academic subjects for which they are best fitted. Then, in the next two years, they have an opportunity of turning to account the experience gained in the vocational guidance period and choosing a particular field (e.g. mechanics, carpentry, electricity, etc.). In this period, useful knowledge can also be acquired by pupils who prefer to concentrate afterwards on a branch of technology or to pursue academic studies in the upper secondary cycle leading to the university. Pupils who leave school on completion of this period receive a Trade Certificate and will be able to earn their living as workers in industry. Pupils who wish to continue their technical studies can do so in the upper (industrial-technical) cycle of the industrial schools (*escuelas industriales*).

Industrial schools. (a) *Industrial-vocational cycle or specialization grade.* Selected pupils are admitted after completing

their pre-vocational primary sixth class or the ordinary primary sixth class. The first year constitutes an orientation period; a speciality is chosen in the second year, and the course finishes on completion of the fourth year. (b) *Industrial-technical cycle or industrial technician's grade.* The best pupils from the regular courses of the industrial-vocational cycle are selected for admission. These more advanced studies are pursued for a further 3-year period and prepare pupils for supervisory posts in industry. Selected students who have completed their fourth year of secondary schooling may also be admitted to the industrial-technical cycle, in the following ways: pupils who have completed the fourth secondary year in an industrial department may be enrolled subject to their taking a preparatory course of 1 year; while those who have completed the fourth year of the ordinary, academic secondary course may be enrolled subject to their taking a preparatory course of 2 years.

Pedro Domingo Murillo National Industrial School. This school is recognized as a model institute for industrial education in Bolivia. It provides the following regular day courses:

(a) a 5-year industrial-vocational cycle or specialization grade, on completion of which pupils receive the diploma of 'skilled tradesman' in one of the following options—workshop mechanics, motor mechanics, textile mechanics, sheet metal work, forging, welding, electricity, radio and sound, foundry work, joinery, cabinet-making, plumbing, building, mining, petroleum, tanning, saddlery, graphic arts, woodwork, analysis of minerals; (b) a 3-year industrial-technical cycle or technician's grade, on completion of which a certificate is awarded. After a further year of practical work in industry and the acceptance of a thesis, students are awarded the Industrial Technician's diploma in one of the following options—mechanical engineering, electricity, industrial chemistry, foundry work and metallurgy, woodwork, mineralogy, petroleum, building.

Candidates are selected by the Department of Vocational Guidance.

Special courses run by the Pedro Domingo Murillo School include evening classes for persons employed in industry who whish to improve their qualifications, and vacation courses for teachers of industrial-technical classes.

Schools of arts and crafts. There are a few schools of arts and crafts, most of which are run by the Salesian Order; they train tailors, shoemakers, typographers, etc.

Industrial schools for girls. These are state institutions for girls who have completed the ordinary primary courses. They provide a 6-year course in two cycles of 4 and 2 years. The first cycle, for specialized workers, is divided into an orientation stage and a vocational training stage, each of 2 years' duration. The curriculum for this cycle is divided into three main groups of subjects: dressmaking; decorative arts (hand and machine embroidery, lace-making, weaving); home economics. Child welfare and applied design are also taught.

The upper cycle trains women technicians for positions as heads of workshops.

There is a third division for the training of social welfare workers and health assistants; this instruction is given in institutions coming under the Ministry of Labour and Social Security and the Ministry of Public Health.

Commercial education. Apart from commercial streams in the lower cycle of secondary education, commercial education is provided by a 3-year course, based on 2 years of general secondary schooling, for secretaries, and a further 3- or 4-year course for book-keepers, etc.

Agricultural education. This is provided in 4- or 5-year courses following on from primary school.

Teaching staff. Teachers in industrial schools are classified as: (a) teachers of general educational subjects, such as Spanish, mathematics, history, geography, languages, social legislation, gymnastics, music and singing, etc., who are recruited from the teacher training colleges or are employed temporarily after several years' previous experience; (b) teachers of technical and industrial subjects, who are recruited from among graduates of foreign technical schools, or graduates of the Pedro Domingo Murillo School who have had further study abroad. A training college for technical teachers has now been set up.

Teacher training schools

Primary school teachers are trained in urban teacher training schools (at Sucre, La Paz and Santa Cruz) with a 4-year course beginning after the fourth year of secondary schooling, and in rural teacher training schools with a 4-year course beginning after the completion of primary schooling. There are vacation courses of 2 months which offer further professional training for temporary (uncertificated) teachers.

The Institute of Teacher Training (Instituto de Capacitación Docente) has just been set up under the Directorate-General of Education and under the immediate responsibility of the National Directorate for the Pre-Service and In-Service Training of Teachers (Dirección Nacional de Formación y Mejoramiento Docente). Its activities include: distribution of educational literature, with the object of providing all serving teachers with appropriate professional information; correspondence courses for temporary teachers; and supplementary vacation courses for the purpose of consolidating and appraising the results of the above-mentioned courses.

Other specialized schools

Education for blind, deaf and mentally deficient pupils is provided in the Institute for Special Education at Obrajes (a suburb of La Paz). This institute is under the authority of the Ministry of Labour and Social Security.

Education for children and adolescents in need of care and protection, many of whom present behaviour problems, is given in 'homes' (*escuelas hogares*) which have been set up in almost all parts of the country. The homes for adolescents, such as the Felix Méndez Arcos Institute for Special Education, are predominantly vocational. All these homes are under the authority of the Ministry of Labour

and Social Welfare, but the teachers giving ordinary instruction in them are appointed by the Directorate-General of Education.

Out-of-class activities

Holiday camps are now being instituted, and substantial financial provision is being made for them. An example is the new holiday camp at Yanacachi, in the district of La Paz, which is located in an area with a sub-tropical climate where there is an abundance of agricultural produce and fruit trees.

In the cities, plans are in progress for the laying out of playgrounds and sports grounds.

TRENDS AND PROBLEMS

A comprehensive planning service for all educational activities will be established in 1960. Preparatory work has been carried out by the Department of Educational Statistics, which is part of the Directorate-General of Education, and statistical offices have been set up in each educational district. A large allocation (10,000 million bolivianos) has been made for the school building programme; it will be administered by the Ministry of Education, various technical bodies, and teachers' associations. As was mentioned earlier, civic bodies were also set up by Decree No. 05333 to promote the school building programme.

The first National Congress on Education is to be held this year, under the auspices of the Directorate-General of Education and the teachers' associations.

[*Text revised by the Bolivian National Commission for Unesco in January 1960.*]

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STATISTICS

Population (mid-year 1959 estimate): 3,416,000.
Area: 424,163 square miles; 1,098,581 square kilometres.
Population density: 8 per square mile; 3 per square kilometre.

Summary of school statistics, 1954–56. Total enrolment at pre-primary, primary and secondary schools was over 340,000 pupils in 1956, representing approximately 10 per cent of the population. There were, in addition, some 12,000 pupils attending primary night schools. Of the school going population, 88 per cent were pupils in kindergartens and primary schools, some 9 per cent in general secondary schools and about 3 per cent in vocational institutions. Girls made up 45 per cent of enrolment at urban primary schools, data for rural schools are not available; 35 per cent of pupils at general secondary schools were girls and over half the enrolment at vocational institutions. The teaching staff numbered 9,710 at pre-primary, urban primary and general secondary schools in 1956 and the pupil teacher ratio was 23 in urban primary schools and 13 in general secondary schools. The proportion of women teachers is unknown. Between 1954 and 1956 enrolment increased by 9 per cent in urban primary schools, by 17 per cent in general secondary schools and by 76 per cent in vocational education (See table).

Educational finance, 1957. In 1957, the budget estimate for expenditure on education amounted to approximately 23,021 million bolivianos (official exchange rate: 1,000 bolivianos = 0.12 (approx.) U.S. dollar), representing about 7,034 bolivianos per inhabitant.

Sources. Bolivia: Ministerio de Educación Pública y Bellas Artes, *Plan de Fomento de la Educación Nacional 1958; Educación, Cultura, Deportes 1956/57;* Ministerio de Asuntos Campesinos, *Datos sobre la campaña nacional de alfabetización, 1957;* other official publications.

SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution[1]	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1956	35	313	...	7 981	3 985
	Kindergartens, private	1956	5	...	...	480	229
	Total	**1956**	**40**	[2]**313**	**...**	**8 461**	**4 214**
	„	1955	...	...	...	...	...
	„	1954	[2]27	[2]270	...	[2]7 586	[2]3 666
	„	1953	...	...	...	...	...
Primary	Primary urban schools, public	1956	528	...	...	128 360	57 517
	Primary urban schools, private	1956	112	...	...	31 387	14 385
	Rural primary schools and literacy courses, public[3]	1956	[4]...	...	...	133 976	...
	Total	**1956**	**...**	**...**	**...**	**293 723**	**...**
	„	1955	...	...	...	...	...
	„	1954	574	6 227	...	[5]146 087	63 247
	„	1953	...	...	...	...	...
Secondary							
General	Secondary schools, public	1956	77	...	...	21 812	7 306
	Secondary schools, private	1956	53	...	...	9 428	3 624
	Total	**1956**	**130**	**2 459**	**...**	**31 240**	**10 930**
	„	1955	...	...	...	...	...
	„	1954	105	1 804	...	26 645	8 438
	„	1953	...	...	...	...	...
Vocational	Vocational schools for women, public	1956	11	...	...	1 240	1 240
	Commercial schools, public	1956	7	...	...	1 662	835
	Arts and crafts schools, public	1956	15	...	...	2 461	—
	Other special institutions, public[6]	1956	15	...	...	[6]2 187	[6]1 507
	Trade and crafts schools, private	1956	12	...	...	845	646
	Commercial schools, private	1956	12	...	...	1 125	760
	Arts and crafts schools, private	1956	1	...	...	67	—
	Other special institutions, private	1956	1	...	...	35	21
	Total	**1956**	**74**	[7]**242**	**...**	[8]**9 622**	**5 009**
	„	1955	...	...	...	...	...
	„	1954	40	450	...	[8]5 467	3 342
	„	1953	...	...	...	...	...
Adult	Primary night schools, public	1956	81	...	...	11 537	3 267
	Primary night schools, private	1956	2	...	...	312	312
	Total	**1956**	**...**	**...**	**...**	**11 849**	**3 579**
	„	1955	...	...	...	...	...
	„	1954	48	383	...	11 043	...
	„	1953	...	...	...	...	...

1. Data on teacher training and higher education institutions for 1950 were presented in Unesco, *World Survey of Education: II—Primary Education*, 1955, page 120. Comparable data for later years are not available.
2. Public schools only.
3. Probably including some adult education.
4. In 1956 there were 3,301 courses.
5. Urban primary schools only.
6. Including teacher training, conservatory and schools of music and fine arts.
7. Public schools only, not including schools of women's professions.
8. Including data on public and private teacher training. In 1956, in one private secondary teacher training institution there were 35 (F.21) students, and in 1954, in the higher teacher training institute of La Paz, there were 381 (F.226) students.

BRAZIL

THE EDUCATIONAL SYSTEM

Brazilian education is on the threshold of a period of complete reorganization of its structure, which in its present form is based on legislation mostly antedating the Federal Constitution of 1946. In the case of secondary education, each branch (except teacher training and industrial education) is governed by Federal Acts of Parliament designed to establish a uniform pattern of school organization throughout the country, to which same end the Federal Government exercises powers of direction and inspection over federal, municipal and private secondary schools (with the exception of teacher training institutions).

The 1946 Constitution steered a middle course between centralization and full state autonomy in education, a course which, apart from being more in keeping with the federal structure of the Union, is regarded as a necessity owing to the immense size of the country. The effect of this policy should be to limit the legislative powers of the Union Government to fixing the general norms ('the guiding principles and bases of national education') to which the entire educational system should conform. However, in addition to the organization and maintenance of educational systems in the Federal Territories, the Federal Government will also have the power to operate throughout the country a supplementary educational scheme strictly limited to making good local deficiencies. The States and the Federal District will organize their own systems of education, always subject to the general provisions of federal law, and private and municipal education in their respective territories will be under their supervision.

New legislation for implementing the provisions of the Constitution has been under consideration by Parliament since 1948. Pending the adoption of this new general Education Act, secondary education continues to be governed by the earlier Organic Laws on general secondary, commercial and agricultural education promulgated respectively in 1942, 1943 and 1946. For industrial education, a new Federal Act was passed in 1959 in which the trend towards centralization and uniformity is much less marked than in the previous Organic Law. Teacher training is, in practice, organized by the States which have full discretion, although most of them remain broadly faithful to the structure prescribed by the Federal Organic Law enacted in 1946 a few months before the promulgation of the Constitution.

Apart from these provisions concerning the division of powers between the various levels of public authority, the basic constitutional principles governing the Brazilian scholastic system as a whole are as follows:

1. All persons have a right to education which shall be given in the home and at school and shall be based on the principles of freedom and the ideals of the brotherhood of man.
2. Education in its various branches shall be provided by the public authorities; it may be provided by private initiative subject to the relevant provisions of the law.
3. Primary education shall be compulsory and shall be given in the national language only.
4. Public primary education shall be given free of charge to all; public post-primary education shall be free to all who furnish proof of lack or insufficiency of means.
5. Religious instruction shall be on the curriculum of all state schools; it shall be an optional subject taught in accordance with the religious faith of the pupil.
6. Each year the Union shall appropriate not less than 10 per cent, and States, the Federal District and municipalities not less than 20 per cent, of their revenue from taxation for the maintenance and improvement of education.
7. The Union Government shall contribute financially to the maintenance and improvement of the educational systems of States and of the Federal District.
8. The competent authorities shall be bound to include in their educational system welfare services to ensure that necessitous pupils are in a fit condition to profit from their schooling.

The structure of the educational system is shown in the diagram on page 269.

THE DEVELOPMENT OF SECONDARY EDUCATION

In the type of society which existed before the proclamation of the Republic (1889), when Brazil was a mainly agricultural and exporting economy based on slave-labour, the only young people who could aspire to secondary education were those belonging to the well-to-do classes, who took it as a stepping-stone to higher education. Despite the abolition of slavery (1888) and the beginnings of industrial development in the last years of the Empire, this state of affairs in secondary education persisted, with slight changes, at least until 1930.

During the opening years of the Republican era, the dominant feature in the evolution of general secondary education was the move to make it a genuine system of education instead of a somewhat heterogeneous collection of subjects studied simply with a view to passing university or similar entrance examinations and without real co-ordination. This improvement was mainly effected through federal legislation fixing common norms for the organization of secondary education throughout the Union. Observance of these norms was ensured by giving federal recognition to studies carried out in state and private schools for the purposes of entry to higher education.

The institution of Union Government supervision of non-federal schools, confined however to maintaining a single establishment in the federal capital, and the emergence of a conscious trend towards greater uniformity in Brazilian

secondary education were also the fruit of Federal Government action, which pressed steadily on through the Maximiliano reforms of 1915, the Rocha Vaz reforms of 1925, the Francisco Campos reforms of 1931 to the Gustavo Capanema Organic Law on Secondary Education of 1942.

Throughout this series of reforms, the dominant consideration continued to be to make secondary education a general cultural training—with a strong academic bias and an overloaded syllabus—which would provide the foundation for any type of specialized higher studies. Thus 'general culture' became the distinguishing mark of secondary education proper in the broader category of 'intermediate education' (*ensino médio*) which, in Brazil, is the generic term covering general vocational and education at secondary level.

The idea of introducing a certain degree of specialization into general secondary education was not taken up until the reform of 1931. The scheme adopted was to have a 5-year basic course followed by a choice of any of three 2-year 'continuation courses', in which the training given varied with the careers that pupils had in mind—law, philosophy and arts; medicine and natural science; or engineering and the mathematical and physical sciences. The reform of 1942 retained the division of secondary education into stages, namely, a first stage of 4 years (*ginásio*) and a second of 3 years (*colégio*), the humanistic or classical bias of the first stage being strengthened, while the distinction between the classical and science sides in the second had no pre-vocational implications.

While there were some earlier instances of foundations by local governments or private bodies, the existing Brazilian system of industrial education began in 1909 with the establishment by the Federal Government of a network of schools for basic vocational training, in the Federal District and later in the same year in the States of São Paulo and Rio Grande do Sul. The same period, more or less, also saw the start of federal *aprendizados agricolas* from which the network of secondary agricultural training establishments has evolved.

A point to note is that initially vocational education for industry and agriculture was almost exclusively at a primary or elementary level, general primary education being too undeveloped to provide an adequate foundation for vocational education at a more advanced level. Pupils completing the primary course went straight into active employment and learnt their trade on the job. The only ones left to go to the vocational schools were those who had received no primary education and had to be given it there concurrently with a little basic vocational training.

With the Organic Laws on Industrial Education (1942) and on Agricultural Education (1946), vocational training for industry and agriculture was finally raised in status to post-primary level. The effect of the two laws was to systematize these two types of vocational training on a nation-wide scale, public and private schools being merged in a uniform organization. Later, in 1959, a new Federal Act modified the position of industrial education, giving the federal schools, among other things, autonomy in administrative, financial, technical and didactic affairs. Agricultural education is still governed by the law of 1946.

Raising industrial education to secondary level brought with it the definition of its object as the training of medium-grade staff for industry—technicians, foremen and artificers. With the advance of industrialization came increased possibilities for training these cadres in industrial and technical schools. But this same development made it possible and necessary not only to employ lower-grade workers but also to train them for the less-skilled operations in industrial undertakings.

This need was met in Brazil by the establishment of the National Service of Industrial Apprenticeship (1942), which, in addition to setting up apprenticeship schools, also promotes training at work. Established by Federal Law, the Service (SENAI) is run by the industrial employers' association (Confederacão Nacional da Industria) and financed by contributions from member firms. Apart from their cash contributions, firms are under an obligation to employ junior workers (learners) attending apprentices' schools for part of their time, or to organize works training under the supervision of SENAI.

The final item for consideration in the history of vocational training is commercial education. This was always of post-primary or secondary level from its very inception at the beginning of the nineteenth century, when the Federal Government and the governments of various provinces began to concern themselves with the question, setting up special schools or including commercial studies in the curricula of the *colégios* and *liceus*. However, generally speaking, commercial education has led a very up-and-down and precarious existence.

With the coming of the Republic the Federal Government began to concern itself with regulating commercial education and to encourage private and local initiative by grants in aid. In 1926 a federal decree for the regulation of commercial education laid down the conditions for the recognition of schools of commerce, at the same time making them subject to supervision by a federal body. Reformed in 1931, commercial education was given its present structure in 1943 by the Organic Law on Commercial Education which is still in force.

Legal basis

The following are the main Federal Acts relating to education at secondary level:

Organic Law on Secondary Education, 1942, implemented by a number of ministerial orders of which the most important is No. 501 of 1952, consolidating earlier provisions.

Organic Law on Commercial Education, 1943, implemented by Decrees No. 14,373 of 1943 and No. 42,671 of 1957 and various ministerial orders.

Organic Law on Agricultural Education, 1946, implemented by Decree No. 21,667 of 1946, and Ministry of Agriculture orders.

Act No. 3552, 1959, implemented by Decree No. 47,038 of the same year; this is the new federal statute on industrial education replacing the former Organic Law of 1943.

Organic Law on Teacher Training, 1946, which continues to serve as a model for the teacher training legislation of many States.

Act No. 1076, 1950, authorizing the enrolment of pupils having completed the first cycle of a vocational school in the second cycle of general secondary studies.

Act No. 1821, 1953, implemented by Decree No. 34,330 of the same year, laying down a general scale of equivalence between the various branches of secondary level education.

Act No. 2432, 1954, implemented by Decree No. 37,494 of 1955, regulating financial assistance by the Union Government to all education at secondary level and establishing for the purpose the Fundo Nacional do Ensino Médio.

Administration

The administrative structure of the Brazilian education system runs through all three levels of public authority—the Union Government, the federated units and the municipalities—in as much as under the Constitution all three have the power to initiate action for the development of education.

As regards the two largest branches of education at secondary level—general secondary education and commercial education—the Union Government still exercises general directive and supervisory powers over state, municipal and private schools though its direct intervention in the way of running schools is extremely curtailed in general secondary education and practically nil in the commercial sphere.

The Directorates of Secondary and of Commercial Education in the Ministry of Education and Culture are the organs which accord federal government recognition to, and exercise supervision over, general secondary and commercial schools. Both comprise the following sections: Buildings and Equipment, Teaching and Administrative Staff, Guidance and Welfare, and Supervision and Inspection. In addition, each has a section running, respectively, the Campaign for the Improvement and Extension of Secondary Education (CADES) and the Campaign for the Extension of Commercial Education (CAEC), which promote courses for teachers and other activities designed to raise the standard of instruction.

In industrial education the Federal Government has the lion's share in the foundation and maintenance of schools. Since the Federal Act of 1959, which relates to federal schools only and gives them self-government in administrative, didactic, technical and financial matters, the Directorate of Industrial Education of the Ministry of Education has developed into an organ for the technical and pedagogical supervision of these schools and for auditing their accounts. It is however provided that the

GLOSSARY

colégio: secondary school offering a first-cycle general secondary course (*ginásio*) and at least one of the two second-cycle courses (science and classics).

escola agrícola: lower vocational secondary school of agriculture offering the two successive courses of the first cycle (introductory agricultural course and the course for the qualified agriculturalist's certificate).

escola agrotécnica: vocational secondary school of agriculture offering both the first-cycle courses (see *escola agrícola*) and at least one second-cycle course (technical agricultural courses).

escola de aprendizagem comercial—SENAC: part-time vocational training school of commerce, for juveniles and adults, organized by the National Service of Commercial Apprenticeship (SENAC).

escola de aprendizagem industrial—SENAI: part-time vocational training school of industrial training, for juveniles and adults, organized by the National Service of Industrial Apprenticeship (SENAI).

escola de belas artes: upper vocational training school in the fine arts, also offering courses combining general secondary and artistic studies.

escola comercial: vocational secondary school of commerce.

escola de enfermagem: vocational training school of nursing.

escola de iniciação agrícola: vocational secondary school of agriculture offering the lower introductory course in the first cycle.

escola industrial: vocational secondary school of industrial training offering the first-cycle (basic) course.

escola de música: vocational training school of music offering two secondary courses and one higher-level course. The secondary courses are for the training of professional musicians and music teachers respectively. To be admitted to the upper-level course candidates must have their general secondary leaving certificate and the music teachers' course certificate.

escola normal: teacher training school, carrying on from the first-cycle (*ginásio*) course.

escola normal regional: teacher training school at first-cycle secondary level.

escola primária: primary school.

escola técnica: vocational secondary school of industrial training offering the first-cycle (basic) course and at least one second-cycle technical course.

escola técnica de comercio: vocational secondary school of commerce offering at least one second-cycle course (technical commercial course) with or without the first-cycle course.

ginásio: lower general secondary school offering the first-cycle course only.

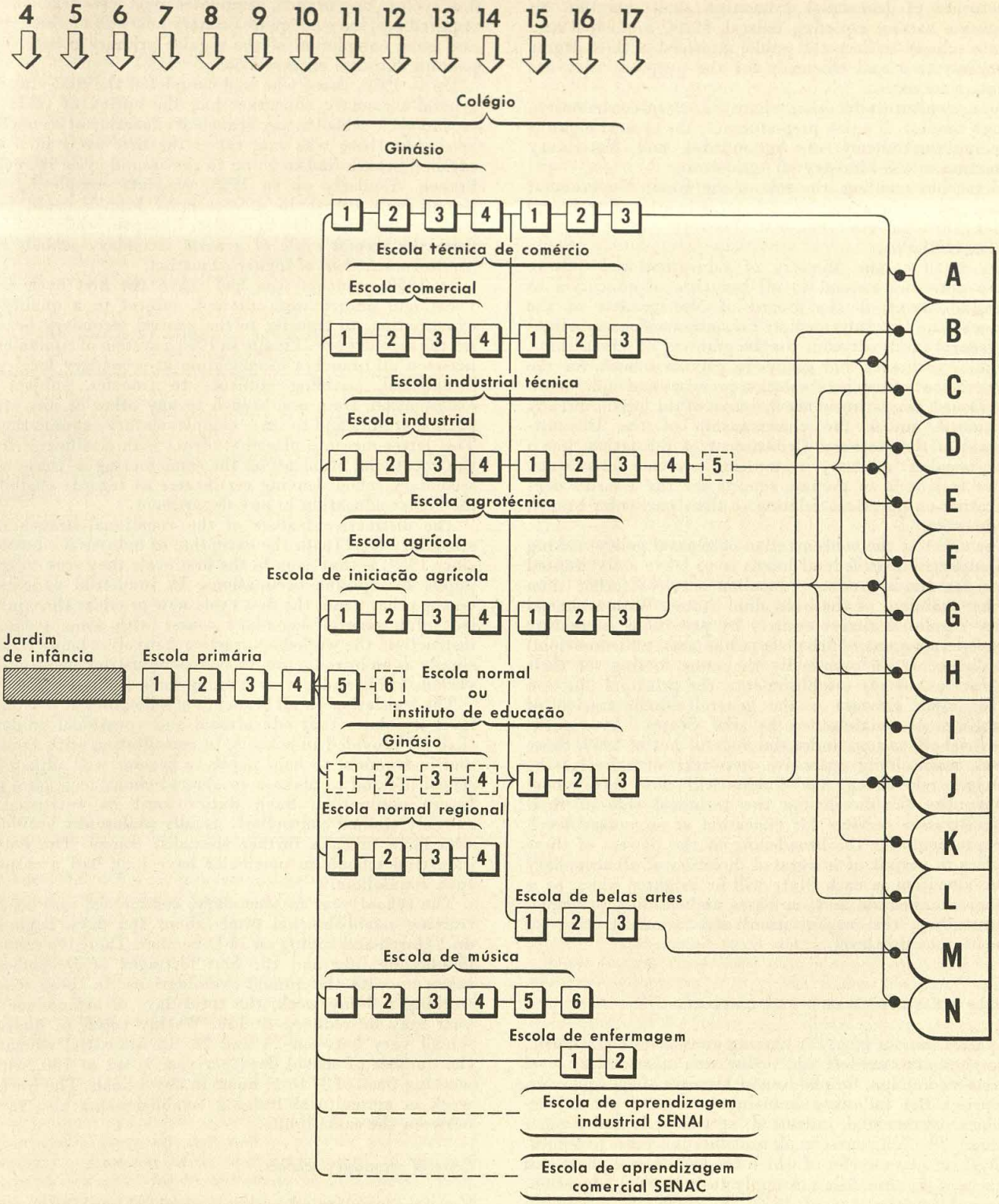
instituto de educação: teacher training school offering a course at second-cycle secondary level, courses for primary school teachers wishing to specialize, and courses in school administration.

jardim de infância: kindergarten.

HIGHER EDUCATION

NOTE. The diagram does not show all courses. Students from vocational secondary schools who pass special qualifying examinations are able to take the entrance examination to an institution of higher education on the same terms as students who have completed a general secondary course. The requirement for admission to colleges of fine arts or music is completion of the general secondary course as well as the relevant vocational course at secondary level.

A. *Medicina:* medicine.
B. *Direito:* law.
C. *Engenharia:* engineering.
D. *Filosofia e letras:* philosophy and letters.
E. *Ciências econômicas:* economics.
F. *Administração:* administration.
G. *Arquitetura:* architecture.
H. *Agronomia:* agronomy.
I. *Odontologia:* dentistry.
J. *Farmácia:* pharmacy.
K. *Química:* chemistry.
L. *Veterinária:* veterinary science.
M. *Belas artes:* fine arts.
N. *Música:* music.


4 5 6 7 8 9 10 11 12 13 14 15 16 17
Colégio
Ginásio
Escola técnica de comércio
Escola comercial
Escola industrial técnica
Escola industrial
Escola agrotécnica
Escola agrícola
Escola de iniciação agrícola
Jardim de infância
Escola primária
Escola normal ou instituto de educação
Ginásio
Escola normal regional
Escola de belas artes
Escola de música
Escola de enfermagem
Escola de aprendizagem industrial SENAI
Escola de aprendizagem comercial SENAC
A
B
C
D
E
F
G
H
I
J
K
L
M
N

Directorate of Industrial Education shall maintain an evaluation service covering federal, state, municipal and private schools to keep the public informed of their degree of organization and efficiency for the purposes they are meant to serve.

For agricultural education, where the federal contribution, though modest, is again preponderant, the central organ is the Superintendency of Agricultural and Veterinary Education of the Ministry of Agriculture.

In teacher training, the role of the Union Government is confined to the provision of help, support and technical advice through the National Institute of Pedagogic Studies (INEP).

An organ of the Ministry of Education and Culture whose activities extend to all branches of education at secondary level, is the Board of Management of the National Fund for Intermediate Education which apportions the federal funds set aside for the granting of scholarships, subsidies to States and grants to private schools for the improvement of teachers' salaries, premises and equipment. This Board, consisting of the directors of the organs already mentioned, under the chairmanship of the Director-General of the National Department of Education, has a three-member 'advisory commission' in each directorate, whose task it is to prepare reports for the Board's consideration on questions relating to their particular branch of education.

The effect of the concentration of general policy-making and supervision in federal hands is to leave only limited scope for the secondary education services (other than teacher training) of the individual States. With technical policy regulated almost entirely by provisions emanating from federal organs, which place public (state and municipal) establishments on practically the same footing for their purposes as private establishments, the principal function of the state services is the general administration of establishments maintained by the States. As regards industrial education, under the Federal Act of 1959, those States maintaining extensive networks of schools—the principal one being São Paulo—will now have more opportunity for developing the technical side of their administrative services for education at secondary level. The prospects for the broadening of the powers of these services to permit of integrated direction of all secondary level education in each State will be brighter when, as is hoped, the Federal Act on bases and guiding principles decentralizes the organization and administration of education at this level.

TYPES OF SECONDARY EDUCATION

If special courses (e.g., for nursing auxiliaries or in music, or applied arts) are left aside, education at secondary level (*ensino mêdio*), i.e., for children of 11 years of age and over, comprises the following branches or types: general secondary, commercial, industrial, agricultural, and teacher training. The full course in all branches is 7 years in length, divided into two cycles of which the first lasts 4 years and the second 3; this does not apply to industrial education, governed by the Act of 1959, in which the minimum length of the second cycle is 4 years. For admission to the first cycle in any branch, candidates must have reached the required age, have adequate primary education (which does not mean completion of the regular primary course) and pass an entrance examination.

Up to 1950, those who had completed the first stage of general secondary education had the option of taking a second-cycle school in any branch of education at secondary level, but those who had taken the first cycle in a vocational branch had to go on to the second cycle in such a branch. Similarly up to 1953, students completing the second-cycle course in a vocational branch could only go on to higher studies in a related branch, while students from the second cycle of general secondary schools had access to any field of higher education.

In 1950, students who had taken the first cycle in a vocational branch were allowed, subject to a qualifying examination, to transfer to the general secondary branch for the second cycle. Finally in 1953 a system of equivalence between all branches of education at secondary level was established, enabling students to transfer, subject to examination, from one branch to any other at any stage in their studies and to take 'complementary examinations'. This latter measure placed students with certificates from the vocational branches on the same footing as those with secondary school leaving certificates as regards eligibility for higher education in any department.

The distinctive feature of the vocational branches at secondary level (with the exception of industrial education since 1959) is that even in the first cycle they seek to train pupils for specific occupations. In industrial education, on the other hand, the first cycle now provides the equivalent of a general secondary course with some technical instruction, the workshop practice it involves being treated simply as an introduction to typical industrial operations of various kinds and not as training for a definite trade.

The legislation on all branches of education at secondary level stipulates that educational and vocational guidance shall be provided in schools, in consultation with families and instructors, to help pupils to become well adjusted to school life and to make a considered choice of studies and future occupation. Such duties must be entrusted to suitably trained counsellors, usually philosophy graduates who have taken a further specialist course. The federal industrial schools in particular have long had a corps of such counsellors.

The school year in secondary, commercial and teacher training establishments totals about 165 days, beginning on 1 March and ending on 15 December. There is a month's holiday in July and the first fortnight of December is taken up with the annual examinations. In those schools working a 5-day week, the total days of attendance per year may be reduced to 140. Weekly totals of hours in school vary between 23 and 28. In industrial education the number of school days per year is set at 180, with a working week of 37 to 41 hours in day schools. The working week in agricultural training establishments also ranges between the same limits.

General secondary schools

General secondary education is provided in *ginâsios*, which offer a single first-cycle (*ginasial*) course, and in *colégios*

which offer the first-cycle course and one or both of the second-cycle courses described respectively as 'science' and 'classical'.

The relevant Organic Law defines the purposes of secondary education as follows: (a) the all-round development of the personality in adolescence, in continuation of the work of primary education; (b) as part of the ethical training of adolescents, to foster and strengthen their sense of patriotism and of human brotherhood; (c) to provide a general, intellectual training which can serve as the foundation for specialized studies at a higher level.

The curriculum laid down by the Organic Law on Secondary Education and the weekly allocations of time between subjects, to which all schools had to conform up to 1953, are shown in the following table.

TIME-TABLE IN GENERAL SECONDARY SCHOOLS
(in hours per week)

Subject	First cycle				Second cycle					
					Classical course			Science course		
	1st year	2nd	3rd	4th	5th	6th	7th	5th	6th	7th
Portuguese	3	3	3	3	3	3	3	3	3	3
Latin	2	2	2	2	(3)	(2)	3			
Greek (optional)					3	2	—			
French	3	2	2	2	3	2	—	2	2	—
English	—	3	2	2	3	2	—	3	2	—
Spanish					2	—	—	2	—	—
Mathematics	3	3	3	3	3	3	3	3	3	3
Natural science	—	—	3	3						
Physics					—	2	3	3	3	3
Chemistry					—	2	3	3	3	3
Natural history					—	—	3	—	3	3
History of Brazil	2	—	—	2	—	2	2	—	2	2
World history	—	2	2	2	2	2	2	2	2	2
Geography of Brazil	—	—	2	2	—	—	2	—	—	2
World geography	2	2	—	—	2	2	—			
Philosophy					—	3	3	—	—	3
Manual training	2	2	—	—						
Drawing	3	2	2	1				2	2	2
Choral singing	1	1	1	1						
Physical training	2	2	2	1	2	2	1	2	2	2
Totals per week	23	24	24	24	23	28	28	25	27	28

Since 1953, while the prescribed curriculum has remained the same, schools have been permitted some latitude in the use of class time, subject to the following minimum allocations: (a) 3 hours per week of Portuguese in junior and senior secondary courses and 3 hours of mathematics in the junior course; (b) in the classical course 14 hours per week for the study of languages in the first year, 10 in the second and 6 in the third, and 3 hours per week for philosophy in the second and third years; (c) in the science course, 6 hours per week of physics and chemistry in the first year; 9 hours of physics, chemistry and natural history in the second and third years.

The subject syllabuses issued by the Ministry of Education and Culture are designed to provide graduates of secondary education with the background of general education essential for higher study in any special field. These syllabuses are accompanied by instructions on how they are to be worked, the schedule having to be fitted in with the plans prepared by teachers. It is the common practice to follow the work schedule drawn up by the teachers of the Colégio Pedro II, a federal institution.

School work is evaluated on the basis of the pupil's monthly marks for class work, of the written examinations taken in June and November and of an oral test taken in December.

For admission to the junior secondary course, candidates must (a) be 11 years of age; (b) have reached a satisfactory standard of primary education (this does not necessarily mean completion of the regular primary course); and (c) pass a qualifying entrance examination. To be admitted to the second cycle pupils must have successfully completed the junior course.

Only teachers on the Register of the Ministry of Education and Culture are eligible for appointments in general secondary schools and, since the formation of the Faculties of Philosophy in 1939, new registrations are confined to graduates of those faculties. However, to cater for special local circumstances, non-graduates may be allowed to teach and, by passing an examination, can be registered as qualified to teach in those localities only where there are no graduate teachers to take their particular subjects.

In schools run by the public authorities established teachers are selected by competition on the basis both of their degrees and of an examination and accordingly are appointed for life, as provided in the Constitution. In addition to established teachers, there are other categories of instructors who come under the legislation applicable to civil servants in general. In private establishments, teachers have the protection of the labour laws and their salaries are based on the number of classes they give.

Teacher training in Faculties of Philosophy is given in four successive stages of 1 year, subdivided into the following specialized branches: mathematics, physics, chemistry, history, geography, social science, classical languages and literature, Romance languages, Anglo-Germanic languages and literature, philosophy and pedagogics. In their last year students are given a teaching course which includes the science and practice of education. The faculties have a demonstration college at which students can practise teaching.

Commercial education

Commercial education is given in *escolas comerciais* (first cycle only) and *escolas técnicas de comercio* (offering both cycles or the second cycle only). The junior commercial schools (*escolas comerciais*) offer a single course known as the basic commerce course; the senior commerce schools sometimes offer the basic course, and invariably provide one or more of the following technical courses: accounting, secretarial work, commerce and advertising, administration, and statistics, the first two being the commonest.

The Organic Law on Commercial Education defines the purposes of this branch of education as follows: (a) to train qualified personnel for specific activities in commerce and for junior administrative posts in public and private undertakings; (b) to give candidates for the simpler or routine jobs in commerce and administration a rudimentary vocational training; (c) to improve the qualifications of persons already employed.

All commercial education courses comprise both general educational and vocational studies. Since 1957 both groups in the basic commerce course have been sub-divided into compulsory and additional subject.

TIME-TABLE OF FIRST-CYCLE COMMERCIAL COURSE
(in hours per week)

Subject	Year			
	1	2	3	4
Compulsory subjects				
Portuguese	4	3	3	3
English	—	3	3	3
Mathematics	4	3	3	3
Geography	2	2	2	—
History	2	2	2	—
Natural science	—	—	—	3
Drawing	4	—	—	—
Handwriting	2	—	—	—
Elementary commercial theory	—	2	—	—
Office practice	—	—	3	3
Commercial practice	—	—	—	2
Total	18	15	16	17

Additional subjects: (1) in general education: French and Spanish; (2) vocational: typing, shorthand, commercial drawing, domestic economy, sales practice, stores and distribution practice, entertaining.

Schools are responsible for organizing their own curricula, with due regard to the instructions of the Directorate of Commercial Education. From the second year onwards, all such curricula must include at least one additional subject, provided that not more than eight subjects are taken in any one school year.

In the second-cycle courses, the curriculum comprises a number of general educational subjects common to all these courses, and vocational subjects which vary according to the field of specialization. The example in the next column shows the curriculum for the course in accounting.

TIME-TABLE OF SECOND-CYCLE COMMERCIAL COURSE (ACCOUNTING)
(in hours per week)

Subject	Year		
	1	2	3
General			
Portuguese	3	2	2
French or English	2	2	—
Mathematics	3	3	—
Physics and chemistry	2	—	—
Biology	—	2	—
Geography of Brazil	—	—	2
History of Brazil	—	—	2
Total	10	9	6
Vocational			
General book-keeping	3	—	—
Punched-card techniques	3	—	—
Elements of economics	2	—	—
Business organization	—	3	—
Commercial accounting	—	3	—
Merchandising	—	2	—
General and commercial law	—	3	3
Elements of statistics	—	—	2
Industrial accounting	—	—	3
Bank accounting	—	—	3
Public accounting	—	—	2
Total	8	11	13

Industrial education

Under the Federal Act of 1959 industrial education establishments may provide the basic course by itself (amounting to a first-cycle general secondary education with some technical instruction) or the basic course and one or more technical courses (second cycle), in addition to apprentice-training courses (for students over 14—minimum duration of course: 20 months) and extra-curricular qualifying, refresher, specialization or 'new developments' courses (for junior or adult workers).

The purposes of industrial education are: (a) to provide a foundation of general education and the basic technical training to enable pupils to play their part as citizens and engage in productive work or to carry their studies further; (b) to prepare pupils for medium-grade specialist employment.

The object of the basic course is to broaden the general education background required in the primary course, and to test the aptitudes of the pupil and develop his potentialities, guiding him, with the family's co-operation, in the choice of employment or further studies.

The technical courses aim at training technicians for posts directly under engineers or managers, or for occupations whose technical implications make this standard of training necessary.

The curriculum of the federal schools for industrial education is compiled by the teachers' council of each school in conformity with general directives drawn up by the Directorate of Industrial Education and is subject to the latter's approval.

For admission to the basic course, candidates must have completed the full primary course or, if they have not received a full primary education but are at least 11 years of age, they must pass a general test of their knowledge. Technical courses are open to students who have completed the first cycle in any branch of education at secondary level.

Agricultural education

Agricultural education is given in junior, middle and senior vocational secondary schools of agriculture (*escolas de iniciação agrícola*, *escolas agrícolas* and *escolas agrotécnicas*). The first offer the introductory agricultural course and the second the course for the qualified agriculturalist's certificate; these are two successive stages in the first cycle. The senior agricultural secondary schools provide second-cycle training courses for agricultural technicians. Schools providing the senior courses may also provide the junior ones.

The establishments training technicians, like most agricultural schools, come directly under the Ministry of Agriculture. They are organized on the same lines as other types of education at secondary level, their purpose being to provide specialist training in the following branches: agriculture, animal husbandry, dairying, and agricultural mechanics. Agronomics and veterinary medicine are taught in higher schools of university standing.

Teacher training schools

Teacher training is regulated and organized by the individual States. However, the Federal Organic Law promulgated in 1946 sets the pattern from which few States depart to any appreciable extent. Thus, there are three categories of institution for the training of primary teachers: (a) the regional or rural teacher training course or school (respectively *curso normal regional*—the term used in the Federal Organic Law; *curso normal rural; escola normal regional;* and *escola normal rural*); all giving first-cycle training at secondary level; (b) the teacher training school (*escola normal*) giving second-cycle training at secondary level, following on from the first-cycle general secondary course (*curso ginasial*); (c) the institute of education (*instituto de educação*) which in addition to the second-cycle teacher training course provides specialist courses for teachers and school administrators.

The subjects studied in the first-cycle teacher training courses include Portuguese, mathematics, world and Brazilian geography, the natural sciences, elements of human anatomy and physiology, hygiene, world and Brazilian history, psychology and pedagogics, practice in teaching, drawing, manual training, music and physical training.

The second-cycle course includes the following subjects: Portuguese, mathematics, physics and chemistry, human anatomy and physiology, hygiene and health education, educational psychology and sociology, drawing and handicrafts, methodology, music and physical training.

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STATISTICS

Population (mid-year 1958 estimate): 62,725,000.
Area: 3,287,204 square miles; 8,513,844 square kilometres.
Population density: 19 per square mile; 7 per square kilometre.

Summary of school statistics, 1953–57. In the school year 1957/58 some 6.7 million pupils were enrolled in educational institutions at all levels representing about 11 per cent of the total population. In addition 473,000 people attended

adult primary education courses. Of the total enrolment, about 86 per cent was in pre-primary and primary schools, 10 per cent in general secondary, 2 per cent in vocational, 1 per cent in all teacher training courses and 1 per cent at university colleges. In 1957 the proportion of girls enrolled in primary schools was 49 per cent, in general secondary schools 47 per cent, in secondary teacher training courses 91 per cent, in university colleges 23 per cent. The teaching staff at all levels of education numbered about 300,000 in 1957 of whom 74 per cent were women; in primary schools women teachers were 93 per cent of the total and in general secondary schools 43 per cent. The average pupil-teacher ratios in 1957/58 stood at about 29 in primary and 14 in general secondary schools. Compared with 1953/54, enrolment had increased by 30 per cent in primary, 34 per cent in general secondary, 33 per cent in vocational, 61 per cent in secondary teacher training courses and by 28 per cent in all higher educational institutions. (See Table 3.)

Secondary enrolment trends 1932–57. Enrolment in general secondary and vocational education has increased throughout this period; in secondary teacher training courses enrolment fluctuated between the years 1932–44 but since 1945 expansion has been uninterrupted. Average total enrolment in all secondary schools rose by 170 per cent between 1932–34 and 1955–57. The ratio of secondary enrolment to the age group 15–19 years old has thus steadily risen from 3 in the period 1932–34 to 13 over the three years 1955–57. A feature of the development of general secondary education has been the increase in the proportion of girls—from only 18 per cent of the enrolment in 1932 to 47 per cent in 1957. (See Table 4.)

Examination results in secondary education, 1953–57. Successful candidates for the lower stage secondary school certificate increased by 27 per cent between 1953/54 and 1957/58. The number of teaching certificates rose by 40 per cent over the same period. In all, some 144,500 certificates were awarded in general and technical secondary education in 1957/58 of which over half to women candidates. This represents an increase of over 21 per cent over the corresponding figures for 1953/54. (See Table 2.)

Educational finance, 1957. For 1957, the estimated expenditure on education by the Federal Government, provincial and municipal authorities was 19,502 million cruzeiros representing approximately 318 cruzeiros per inhabitant. Of this total, 38 per cent was spent by the Federal Government, 54 per cent by State Governments and the Federal District and the remaining 8 per cent by municipal authorities. (See Table 1.)

Source. Brazil: Ministry of Education and Culture, reply to Unesco questionnaire and official reports; Conselho Nacional de Estatística, *Anuario estatístico do Brasil*, 1958.

1. EDUCATIONAL FINANCE, 1957
(in thousand cruzeiros)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**19 502 498**
Federal Government	7 356 725
State Governments and Federal District	10 478 104
Municipal authorities	1 667 669

B. TOTAL EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent
Total expenditure[2]		**19 502 498**	**100.0**
Central administration		1 784 225	9.2
Instruction		16 346 409	83.8
Primary education	7 631 791		39.1
Secondary education	3 931 211		20.2
Higher education	4 741 215		24.3
Other education, not specified	42 192		0.2
Other expenditure		1 371 864	7.0
Inspection services	271 075		1.4
Technical services	77 794		0.4
Other expenditure, not specified	[3]1 022 995		[3]5.2

1. Official exchange rate: 100 cruzeiros = 5.41 U.S. dollars.
2. Budget estimate.
3. Includes some expenditure for cultural institutions.

2. EXAMINATION RESULTS IN SECONDARY EDUCATION 1953/57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Lower Secondary School Certificate	58 093	30 591	62 440	32 956	63 213	33 858	69 515	37 077	73 887	39 123
Higher Secondary School Certificate	15 256	3 765	16 300	3 752	16 298	4 111	17 656	4 337	17 532	4 301
Industrial School Certificate	2 804	918	2 705	891	2 788	988	2 918	1 021	2 823	952
Commercial School Certificate	16 668	5 133	18 070	5 405	19 117	5 710	20 182	6 002	22 109	6 819
Agricultural School Certificate	1 098	6	1 146	12	1 247	38	1 289	37	1 355	55
Teachers' Certificate	15 192	13 298	17 037	14 981	19 349	17 158	20 867	18 466	21 206	19 162
Other	10 109	7 689	10 493	8 000	11 719	8 230	11 854	8 393	5 612	2 818

3. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions [1]	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergarten and nursery schools, public	1957/58	1 492	3 625	6 254	91 964	87 493
	Kindergarten and nursery schools, private	1957/58	1 690	2 752		74 906	
	Total	**1957/58**	**3 182**	**6 377**	**6 254**	**166 870**	**87 493**
	,,	1956/57	3 019	5 865	5 774	151 670	79 806
	,,	1955/56	2 770	5 260	5 192	133 909	70 818
	,,	1954/55	2 359	4 574	4 542	116 888	61 665
	,,	1953/54	2 024	3 829	3 802	102 866	54 267
Primary	Primary schools, public	1957/58	77 769	160 531	171 952	4 772 381	2 685 783
	Primary schools, private	1957/58	8 633	23 920		689 218	
	Complementary schools, public	1957/58	2 701	4 203	6 236	59 341	66 157
	Complementary schools, private	1957/58	2 381	3 420		68 233	
	Total	**1957/58**	**91 484**	**192 074**	**178 188**	**5 589 173**	**2 751 940**
	,,	1956/57	87 477	179 402	166 389	5 291 078	2 607 666
	,,	1955/56	81 110	165 041	153 113	4 877 880	2 398 058
	,,	1954/55	76 025	153 338	141 785	4 582 424	2 259 139
	,,	1953/54	70 126	141 052	130 734	4 304 428	2 122 100
Secondary							
General	Secondary schools, first cycle, public	1957/58	622	11 582	5 849	190 074	94 836
	Secondary schools, second cycle, public	1957/58	273	4 954	1 676	31 990	8 786
	Secondary schools, first cycle, private	1957/58	1 603	22 718	10 536	365 006	180 828
	Secondary schools, second cycle, private	1957/58	509	7 186	1 843	49 164	11 822
	Total	**1957/58**	**3 007**	**46 440**	**19 904**	**636 234**	**296 272**
	,,	1956/57	2 812	43 287	18 297	594 415	275 027
	,,	1955/56	2 707	40 883	17 063	551 729	255 292
	,,	1954/55	2 574	37 203	15 274	512 276	236 672
	,,	1953/54	2 435	34 654	13 993	474 113	218 710
Vocational	Industrial schools, public	1957/58	368	6 015	2 207	15 843	4 346
	Commercial schools, public	1957/58	84	1 061	277	8 758	3 186
	Agricultural schools, public	1957/58	79	817	153	4 285	124
	Other vocational schools, public	1957/58	172	1 513	597	5 944	2 130
	Industrial schools, private	1957/58	58	734	134	3 992	1 273
	Commercial schools, private	1957/58	1 011	11 117	2 276	115 569	33 323
	Agricultural schools, private	1957/58	5	33	1	98	—
	Other vocational schools, private	1957/58	624	3 439	1 273	18 219	6 562
	Total	**1957/58**	**2 401**	**24 729**	**6 918**	**172 708**	**50 944**
	,,	1956/57	2 491	26 099	8 037	165 936	53 693
	,,	1955/56	2 377	25 799	8 442	155 236	50 450
	,,	1954/55	2 135	22 728	7 030	140 072	46 542
	,,	1953/54	1 995	20 419	6 065	129 506	43 807
Teacher training	Teacher training schools, public	1957/58	511	5 454	3 410	35 953	31 449
	Teacher training schools, private	1957/58	646	6 477	4 342	38 693	36 288
	Total	**1957/58**	**1 157**	**11 931**	**7 752**	**74 646**	**67 737**
	,,	1956/57	1 028	10 274	6 731	63 838	56 949
	,,	1955/56	964	9 659	6 271	59 118	52 421
	,,	1954/55	873	8 545	5 612	53 573	47 467
	,,	1953/54	768	7 377	4 903	46 463	41 047
Higher							
Teacher training	Teacher training colleges, public	1957/58	80	829	180	3 671	2 162
	Teacher training colleges, private	1957/58	142	990	207	1 803	1 185
	Total	**1957/58**	**222**	**1 819**	**387**	**5 474**	**3 347**
	,,	1956/57	219	1 979	531	4 817	2 984
	,,	1955/56	162	1 443	368	4 161	2 512
	,,	1954/55	114	1 110	255	3 670	2 268
	,,	1953/54	93	879	150	3 721	2 250
General and technical	Faculties and/or colleges, public	1957/58	411	9 452	960	41 878	8 028
	Faculties and/or colleges, private	1957/58	590	7 413	1 085	34 465	9 330
	Total	**1957/58**	**1 001**	**16 865**	**2 045**	**76 343**	**17 358**
	,,	1956/57	924	16 069	1 965	72 190	16 278
	,,	1955/56	865	14 051	1 717	69 441	15 641
	,,	1954/55	803	13 128	1 666	66 258	14 783
	,,	1953/54	809	11 264	1 213	60 335	13 186

1. The figures in this column refer to the number of *cursos* or school units. *Curso* is defined in the Brazilian school system as 'an independent sequence of lectures or lessons on a given subject or group of subjects'.

Level and type of education	Type of institution	School year	Number of institutions [1]	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Special	Schools for delinquent children, public	1955/56	6	56	12	782	—
	Schools for physically handicapped, public	1955/56	37	225	139	1 510	706
	Schools for mentally handicapped, public	1955/56	6	40	36	600	225
	Schools for delinquent children, private	1955/56	27	78	76	616	616
	Schools for physically handicapped, private	1955/56	49	124	83	1 166	418
	Schools for mentally handicapped, private	1955/56	6	26	20	238	45
	Total	**1955/56**	**131**	**549**	**366**	**4 912**	**2 010**
	„	1954/55	118	561	361	6 153	2 231
	„	1953/54	113	481	325	5 533	1 782
Adult	Adult education courses, public						
	Total [2]	**1957/58**	**10 727**	**13 201**	**10 888**	**386 464**	**135 243**
	„ [2]	1956/57	13 605	15 945	13 322	473 109	171 440
	„ [3]	1955/56	18 545	29 484	19 699	867 170	408 937
	„ [3]	1954/55	21 356	30 240	21 330	932 458	430 156
	„ [3]	1953/54	21 152	25 427	17 808	934 891	423 426

2. Data on primary courses only.

3. Including for 1955/56 data on secondary and university extension courses. Excluding primary courses in 1953/54 and 1954/55.

4. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1932	56 208	18	24 457	35	23 416	90			
1933	66 420	20	28 371	32	29 974	92	120	3 758	*3*
1934	79 055	27	30 140	30	22 876	90			
1935	93 829	32	30 492	31	26 385	95			
1936	107 649	34	35 837	30	26 177	94			
1937	123 590	35	40 446	30	25 447	95	190	4 177	*5*
1938	143 289	36	45 351	30	24 671	95			
1939	155 588	37	50 878	29	22 754	93			
1940	170 057	38	58 064	28	25 008	95			
1941	182 260	39	64 208	29	22 278	95			
1942	199 435	39	78 335	28	22 018	95	302	4 657	*7*
1943	211 246	38	90 345	28	26 423	95			
1944	233 223	39	99 529	28	27 921	95			
1945	256 467	40	96 488	31	26 262	95			
1946	282 179	41	104 844	30	28 414	95			
1947	311 887	42	108 175	29	30 597	94	441	5 137	*9*
1948	335 882	43	107 268	29	32 339	92			
1949	365 851	43	101 750	28	36 045	91			
1950	406 920	43	100 395	28	42 241	91			
1951	438 526	44	109 807	27	38 365	90			
1952	466 887	45	108 689	28	43 000	88	636	5 777	*11*
1953	513 525	45	119 011	27	49 334	88			
1954	557 346	45	130 337	27	56 789	88			
1955	551 729	46	155 236	33	59 118	89			
1956	594 415	46	165 936	32	63 838	89	825	6 408	*13*
1957	636 234	47	172 708	30	74 646	91			

Note. The coverage of figures for the years 1955–57 differs slightly from those shown for previous years.

BULGARIA

THE EDUCATIONAL SYSTEM

Education in the People's Republic of Bulgaria is entirely democratic and available to all citizens without distinction of sex, nationality or race.

Article 79 of the 1947 Constitution of the People's Republic of Bulgaria stipulates:

'Every citizen has a right to education. Education is lay and democratic and progressive in spirit. Ethnic minorities have the right to instruction in their mother tongue; they also have the right to develop their own national culture, although the study of the Bulgarian language is compulsory.

'Primary education is compulsory and free.

'Schools belong to the State. The passage of a law is necessary when private schools are established; such schools are placed under State control.

'The right to education is assured by the schools, institutes and universities; by scholarships, boarding facilities and by financial and special assistance to particularly gifted pupils.'

It was these principles, enshrined in the Constitution, which provided the basis for the Law on Public Education drafted and passed by the National Assembly in 1948. This law was extensively amended and completed by the decree on public education of the Praesidium of the 1954 National Assembly.

The Council of Ministers is the supreme executive and administrative body in matters of public education. The Ministry of Education and Culture has overall responsibility for compliance with ideological and methodological policy and for organization and teaching arrangements for education and culture throughout the country. It produces the basic documents in connexion with schooling, namely school programmes and curricula, regulations and instructions for the different types and levels of educational institution; and it provides for the preparation and publication of textbooks and ancillary school books meeting all scientific, political and pedagogical requirements. It examines all questions with a bearing on the improvement of the organization, methods and forms of scholastic and instructional activity in schools, or to the directing and supervisory role of provincial and local authorities in the sphere of education and culture.

The administration of public education at provincial level is the responsibility of the Provincial People's Councils and their attached Education and Culture Sections; the latter are in direct control of teaching and administrative arrangements in every type and level of educational establishment in their respective areas. Their decisions are binding on scholastic establishments, but must not conflict with what the law lays down, with the orders issued by the Council of Ministers or with the instructions and directives of the Ministry of Education and Culture. The provincial Education and Culture Sections are answerable concurrently to the executive committees of the Provincial People's Councils and to the Ministry of Education and Culture, which supervises their activities.

Municipal and rural people's councils allocate the necessary funds to the schools, see that their premises are in good condition and help in school activities.

School principals, assisted by their teachers' councils, direct the school and classroom activities in their respective establishments of which they are the administrative heads as well as the directors of studies. They are responsible for the standards of classwork and training in their schools.

Attached to each school is a parents' committee, which is an auxiliary organ of the school for administrative and youth-training tasks. It functions independently of the school administration but in co-ordination with it.

The diagram on page 279 shows the structure of education in Bulgaria.

THE DEVELOPMENT OF SECONDARY EDUCATION

The invention of an original Bulgar-Slavonic alphabet in Bulgaria, the emergence of a vernacular literature and the opening of the first schools date back as far as the ninth century. A Slavonian culture, remarkable for the period, developed, but Bulgaria's subjection to Byzantine from 1018 to 1187, and later, for five centuries, to the Ottoman Empire (1396–1878), was to offer the severest impediment to the growth of learning and culture in the country.

It was only after the liberation of the Bulgarian people, in 1878, that a State-organized system of public education was inaugurated. Compulsory primary education was introduced by the Provincial Statutes on People's Schools, of 1878, the Tarnovo Constitution of the Principality of Bulgaria, of 1879, and the Organic Statutes of the autonomous province of Eastern Rumelia, of 1879, Two-grade and four-grade—and later, seven-grade—secondary schools were also opened to provide education beyond the primary level. Parallel with the Bulgarian schools there were schools maintained for the national minorities—Turkish, Greek, Jewish, Armenian—at their own charges.

Concurrently with the growth of schools of general education, training schools for industry, agriculture, and commerce were founded and organized.

The spread of education was encouraged by the 1885 Law on Public and Private Schools, which, like its predecessor, was based on the principle of municipal and communal autonomy as regards school organization. 1885 also saw the reunion of the Principality of Bulgaria and the autonomous province of Eastern Rumelia.

The Public Education Law of 1891 was the first law to cover all levels and types of education. It was, for many years, to ensure the precedence of general over vocational education in the schools, and in addition, concentrated the control of public education in the hands of the Government. Another of its provisions was for the opening of night

schools and schools on Sundays for pupils who had completed the primary cycle.

The secondary schools were based on four years of primary schooling and pupils who completed the full primary course (6 years) passed straight into the third grade in secondary school. The course was in two cycles, the first of 3 years' duration while the second cycle, split into 'classical' and 'science' sides, was 4 years' long for boys' schools and 3 for girls. In 1897 the length of the course was made 4 years for girls as well as boys and in 1904 the girls' schools were remodelled on the boys' school pattern. The secondary school leaving examination had become compulsory in 1891.

Under a law of 16 January 1896 a Government School of Painting had been opened and became the School of Arts and Crafts in 1898. However, the expansion of vocational education over the period was irregular, owing to the uneven development of the country's economy, though the 1897 Agricultural Education Law introduced elementary, secondary and higher schools of agriculture.

The Law on Vocational Education of 18 December 1906 laid down the broad lines for that type of education in Bulgaria. There were schools at elementary and secondary level, the latter started and maintained by the State, by Chambers of Commerce and Industry, and with moneys from legacies or supplied by private individuals or associations. These secondary schools accepted young people of either sex who had completed either the elementary vocational course, or the third year of secondary school or the upper cycle of the primary course.

The 1909 Public Education Law marked an important stage in the evolution of educational legislation in Bulgaria. Among other things, it incorporated with the Ministry of Education inspectorates, directly responsible to the Minister, for each of the special branches of education, and for the first time made provision for funds for the maintenance of the schools. The organization of the educational system was planned on lines making each level preparatory for the next and the general schools became the normal avenue to vocational establishments.

The 1921 Supplementary Law to amend the Law on Public Education was an attempt by the Agrarian People's Union Government (21 May 1920–9 June 1923) to align Bulgarian education in accordance with the economic needs of the country, to which end vocational education was given precedence over general. It was also a first attempt at unifying education. The period of compulsory education was increased from 4 to 7 years, embracing the 7 year old to 14 year old age groups, so that the whole of the primary course became compulsory, including the 3-year upper primary cycle, or *progymnase*, and certain vocational schools when the courses were completed in 2 years with from 3 to 10 months' study per year. Provision was also made for structural modifications in the teaching provided by the secondary schools, which enabled vocational secondary education to be founded on a broader basis of general education.

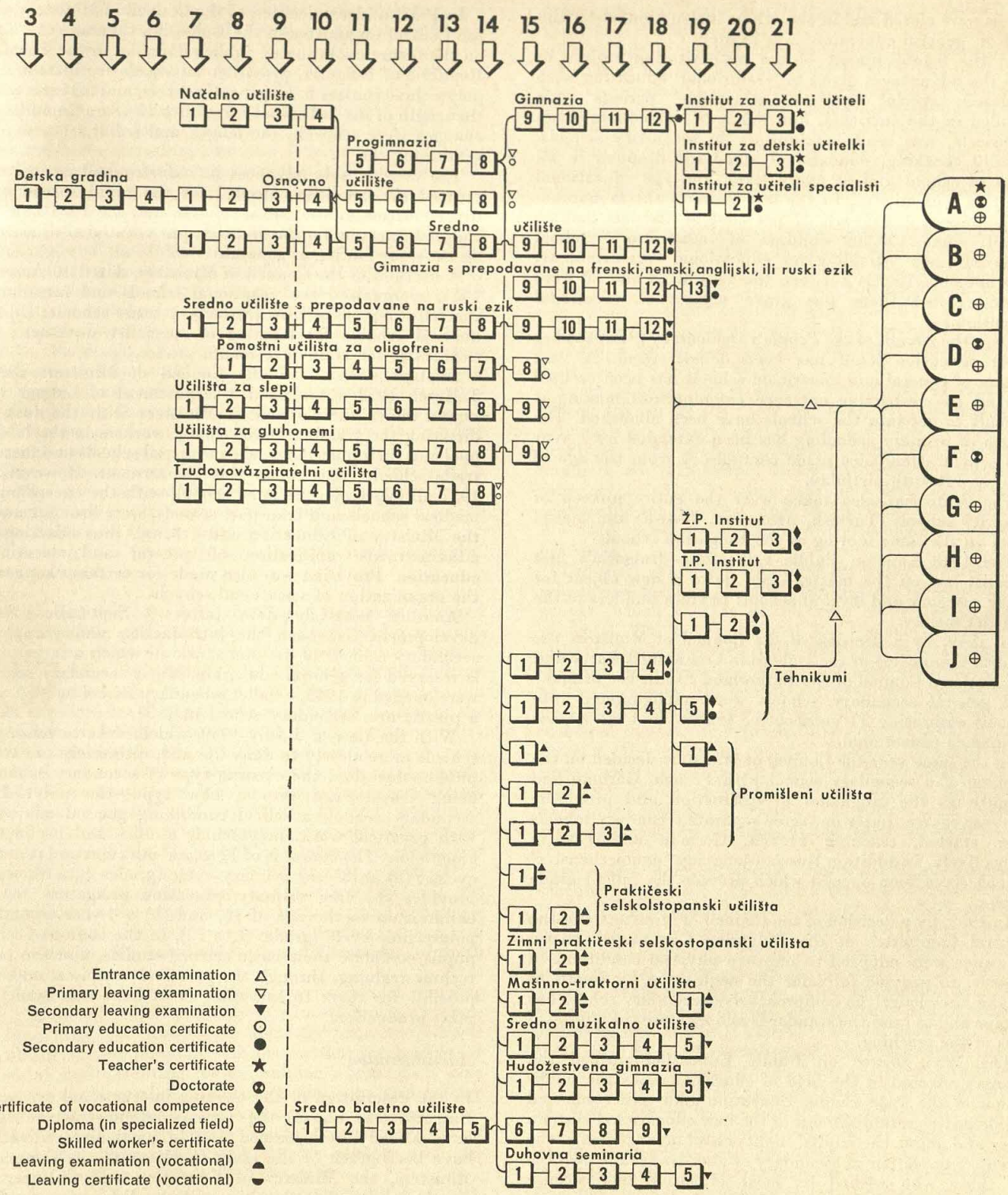
After the *coup d'état* of 9 June 1923 the number of secondary schools was considerably reduced; admissions were restricted with the institution of an entrance examination; and traditional education—the 'humanities'—expanded at the expense of science teaching and practical studies. The same trends appeared in the special laws on vocational education. A large proportion of the vocational

GLOSSARY

detska gradina (kindergarten): pre-primary school; there are kindergartens for handicapped as well as for normal children.
duhovna seminaria (seminary): vocational secondary school preparing for entry to priesthood.
gimnazia: general polytechnical secondary school with vocational training.
gimnazia s prepodavane na frenski, nemski, anglijski ili na ruski ezik: general secondary schools in which the medium of instruction is French, German, English or Russian.
hudozestvena gimnazia: vocational secondary school of art.
institut za detski učitelki: teacher training college for teachers in kindergartens.
institut za načalni učiteli: teacher training college for teachers in primary schools.
institut za učiteli spécialisti: teacher training college for teachers of practical subjects in general polytechnical secondary schools and vocational schools.
mašinno-traktorni učilišta: vocational training school for agricultural workers and technicians.
načalno učilište: lower primary school.
osnovno učilište: primary school.
pomoštni učilišta za oligofreni: school for mentally defective children (from age 8).
praktičeski selskostopanski učilišta: vocational training schools of agriculture.
progimnazia: upper primary school.
promišleni učilišta: vocational training schools for industrial occupations.
sredno baletno učilište: vocational secondary school of ballet.
sredno muzikalno učilište: vocational secondary school of music.
sredno učilište: general and polytechnical secondary school with vocational training, covering the complete course of general education.
sredno učilište s prepodavane na ruski ezik: secondary school, covering complete 12-years course of general education, with Russian as medium of instruction.
technikumi (technicums): technical secondary schools.
TP institut: vocational training school for postal and telecommunications officials.
trudovovazpitalelni učilišta: primary school for delinquent children.
učilišta za gluhonemi: primary school for deaf and dumb children.
učilišta za slepi: primary school for blind children.
Z.P. institut: vocational training school for railway officials.
zimni praktičeski selskostopanski učilišta: vocational training school for agriculture (winter courses).

HIGHER EDUCATION

A. State University.
B. Teacher training college for teachers in general polytechnical secondary schools and vocational schools.
C. Institutions of higher technical education.
D. Agricultural colleges.
E. Economics and finance institutes.
F. Colleges of fine arts, music, drama.
G. Medical institutes.
H. Higher Institute of Physical Education.
I. Theological Academy.
K. Communist Party College.


3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
Načalno učilište
Detska gradina
Osnovno učilište
Progimnazia
Sredno učilište
Gimnazia
Gimnazia s prepodavane na frenski, nemski, anglijski, ili ruski ezik
Sredno učilište s prepodavane na ruski ezik
Pomoštni učilišta za oligofreni
Učilišta za slepi
Učilišta za gluhonemi
Trudovovăzpitatelni učilišta
Institut za načalni učiteli
Institut za detski učitelki
Institut za učiteli specialisti
Ž.P. Institut
T.P. Institut
Tehnikumi
Promišleni učilišta
Praktičeski selskolstopanski učilišta
Zimni praktičeski selskostopanski učilišta
Mašinno-traktorni učilišta
Sredno muzikalno učilište
Hudožestvena gimnazia
Sredno baletno učilište
Duhovna seminaria
A
B
C
D
E
F
G
H
I
J
Entrance examination
Primary leaving examination
Secondary leaving examination
Primary education certificate
Secondary education certificate
Teacher's certificate
Doctorate
Certificate of vocational competence
Diploma (in specialized field)
Skilled worker's certificate
Leaving examination (vocational)
Leaving certificate (vocational)

schools were closed and in the others instruction under the head of 'general education' was limited.

On the establishment of the authoritarian régime in 1935 the advantages given to 'traditional' education were increased: special 'national education' periods were included in the curricula, and religious instruction, given by priests, was made compulsory in secondary schools. Broadly speaking, educational standards dropped in all types of school and at every level, and the educational situation was critical. In the last years of the monarcho-fascist régime (1943–44), 27 per cent of districts had no school; some 100,000 children of 'compulsory' school age, were not attending an educational establishment; over 500,000 citizens between the ages of 15 and 50 were illiterate; and there was grave neglect of vocational education.

Since the advent of the People's Democracy (9 September 1944) education itself has been democratized. A vast system of general and vocational schools has been created and all the restrictive entrance examinations making it difficult to get into the schools have been abolished. The length of primary schooling has been extended by 1 year and school attendance made compulsory from the age of 7 to the fifteenth birthday.

The State has also taken over the entire upkeep of minority schools (Turkish, Armenian, Jewish) and placed them on the same footing as the Bulgarian schools.

The 1948 Law on Public Education—Bulgaria's first socialist law on the matter—laid down a new object for every category and level of school: to train builders of the socialist society.

In 1949, by a decision of the Council of Ministers the Central Committee of the Bulgarian Communist Party and the National Council of the Fatherland Front, the primary and general secondary schools were amalgamated into schools embracing 11 consecutive grades, and all schools became co-educational.

In the same year the Council of Ministers decided on the opening of a secondary school with French, German and English as the languages of instruction and providing a 5-year course. Later on, three separate secondary schools were started, teaching French, German and English respectively. In addition Russian-language 'comprehensive' schools have been opened which provide the full 11-grade course.

In 1952, by a decision of the Council of Ministers and the Central Committee of the Bulgarian Communist Party, measures were adopted to improve physical conditions in schools, to provide fully for the acquisition by pupils of all the knowledge the comprehensive secondary school has to give and to raise the standards and increase the effectiveness of the teaching.

The 1954 Decree on Public Education ratified the changes effected in the field of education since the publication of the 1948 Public Education Law and confirmed the definitive establishment of the new educational system. Over and above the adults' night school arrangements, the private completion of secondary studies was made possible for those who wished it; local education bodies were encouraged to use their initiative; and powers were given for the expeditious settlement of questions relating to the development and improvement of education in the country.

In 1957, under a decision of the Council of Ministers and the Central Committee of the Bulgarian Communist Party on the future evolution of public education in the People's Republic of Bulgaria, provision was made for introducing polytechnic courses in all general schools, and for increasing the length of the full course from 11 to 12 years. In addition changes were made in the length and subdivision of the academic year.

The considerable advances in industry and agriculture created the conditions needed for the rapid spread and diversification of vocational schools, and the 1948 Law on Public Education for the first time put vocational education on the same footing as general.

A decision of the Council of Ministers, dated 10 August, 1951, reorganized the vocational schools and introduced the following categories: (a) factory trade schools; (b) industrial schools for training of specialist workmen; (c) *technicumi* for training foreman grades.

Another decision of the Council of Ministers dated 3 March 1952, established a Department of Labour Reserves under the Council of Ministers with the task of directing the training of the young workers in the labour pool and their placement; the industrial schools and factory trade schools came under this Department. However, in 1957 all types of vocational school, with the exception of medical schools and transport schools, were brought under the Ministry of Education and Culture, thus effecting an administrative unification of general and vocational education. Provision was also made for certain changes in the organization of vocational schools.

Another post-Liberation (after 9 September 1944) development has been the introduction and growth of secondary schools of art and music in which a large place is reserved for general education. Music secondary schools were opened in 1945, a ballet secondary school in 1950, and a plastic arts secondary school in 1951.

With the Law of 3 July 1959, which seeks to relate the schools more closely to daily life and, ultimately to extend public education, the existing type of secondary school is being transformed into a new type—the polytechnic secondary school, a school combining general education with practical work, polytechnic studies and production experience. The course is of 12 years' duration and is in two cycles: (a) an 8-year primary cycle (grades 1 to 8), which provides the free primary education obligatory for all children up to the age of 16, and (b) a 4-year secondary polytechnic cycle (grades 9 to 12), in the course of which pupils complete their basic science studies, and the polytechnic training, through the practical exercises, makes it possible for them to specialize in at least one branch of mass production.

Administration

In the description of the existing instructional system in Bulgaria (see above) the various administrative organs have already been named and in particular indications have been given of the main functions of the Council of Ministers, the Ministry of Education and Culture, the Provincial People's Councils and the Education Sections attached to them.

Curricula and syllabuses for all types of secondary

school are prepared by the Ministry of Education and Culture; those for the general schools must also be approved by the Council of Ministers.

The Higher Committee for Education is a consultative body to advise the Ministry of Education and Culture—on questions affecting school education, notably the most important draft laws, study schemes, the principles informing the curriculum and the fundamentals of Communist education. Its members are partly elected and partly *ex officio*.

Basic methodological questions are examined and settled by the Ministry with the help of the Institute of Pedagogics of the Bulgarian Academy of Sciences, and the in-service teacher-training institute. These institutes organize extension courses for teachers to improve the latter's intellectual standards and teaching skills, which may or may not involve them absenting themselves from their duties. Pedagogical bureaux have also been attached to the Education and Culture sections to study and circulate the best of what teachers have learnt in practice. The policy applied by the Ministry of Education and Culture, and all other organs of education, is directed to combating rigidity in teaching methods.

The textbooks used in all schools must be approved by the Ministry of Education and Culture. They are issued by a special State publishing enterprise and distributed by the State Books and Publications sales combine.

Teaching aids are made by a special State enterprise, Outchtechprom.

Control. General control of schools and studies is exercised by the Ministry of Education and Culture, and it oversees the way in which its rulings and directives are applied, either directly, or through the Education and Culture Sections attached to the Provincial People's Councils.

As the agencies of the Provincial Peoples' Councils, the Education and Culture Sections have entire responsibility for the organization of education and for the ideological, instructional and other school activities in all establishments within their areas. The provincial sections discharge their task of control and supervision through a corps of specialist inspectors who supervise the activities of secondary school teaching staff and principals. Measures prescribed by the inspectors are binding on principals.

The provincial Education and Culture Sections are responsible for the appointments, transfers and dismissals of all principals and teachers and are further in charge of the measures for improving the qualifications of both categories.

The provincial sections are also responsible for ensuring the regular allocation of funds to educational institutions in their area and drawing up plans for projected schools and hostels in conjunction with the sections responsible for planning and executing major building works. They also draw up the annual and long-term education and culture plans for their respective provinces.

The local People's Councils handle the procurement of general and educational supplies for schools and the necessary funds are put at their disposal.

Each school principal is personally responsible to the Ministry of Education and Culture and to the local People's Council for all that goes on in his institution. His rights and duties are laid down in the regulations for general and vocational schools respectively.

Principals of secondary schools—whether general, vocational or art schools—are selected from among persons who are graduates of an institution of higher education, who are authorized to teach, and who have had at least 5 years' practical experience. Principals of vocational and art schools must also have had some experience in production or the pursuit of art. Principals of general and vocational schools are appointed by the provincial Education and Culture Section under which they will serve, but principals of art schools are appointed by the Ministry of Education and Culture. In general schools, unless there are over 15 classes, the principal must do a certain number of hours teaching himself; in vocational schools and art schools he is exempt from this obligation.

In general schools with more than 18 classes the principal is assisted by an assistant principal and when there are more than 29 classes, by two.

In technicums with more than 350 pupils and vocational schools with more than 250, one assistant principal is put in charge of classroom work and a second in charge of practical work and production experience; where the numbers are respectively below 350 and 250 there is a principal in overall charge with one assistant principal responsible for practical work and production experience. Assistant principals are required to give 6 hours instruction per week.

The most important questions regarding the life of the school and teaching methods are put up to the teachers' council which acts as an advisory body to the school principal. The membership of the teachers' council is as follows: the school principal, who acts as chairman, the assistant principal, the entire teaching staff, the leader of the 'brigades' (in general schools), the instructors (in vocational schools), the doctor and the librarian. The principal may invite representatives of the local People's Council, the chairman of the Parents' Committee, representatives of social and political organizations, of the Dimitrov Union of Popular Youth and, in the case of vocational schools, of various enterprises and administrations, to attend meetings of the teachers' council.

Supervision and inspection. Supervision of secondary schools is ensured by the Education and Culture Sections under the Provincial People's Councils, to which specialist inspectors are attached. The latter are selected by the Executive Committees of the Provincial People's Councils from the best secondary school teachers with at least five years' practical experience. The inspectors deal with everything relating to the organization and quality of schooling and teaching activities in the province. Within their own fields of specialization, they also supervise the out-of-school activities of teachers, their basic task being to get results from every teacher in his own field comparable to those achieved by the best of his colleagues.

The provincial Education and Culture Sections, helped by the pedagogical bureaux, co-ordinate the work of the inspectors. The bureaux share with the inspectors the task of preparing and organizing lectures designed to raise the ideological, political, scientific and methodological standards of teaching staff, and their heads, with active assistance

from the inspectors, publish provincial bulletins on teaching questions, mainly with a view to making known the results of the most satisfactory teaching experiments. The bureaux also ensure close co-ordination of their own activities with the educational and cultural activities of the provincial trade union authorities and with work of the provincial committees of the Dimitrov Union of Popular Youth.

The Ministry of Education and Culture, through its 'methods' experts, affords scientific and methodological assistance to the inspectors attached to the provincial Education and Culture Sections.

Finance. Under Articles 79 and 80 of the Constitution of the People's Republic of Bulgaria, the State wholly maintains all educational establishments in the country. The People's Republic of Bulgaria has a consolidated budget which incorporates the national budget and the budgets of the Provincial Councils and State Social Insurance. The appropriations required for plant maintenance and equipment and building operations for establishments of nation-wide importance are included in the budget of the Ministry of Education and Culture, and for those of local importance only, in the special Education and Culture section of the budgets of the Provincial Councils.

Annually, before the end of the financial year, each educational establishment prepares estimates of its expenses for the following year: salaries, school supplies, library books, scholarships, meals, capital expenditures, supply of clothing and bedding, repairs, prizes, fêtes, decoration, etc.; heads of Education and Culture Sections check and approve the estimates of educational establishments in their charge.

The funds for the building of new establishments are provided under the budget of the provincial Education and Culture Sections and used in accordance with the building scheme prepared. Appropriations for school building also cover the costs of full equipment of the premises.

Staff salaries consist of base salary plus supplements. The base salary is intended as remuneration of teaching in school and covers the number of hours in class required of each teacher over the year. Teachers' weekly norms are fixed by administrative decision and are from 18 to 24 hours according to the category of school and the subject taught. When the time worked is above or below this norm, the base salary is increased or reduced correspondingly. Teachers with regular secondary school appointments receive increments averaging 10 per cent every five years. Teachers receive extra pay for work done over and above their normal duties—e.g., doing a colleague's work in addition to their own, during his temporary absence. Extra payments are also made to teachers taking charge of certain activities outside their classwork proper—running a library, or school society, acting as secretary of the teachers' council, running a methodological information room, laboratory, experimental unit, testing plot or study group, correcting compositions, etc., for each of which a single fixed fee is payable. For other activities, such as running a choir, orchestra, or physical culture class, payment is on the basis of a stipulated number of hours worked per week, which are added to the teachers' hours of classwork in calculating his base salary.

Although secondary education is not compulsory for the moment, it is open to all without any restriction. Dues paid by pupils in general schools are extremely low and not meant to cover the real cost of schooling, and are waived in the case of the permanently disabled, widows and orphans of the Patriotic War and the Resistance. For large families, fees are reduced by 50 per cent for the first child, 75 per cent for the second child, and waived entirely in respect of the third and subsequent children.

The State allocates considerable sums yearly for assistance to pupils taking secondary education. Pupils of all categories of secondary school whose parents are in temporary difficulties are given scholarships until completion of their studies.

Buildings and equipment. Schools are built on sites which have been previously approved by a special commission and must be of an area proportionate to the number of pupils, on the basis of a minimum of 12 square metres per head, exclusive of the school's base area. In very thickly populated districts the prescribed open space may be reduced by 35 per cent. Its allocation is as follows: 35 per cent for playing fields, 25 per cent for testing plots, 20 per cent for gardens and flower beds, from 5 to 10 per cent for livestock accommodation and out-buildings.

School buildings should not be over 3 storeys high, but 4 storeys are permissible in the capital. A minimum of 13 cubic metres of space per pupil must be provided.

In every secondary school provision is made for physics, chemistry and biology laboratories, drawing and music rooms, a medical and dental room, a library and reading room, a canteen, a kitchen, workshops for the various branches of industrial production, a gymnasium with cloakroom and showers, etc. Classrooms must not be larger than 8.6 metres long by 3.8 metres wide, and must be 3.4 metres in height to permit of tall windows. Each pupil in a classroom must have not less than 1.16 square metres floor space and 4 cubic metres of air. The ratio of the glazed areas of a classroom's outside windows to its floor space must be 1 : 4.

School welfare services. All schools are under the supervision of doctors and the State's medical services provide the necessary treatment. Anthropometric and psycho-physiological observations are made of each pupil.

Like all other citizens, teachers and pupils are entitled to free medical attention in case of illness or when prophylactic measures are called for.

TYPES OF SECONDARY EDUCATION

General secondary schools

The general secondary school, with 12 year course (grades 1–12), covers three cycles of education: elementary (4 years), intermediate or upper primary (4 years) which goes from the fifth to the eighth grade, at which grade compulsory education stops, and a senior or secondary stage (4 years, grades 9–12).

These three cycles may also be split up and given respectively in an elementary, an upper primary and a

secondary school, or the first two courses may be combined in an 8-year primary school.

Apart from these schools, general education is provided in the following establishments:

1. Upper primary night schools, night secondary schools incorporating the upper primary cycle, and night secondary schools proper: in schools of this category, 4 hours of study are done on 5 evenings a week, with 1 evening set aside for individual work and 'tutorials'. Students employed in factories or offices have their working day reduced to 7 hours without loss of pay or salary.
2. Twelve-grade sanatorium schools for tubercular and tuberculosis-prone children, or children who have been in contact with sufferers from the disease.
3. Twelve-year secondary schools (grades 1–12) with all teaching in Russian.
4. Secondary schools with French, German or English as the language of instruction (general secondary school course plus a year of preparatory study).

There are special study plans for these four types of school, but taken as a whole the subjects taught do not differ from those in the ordinary general secondary school.

General secondary education is open without restriction to those who have completed compulsory primary schooling.

Curriculum. The object of the general secondary schools is to give pupils a systematic and lasting knowledge of scientific principles and to develop habits and aptitudes in them which are consonant with the public interest. Under the new law, the general secondary schools now become polytechnics where the teaching is slanted towards production. Their main task is to train the young for life in the sense of equipping them to take their place in production and undertake work of use to the community, while concurrently fitting them to continue their studies in a centre of higher education.

Achievement testing. In every type of school, pupils' results are evaluated in terms of a scale of 6 markings and assessments: perfect (6), very good (5), good (4), fair (3), weak (2), bad (1).

At the end of the year, pupils who obtain at least a 'fair' for every subject are promoted to the next grade. Those marked 'weak' in more than two subjects are held back for a year. Pupils whose assessments include one 'weak' (or two at most) are held over to sit another examination at the beginning of the forthcoming school year. If they pass, they are promoted to the next grade; if they fail, they have to repeat the previous one. A grade can only be repeated once and no more than two grades may be repeated by a pupil during his school career.

Pupils who complete the last grade of the secondary school without having had any 'weak' assessments, take the secondary school leaving examination. It is taken in two parts—one in June and the other in September. The examination tests are the following: Bulgarian language (oral and written), mathematics (oral and written), Russian language (oral), physics (oral), chemistry (oral), Bulgarian history (oral). Pupils whose marks throughout secondary school give an arithmetical average rating the assessment 'very good' are exempted from sitting the secondary school leaving examination, with the exception of the written papers on Bulgarian language and mathematics which are compulsory for all candidates.

Candidates may attempt the complete secondary school leaving examination twice within 2 years after completion

TIME-TABLE FOR POLYTECHNICAL SECONDARY SCHOOLS
(in periods per week)

Subject	Year of schooling, with weeks per year in parentheses											
	1 (31)	2 (31)	3 (31)	4 (31)	5 (34)	6 (34)	7 (34)	8 (30)	9 (34)	10 (34)	11 (34)	12 (30)
Bulgarian language and literature	11	11	11	7	6	6	5	4	3	3	3	4
Russian	—	—	—	—	3	3	2	2	2	2	2	2
A Western language	—	—	—	—	—	—	2	2	2	2	2	1
Mathematics	5	5	5	5	5	5	4	5	5	4	3	3
Physics	—	—	—	—	—	2	2	2	2	2	3	3
Astronomy	—	—	—	—	—	—	—	—	—	—	—	1
Chemistry	—	—	—	—	—	—	2	2	2	2	2	2
Biology and geology	—	—	—	2/1	2/1	1	2	2	2	2	2	—
Geography	—	—	—	1/2	2	2	2	2	2	2	1	—
History; study of the Constitution	—	—	—	2	1/2	2	2	2	2	2	2	2
Elements of Communist theory	—	—	—	—	—	—	—	—	—	—	—	2
Psychology and logic	—	—	—	—	—	—	—	—	—	2	—	—
Physical training	2	2	3	3	3	2	2	2	2	2	1	1
Drawing	1	1	1	1	2	2	1	1	1	—	—	—
Singing	1	2	2	2	2	2	1	1	1	1	—	—
Total	20	21	22	23	26	27	27	27	26	26	21	21
Technical subjects												
Production work experience	2	2	3	3	3	3	3	2	—	—	—	—
Technical drawing	—	—	—	—	—	—	—	—	2	—	—	—
Crop and stock management	—	—	—	—	—	—	—	2	—	—	—	—
Rural mechanization	—	—	—	—	—	—	—	—	1	—	—	—
Elements of machine operation	—	—	—	—	—	—	—	—	3	—	—	—
Cars and tractors	—	—	—	—	—	—	—	—	—	2	—	—
Practical electricity	—	—	—	—	—	—	—	—	—	—	2	—
Total	2	2	3	3	3	3	3	4	6	2	2	—
Vocational training (theory and practice)	—	—	—	—	—	—	—	—	—	5	10	12
Grand total	22	23	25	26	29	30	30	31	32	33	33	33
Optional subjects												
Shorthand	—	—	—	—	—	—	—	—	2	2	—	—
Russian	—	—	—	—	2	2	2	2	2	2	2	2
A Western language	—	—	—	—	—	—	2	2	2	2	2	2
Music	—	—	—	—	—	—	—	—	2	2	2	2
Drawing	—	—	—	—	—	—	—	—	2	2	2	2

Remarks.

1. In grades 8–12 pupils do two weeks of 'polytechnical' practical work (grades 8 and 9) or 2 weeks of vocational training (grades 10,11 and 12).
2. In grades 5, 6 and 7, one of the 3 hours per week allocated to production work experience is reserved for work on the experimental plots.
3. For grades 1–11 inclusive, two weeks are reserved for excursions and work of public utility.
4. For modern language teaching (Russian and Western European) laboratory work (chemistry, physics, biology) and practical work (carpentry, metalwork, elements of machine operation, electricity, cars and tractors, rudiments of rural economy) classes of over 25 pupils are split into two groups. For physical training, classes of over 36 are also split; in co-educational classes, the girls form one group and the boys another.
5. In the first grade the periods are 35 minutes long; in all other grades, 45 minutes.

of secondary education. The school leaving certificate is granted to candidates marked not less than 'fair' in all subjects. Those marked 'weak' in three or more subjects must take the whole examination again, while those marked 'weak' in one subject (or two at most) may be deferred to the following session; they are entitled to two such deferments for any given subject.

Gold and silver medals are awarded to secondary school graduates who complete their studies with the assessment 'perfect' for both work and conduct.

Successful completion of secondary schooling entitles young people to continue their studies in any institution of higher education, in particular the State University and the technicums at post-secondary level.

Division of the school year. The school year is divided identically in all general secondary schools, running from 15 September to the end of June, after the examinations, with a winter holiday from 31 December to 11 January and a spring holiday from 1 to 7 April; the summer holidays are from the end of June to 15 September.

There are three school terms in the year: first term, 15 September–30 December; second term, 12 January–31 March; and third term, 8 April–10 June. Every pupil is tested in all subjects each term and parents are kept informed of the results.

On average there are 5 hours of classwork per day concentrated in one half of the day, and a 6-day school week. Periods are 45 minutes in length with breaks of 10 minutes each, increased to 20 minutes every third period.

Teaching staff. Secondary school teachers must have completed higher education. They are trained at the University, the Conservatorium of Music, the Academy of Fine Arts and the Higher Institute of Physical Culture. Extension courses for teachers are provided at special institutes.

Mathematics and language teachers do 18 hours classwork per week and other teachers 20 hours. In night schools the hours worked are reduced by 2 a week. Teachers have 60 days of paid holidays per annum.

Teaching staff and school principals are appointed and transferred by the provincial Education and Culture Sections in accordance with special regulations.

Teachers belong to a single trade union. They participate freely in the political and social life of the country and may be elected to the People's Councils and the National Assembly.

Women teachers retire at the age of 50 or after 20 years' teaching service; for men the retirement age is 55, and length of service 25 years.

Special schools (palliative-corrective schools)

There are special schools to provide primary education for blind, deaf and dumb or mentally retarded children. There are also special schools for the re-education through work of children with anti-social tendencies.

The entrance age for special schools is 7 years, except at the schools for mentally retarded children (auxiliary schools), where it is 8; this allows of more judicious selection among retarded children and the creation of conditions more favourable for their school activities and training, in the light of their ages and psychological peculiarities.

The length of the course is 8 years in schools for retarded children and schools of re-education through work, and 9 years in schools for blind or deaf and dumb children. In schools of the two latter categories, job-training has been introduced.

In the auxiliary schools and schools of re-education, the intermediate cycle covers grades 5–8; in schools for the blind it is grades 6–9. In schools for the deaf and dumb there is a combined cycle with no division into lower primary and intermediate cycles.

After completing the course in a special school and passing the leaving examination, pupils are awarded the primary leaving certificate, which entitles them to continue their studies in higher level general schools, industrial schools and technicums.

The opening and closing dates of the school year are the same in special schools as in general schools.

So far, the teachers for the special schools have been trained in a division of the Institute of Pedagogics provided expressly for the purpose. In future they will be trained at the university.

Vocational secondary schools (technicums)

Admissions to technicums are decided by the Commission for the State Plan according to the needs of the national economy. Those eligible are persons of either sex who have completed upper primary or secondary studies but are not employed in production, and the age for admission varies: it is up to 16 for those who have completed the upper primary course (*progymnasium*), up to 18 for those who have completed the ninth grade, and up to 30 for those who have completed the twelfth grade, subject in addition to the last-mentioned having done their military service. To give young people in productive employment an opportunity to complete their secondary technical training, obtain a more advanced qualification in the field in which they are employed and attain a higher level of scientific knowledge, theoretical and practical, without abandoning their work for production, night technicums and postal study departments attached to day and night technicums have been started. Entrance qualifications are the same as for the day technicums, but the upper age limit can be raised to 40. The courses take from 4 to 5 years for students who have completed primary education and from 1 to 3 years for those who have completed secondary education.

Curriculum. The purpose of the vocational secondary school (technicum) is to produce trained supervisory grades and skilled workers, with a secondary education behind them, for all branches of the planned economy, in particular for publicly owned factories etc.; to provide the young people who attend them with the essential theoretical grounding and to develop in them the practical skills and habits of industry that will fit them for their field of work and for leadership in it. Secondary vocational schools are also intended to prepare students for further study, in institutions of higher education, to shape them to a progressive, democratic pattern and to inculcate a socially

TIME-TABLE FOR MECHANICAL ENGINEERING TECHNICUM

(special branch: machine tools)
(in periods per week)

Subject	Year of course (divided into terms), with weeks per year in parentheses														
	1 (37)			2 (37)			3 (37)			4 (35)			5 (33)		
	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
General															
Bulgarian	3	3	3	3	3	3	3	3	3	3	3	3	—	—	—
Russian	3	3	3	2	2	2	2	2	2	—	—	—	—	—	—
Mathematics	5	5	5	6	6	6	3	3	3	3	3	3	—	—	—
Physics	2	2	2	2	2	2	—	—	—	—	—	—	—	—	—
Chemistry	2	2	2	2	2	2	—	—	—	—	—	—	—	—	—
History: study of the Constitution	2	2	2	2	2	2	2	2	2	—	—	—	—	—	—
Physical training	2	2	2	2	2	2	2	2	2	1	1	1	—	—	—
A Western language (optional)	2	2	2	2	2	2	2	2	2	—	—	—	—	—	—
Total	21	21	21	21	21	21	14	14	14	7	7	7	—	—	—
General technical															
Technical drawing	3	3	3	3	3	3	3	3	3	—	—	—	—	—	—
Metal technology	4	4	4	2	2	2	—	—	—	—	—	—	—	—	—
Mechanical engineering	—	—	—	—	3	3	3	3	3	—	—	—	—	—	—
Strength of materials	—	—	—	—	—	—	4	4	4	—	—	—	—	—	—
Elements of machines	—	—	—	—	—	—	—	—	—	4	4	5	2	2	—
General electrotechnics	—	—	—	—	—	—	2	2	2	4	3	3	—	—	—
Total	7	7	7	5	8	8	12	12	12	8	7	8	2	2	—
Special technical															
Design	—	—	—	—	—	—	—	—	—	4	4	5	4	3	—
Hoisting machinery	—	—	—	—	—	—	—	—	—	—	—	—	2	4	—
Heat engines, pumps and compressors	—	—	—	—	—	—	—	—	—	5	4	2	2	2	—
Machine-tools	—	—	—	—	—	—	2	2	2	5	4	4	4	3	—
Permissible tolerances and engineering measurements	—	—	—	—	—	—	2	2	2	—	—	—	—	—	—
Technology of machinery construction	—	—	—	—	—	—	—	—	—	—	3	3	5	6	—
Organization, costing and fixing of norms	—	—	—	—	—	—	—	—	—	—	—	—	5	6	—
Safety measures and fire precautions	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	3	—	—	4	4	4	14	15	14	22	22	—
Practical work															
General metal working (1st, 2nd and 3rd years)	10	10	10	10	10	10	10	10	10	—	—	—	—	—	—
Fitting and turning	—	—	—	—	—	—	—	—	—	10	10	10	15	15	—
Production work experience 7 weeks of 46 hours	—	—	—	—	—	—	—	—	—	—	—	—	—	—	46
Total	38	38	38	39	39	39	40	40	40	39	39	39	39	39	46

Remarks.

1. At the end of the fourth year, students take their final examinations in Bulgarian language and in mathematics.
2. The course leads up to a state examination in the following subjects: practice in the speciality taught; design; elements of machines; machine tools.

and politically scientific outlook on the world which will equip them to build a socialist society.

In ordinary day and night technicums both general education and specialist theoretical subjects are taken. Practical work is done only in the day technicums, where it is allotted roughly the same amount of programme time as general education and special theoretical subjects. In these day technicums, where the pupils have completed secondary education before admission, teaching is confined to the special theoretical subjects plus political economy or the principles of Marxism-Leninism, and practical work makes up the balance.

The accompanying schemes of studies for a mechanical engineering and an agricultural technicum respectively give some idea of the subjects taught and their general level. (It should, however, be borne in mind that these schemes of study are to be amended in accordance with the new law on education.)

A notable feature of these courses is the practical work, designed to relate theory to practice and to enable students to familiarize themselves with the various operations of production. For practical work classes are generally divided into two groups with a teacher in charge of each.

Teaching and assessment methods, and the conditions for promotion from one grade to the next are the same as in other secondary schools. Students in the technicums

TIME-TABLE OF AN AGRICULTURAL TECHNICUM
(in periods per week)

Subject	Year of course, with weeks per term in parentheses												Laboratory exercises
	1			2			3			4			
	I (15)	II (11)	III (9)	I (15)	II (11)	III (7)	I (12)	II (10)	III (6)	I (13)	II (4)		
General													
Bulgarian	5	5	5	4	4	4	3	3	3	—	—		—
Russian	4	4	4	2	2	2	2	2	2	—	—		—
Mathematics	5	5	5	4	4	4	2	3	3	—	—		—
Physics; agricultural meteorology	5	4	4	2	2	2	—	—	—	—	—		24
Chemistry	5	4	5	2	3	2	—	—	—	—	—		70
History	4	3	3	2	2	2	2	2	2	—	—		—
Physical training	2	2	2	2	2	2	2	2	2	—	—		—
A Western language (optional)	2	2	2	2	2	2	2	2	2	—	—		—
Work on the local collective farm	1	2	2	—	—	—	—	—	—	—	—		—
Total	33	31	32	20	21	20	13	14	14	—	—		94
Special													
Botany	5	4	4	—	—	—	—	—	—	—	—		46
Evolution by natural selection	—	—	—	—	—	—	—	—	—	3	3		—
Geodesy	—	—	—	—	—	—	—	3	3	—	—		18
General agriculture and pedology (soil science)	—	—	—	7	5	5	6	—	—	—	—		64
Crop growing	—	—	—	—	—	—	4	3	3	7	7		58
Seed selection and production	—	—	—	—	—	—	—	—	—	5	5		25
Crop protection	—	—	—	—	—	—	—	—	—	7	7		42
Stock farming and dairying	—	—	—	4	4	4	3	3	3	—	—		52
Bee-keeping	—	—	—	—	2	3	—	—	—	—	—		15
Sericulture	—	3	2	—	—	—	—	—	—	—	—		17
Soil improvement and forestry	—	—	—	—	—	—	2	3	3	—	—		16
Horticulture, viticulture:													
viticulture	—	—	—	2	2	—	—	—	—	—	—		—
fruit-growing	—	—	—	4	2	3	—	—	—	—	—		45
horticulture	—	—	—	—	—	—	3	3	3	—	—		—
Mechanization and electrification on the farm	—	—	—	—	2	3	2	3	3	6	6		60
Economics of agriculture and elements of book-keeping	—	—	—	—	—	—	5	6	6	8	8		60
Total	5	7	6	17	17	18	25	24	24	36	36		518
Grand total	38	38	38	37	38	38	38	38	38	36	36		612

for general secondary graduates take half-yearly examinations. In the other technicums, promotion to the next class is determined by the marks obtained during the year.

To relate theory more closely to practice and school work to daily life, and to establish more direct contact with industrial and agricultural production by accustoming technicum pupils to the actual conditions they will find there; farm, factory, etc. attachments are arranged for students at the end of each of the last 2 years, and take place on completion of the theoretical and practical syllabus. They are an integral part of the education process and amplify the teaching given, by 'exposing' students to the actual working conditions prevailing in industry or agriculture. Students work under the same conditions as ordinary workmen and are paid for their labour. At the end of the period they are given individual assessments of their work which are noted on their diplomas.

Achievement testing. In some technicums students sit for their pass in Bulgarian language and mathematics at the end of the last year but one, while the final year ends with a state examination comprising practical tests in the field of specialization chosen and tests on three or four special disciplines. In other categories of technicum, at the end of the final year students submit a thesis for their diplomas on a subject of their instructor's choice within their field of specialization, and their handling of it must show reasonable soundness of judgement.

Students who completed secondary vocational training level in a technicum are given the qualification of 'certificated technician (secondary)', which qualifies them for supervisory posts under senior supervision in their field of specialization in state farms, factories, etc., or other collective agricultural and industrial enterprises. Alternatively they can pursue their studies in a centre of higher education.

The school year. In secondary vocational schools the academic year begins on 15 September and ends on 28 June, so that pupils can rest during July and August and the first half of September while contributing to production in factory or field. In technicums which take pupils on completion of the upper primary course the year is divided

into three terms and into two in those where entry is after completion of secondary school; postal students also work a two-semester year. There are holidays in the winter from 29 December until 10 January and in the spring from 30 March until 5 April. The first term is from 15 September until 28 December; the second, from 12 January until 29 March; the third, from 6 April until 28 June.

The length of the school year is the same for two-semester as for three-term schools and the holidays are on the same dates. In two-semester schools the winter semester is from 15 September to 8 February and the summer semester from 9 February to 28 June with a break in each for the winter and spring holidays respectively. A 6-day week is worked, with 5 days actually in school; for second, third, fourth and fifth-year pupils one day being reserved for work in an industrial or agricultural undertaking. The classroom periods are the same length as in the general schools. The length of practical periods is 55 minutes, with a break after every two periods.

Teaching staff. The staff for teaching the special subjects are selected from: (a) persons who have completed higher education specializing in a given branch and have done the full course of the training institute for vocational school teaching staff; (b) graduates of the university-level special schools in the 'professional' category; (c) graduates of vocational secondary school (technicums), with two years' subsequent work experience and two years of study at the training institute for instructors responsible for practical work in the vocational schools.

Vocational training schools

These schools are day establishments training skilled workers. Students attend full-time and do not undertake production work. The Commission for the State Plan controls admissions according to skilled labour requirements in the various sectors of the economy. Candidates for admission to vocational training schools must have completed upper primary education, with the following exceptions: for the post office, engineering and mining schools the minimum requirement is completion of the ninth grade; and secondary education must have been completed for admission to the training schools for radio and cinema operators. Secondary school graduates are also eligible for the schools for machine operators and tractor drivers. In the vocational training schools accepting completion of upper primary education, the courses are from 1 to 3 years in length. Where the requirement is completion of the ninth grade or of secondary education the length of course is from 12 to 18 months.

Various categories of vocational training school have been started corresponding to the different sectors of the national economy.

Curriculum. The weekly hours of work in vocational training schools are more than in vocational secondary schools, rising to 42. The ratio between general education, specialist theory and specialist practical training in the course is approximately 1 : 1 : 2. The emphasis is placed on practical work and training for production to give students a solid practical qualification. The following scheme of studies gives some idea of the level of studies in these establishments.

TIME-TABLE OF VOCATIONAL TRAINING SCHOOL FOR THE METAL INDUSTRIES
(in periods per week)

Subject	1 (36)	2 (36)	3 (26+10[1])
General			
Bulgarian language	2	2	2
Russian	2	2	—
Mathematics	3	2	2
Physics	2	2	—
Chemistry	—	—	—
History	2	2	2
Physical training	2	2	2
Total	13	12	8
Technical Subjects			
Technical drawing	3	2	2
General technology	4	—	—
Strength of metals and mechanical engineering	—	2	2
Applied electricity	—	—	2
Special technology	—	3	3
Total	7	7	9
Practical work			
General:			
forgings	4	—	—
castings	4	—	—
fitting	4	—	—
turning and milling	4	—	—
Specialization	—	19	21
Total	16	19	21
Work experience[1]			(46)
Grand total	36	38	38

1. The third term of 10 weeks is devoted to work experience.

On leaving the vocational training school pupils are qualified as 'skilled workmen' in a specific field of specialization and are eligible for employment in state or other public enterprises. Graduates of vocational training schools have the right to continue their studies in a technicum, for the same field of specialization, subject to passing supplementary examinations in these disciplines included in the technicum curriculum for the appropriate grade but not taught at the vocational training school they attended.

To help young people to get their bearings in the choice of an occupation, information and introductory sessions and courses are arranged by schools and political and social organizations. To attract young people to the vocational training schools of the greatest social value, hostels are attached to them and study grants made to those attending.

Training courses. The purpose of training courses is to acquaint workers with the basic scientific and technological achievements in their particular field. The duration of the

courses is from 2 to 6 months and they are started, in the light of needs and conditions locally, for the training and retraining of workers and to improve their standard of training. Workmen are usually forced to discontinue production work to be able to attend the courses, but when the management of a factory or works wants to teach workmen a novelty in the technical field affecting the current production processes in the factory it arranges a 30 to 40-day training course which workmen may attend without discontinuing work.

Training courses are free, the appropriate finance for particular kinds of course being provided by the administration or enterprise starting them.

The schemes of study and curricula of the courses are approved by the Ministry of Education and Culture. They consist mainly of special theory and practical work in the ratio of approximately 1 : 2.

Secondary schools of music, art and ballet

Entrance to these schools is by competitive examination open to candidates from the whole country. Almost half of the pupils are holders of state scholarships.

Schools of music. Musical education is given at three levels: primary, secondary and higher. Primary musical education is bracketed with courses taken in general primary schools and ends at the same time as the general primary course. Entrance to primary music schools is by competition, the qualifying age being the same as that for the first year of the primary general school.

Secondary music schools, which offer a 5-year course, take two types of student: boys and girls not over 16 years of age who have completed their primary education and passed the competitive entrance examination; and young men and women in employment who are not over 30 years of age and have also passed the entrance examination. Curricula and syllabuses for each specialist branch are prepared by committees comprising professors from the secondary schools of music and the State Conservatoire and other eminent national musicians who also teach music, and are then approved by the Ministry of Education and Culture.

Pupils who have completed the full course of a secondary music school sit a final examination and receive a secondary school leaving certificate which entitles them to go on to the Conservatorium (for the diploma in music), or to a training institute for upper primary school teachers, or to the departments of philology, history and geography at the University of Sofia. Alternatively they are qualified for employment in theatre or symphony orchestras or operatic choruses, as choirmasters or directors of musical ensembles, teachers in children's music schools or clubs etc.

The Fine Arts Secondary School. This school takes boys and girls not over 16 years of age who have completed primary schooling and passed a competitive examination on a special syllabus. Candidates must have obtained the rating 'perfect' (6) for industry and conduct at primary school and an overall average grading not lower than 'good' (4).

The Fine Arts Secondary School gives training in painting, sculpture and draughtsmanship, and the length of the course is 5 years. The schemes of study and curricula for each branch drawn up by commissions comprising the teachers of the Fine Arts Secondary Schools and professors from the Higher Institute of Plastic Arts, and are then approved by the Ministry of Education and Culture.

Pupils who complete the Fine Arts Secondary School course and pass the final examination are awarded a secondary school diploma which entitles them to go on to the N. Pavlovitch Higher Institute of Plastic Arts, to the departments of philology, history and geography at the University of Sofia, or to teacher training schools etc.

The Ballet Secondary School. This school trains dancers and teachers of ballet and choreography.

The classical ballet department takes pupils who have completed the third grade at general school and are not over 10 years of age.

The Bulgarian folk dance department takes pupils who have completed the ninth grade at a general school and are not over 18 years.

The length of courses is 9 years in the classical ballet, and 2 years in the Bulgarian folk dance department, respectively.

On completing the course and passing a final examination, pupils are awarded a secondary school certificate which qualifies them for the corps de ballet in the country's theatres and opera houses or alternatively for further study in a university-level school of music, dramatic art, etc., in the departments of philology, geography and history of the University of Sofia, or as leaders of dance groups etc.

Teacher training schools

Teachers for pre-primary and primary schools are trained at teacher training schools providing a 5-year course consecutive to primary education. These schools are in the process of being abolished. In future, these categories of teachers will be trained at institutes providing a 3-year course consecutive to secondary schooling.

Out-of-class activities

Out-of-class activities are an integral part of the system of education. Youth organizations, study circles and all types of society formed in the schools permit pupils to amplify and deepen their knowledge and satisfy their taste for science, culture or sport combined with active participation in the domestic life and public activities of the school.

The Dimitrov Union of Popular Youth is an organization open to all Bulgarian youth, including pupils in the upper cycle of secondary schools. Associations of the Union operating in schools have groups in every class. Pupils from 10 to 14 years of age in primary or upper primary schools (grades 3 to 8) belong to the Dimitrov Pioneers Organization. The Union and the Pioneers Organization are the schools' leading helpers in their efforts to ensure that pupils acquire lasting knowledge and an intelligent acceptance of discipline.

Physical training and sport occupy a major place in school-centred out-of-class activities. Sports groups for gymnastics, athletics and volley ball are formed in schools,

as physical conditions and the availability of qualified coaches permit. In some branches of physical activity—e.g., gymnastics, athletics, skiing, volley ball and basket ball—there are organized competitions and nation-wide championships are held annually.

Among the most widespread forms of out-of-class activity undertaken by young people at school are study circles—literature, history, geography, foreign languages, biology, etc.—and hobby clubs—wireless, electricity, car, motor cycle, printing clubs, etc.

The varieties of amateur art activities undertaken by pupils are a major factor in developing their aesthetic sense. Exhibitions of artistic work are arranged each year in the schools, with evening recitals of singing and dancing and festivals of Bulgarian and foreign art.

A laudable tradition which has developed is the annual holding in the schools of a variety of competitions in literature and history for pupils, and in the technicums competitions on the special subjects studied there. These competitions provide an occasion for pupils to produce work of quality, based on their personal researches. For the best entries prizes are awarded by the Education and Culture Sections and the Ministry of Education and Culture. There are also competitions for pupils in mathematics and physics, which help to awake livelier interest in those subjects.

In recent years the work camp movement, in which students and secondary school pupils take an active part, has made great strides. Teams have worked on a wide range of tasks—construction of small dams and irrigation canals, terracing, preparing land for afforestation, school building projects, etc. In addition to the cash value of its work the work camp movement has proved to be particularly effective for inducing the taste for work and a better grasp of the realities of life.

Each school child spends 3 weeks in a summer camp in the mountains or by the sea under optimum conditions for well-being and health, three-quarters of the maintenance costs being borne by the State. There is a great deal of travel by children, with each school arranging excursions from one to several days in length which enable the children to get to know the country better.

TRENDS AND PROBLEMS

Despite the great successes achieved, education in the People's Republic of Bulgaria does not fully meet the heightened requirements of socialist construction. The basic defects of the education system in force until now—and particularly of the general secondary school—have been due to the fact that courses were too 'bookish', and unrelated to practice and national production.

The main defect of the general secondary school has lain in its orientation, in the lack of realism which has seen its essential task as preparing candidates for higher education and appointment to administrative posts, with no attempt to train for productive work. This shortcoming was less apparent and less serious when secondary education was reserved for the few and the number of pupils completing the secondary course coincided with the number entering higher educational institutions. But it can no longer be tolerated now that the secondary school has been democratized and the normal outlet for its graduates is into employment in production.

It is in terms of these shortcomings of the educational system that its reorganization has been undertaken. The reconstruction now in progress aims at combining schooling with broadly based polytechnical training and vocational experience so that the schools will turn out well balanced citizens able to play their part in national production and cultural life. This reform also seeks to give youth trained bodies and sound moral and aesthetic values, to implant love of country and devotion to the cause of peace and co-operation between the peoples.

[*Text prepared by the Ministry of Education and Culture in September 1959.*]

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STATISTICS

Total population (mid-year 1958 estimate): 7,728,000.
Area: 43,048 square miles; 111,493 square kilometres.
Population density: 180 per square mile; 69 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58 pupil enrolment (not including adults in evening courses) reached a total of about 1,520,000, being nearly 20 per cent of the total population. Of these pupils, 18 per cent were in kindergartens, 64 per cent in primary schools, 10 per cent in general secondary education, 5 per cent in vocational education, less than 1 per cent in teacher training and about 3 per cent in university or other forms of higher education. Total enrolment increased by 12 per cent between 1953 and 1957. There were increases of 7 per cent in the kindergartens, 12 per cent in primary education, 35 per cent in general secondary education, and 66 per cent in higher education. On the other hand, enrolment

decreased by 10 per cent in vocational education, by 32 per cent in teacher training at the secondary level and by 59 per cent at the higher level.

Teachers numbered 66,290 in 1957, an increase of 16 per cent over 1953. The average number of pupils per teacher in 1957 was 24 in primary schools, 20 in general secondary schools and 16 in vocational schools and courses. (See Table 2.)

Enrolment trends in secondary education, 1939–57. Total enrolment (including adults) in general secondary education was one and a half times as high in 1952 as in 1939, even though there had been a steady decline since 1945. In the technicums there was a more or less steady rise in enrolment between 1939 and 1952. While in 1939 the technicums enrolled barely one-tenth of all secondary school pupils, the proportion grew to 30 per cent in the period 1950–52. The decrease in enrolment of general secondary education was thus offset in part by the growth of the technicums. Comparing the 1945–49 period with the year 1939, total enrolment in secondary education (including general, vocational and teacher training) showed over 100 per cent increase, thereby raising the secondary enrolment ratio from 17 to 29. Further growth in general secondary education, partly offset by decreases in vocational education and teacher training, brought the average enrolment for the period 1955–57 to 200,000 pupils, being about 35 per cent of the estimated population 15–19 years old. (See Table 3.)

Examination results in secondary education, 1953–57. The number of secondary leaving diplomas granted each year during this period was as follows: 1953/54, 30,224; 1954/55, 28,719; 1955/56, 32,991; 1956/57, 33,900; 1957/58, 32,266.

Educational finance, 1958. State budget estimates for 1958 provided 1,527 million leva for education, an average of 197 leva per inhabitant. This recurring expenditure was distributed by purpose as follows: central administration, 0.7 per cent; teachers' salaries, etc., 54 per cent; other instructional expenses, 38 per cent; other recurring expenditure, 8 per cent. (See Table 1.) The distribution by level and type of education is shown in Table 1 B.

Source. Bulgaria: Council of Ministers, Central Bureau of Statistics, reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1958 (in thousand leva)[1]

A. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure		...
Recurring expenditure[2]		1 527 247
For central administration	10 102	
For instruction		
Salaries to teachers, etc.	819 437	
Other instructional expenditure	580 675	
Other recurring expenditure	117 033	
Capital expenditure		...

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**1 527 247**		**100.0**
Central administration		10 102		0.7
Instruction		1 400 112		91.7
Pre-primary education	122 892		8.0	
Primary education	531 914		34.8	
Secondary education	463 697		30.4	
General	171 695		11.3	
Vocational	275 041		18.0	
Teacher training	16 961		1.1	
Higher education	128 329		8.4	
Special education	27 026		1.8	
Adult education	10 459		0.7	
Other education, not specified	115 795		7.6	
Other recurring expenditure, not specified		117 033		7.7

1. Official exchange rate: 1 lev = 0.149 U.S. dollar.
2. State budget estimates.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, full-time	1957/58	516	2 113	...	26 250	...
	Kindergartens, half-day	1957/58	1 622	1 858	...	62 685	...
	Kindergartens, seasonal	1957/58	4 082	5 998	...	181 501	...
	Total	**1957/58**	**6 220**	**9 969**	...	**270 436**	...
	„	1956/57	6 376	10 199	...	277 969	...
	„	1955/56	6 329	9 853	...	272 347	...
	„	1954/55	6 130	9 521	...	265 552	...
	„	1953/54	6 020	9 183	...	251 871	...
Primary	Elementary schools (grades 1–4)	1957/58	2 926	22 141	...	620 002	...
	Primary schools (grades 1–7)	1957/58	3 408	18 125	...	354 961	...
	Higher primary courses in 11-year schools (grades 5–7)	1957/58	111				
	Total	**1957/58**	**6 445**	**40 266**	...	**974 963**	...
	„	1956/57	6 383	39 003	...	944 677	...
	„	1955/56	6 385	37 178	...	920 513	...
	„	1954/55	6 398	36 044	...	893 624	...
	„	1953/54	6 360	34 470	...	869 767	...

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Secondary							
General	Secondary (11-year) schools (grades 8–11)	1957/58	198	7 525	...	146 861	...
	Gymnasiums (grades 8–11)	1957/58	104				
	Total	**1957/58**	**302**	**7 525**	**...**	**146 861**	**...**
	„	1956/57	297	6 924	...	141 672	...
	„	1955/56	285	6 098	...	133 244	...
	„	1954/55	270	5 614	...	120 108	...
	„	1953/54	263	5 289	...	109 051	...
Vocational	Technicums of industrial education	1957/58	52	1 414	...	25 997	...
	Technicums of engineering (construction)	1957/58	7	108	...	1 940	...
	Technicums of agriculture	1957/58	34	600	...	10 454	...
	Technicums of transport and communication	1957/58	1	39	...	1 103	...
	Technicums of commerce	1957/58	17	322	...	7 658	...
	Technicums of medical service	1957/58	19	70	...	5 865	...
	Schools of fine art	1957/58	6	169	...	971	...
	Schools and courses of practical technical training	1957/58	61	881	...	8 909	...
	Schools and courses of practical agricultural training	1957/58	42	526	...	6 389	...
	Schools and courses of miscellaneous practical training	1957/58	13	151	...	1 266	...
	Total	**1957/58**	**252**	**4 280**	**...**	**70 552**	**...**
	„	1956/57	256	4 178	...	70 380	...
	„	1955/56	366	3 933	...	67 619	...
	„	1954/55	305	4 477	...	75 037	...
	„	1953/54	310	4 414	...	78 125	...
Teacher training	Teacher training schools						
	Total	**1957/58**	**20**	**403**	**...**	**7 185**	**...**
	„	1956/57	22	544	...	8 989	...
	„	1955/56	23	579	...	10 814	...
	„	1954/55	23	604	...	11 066	...
	„	1953/54	23	578	...	10 568	...
Higher							
Teacher training	Teacher training colleges						
	Total	**1957/58**	**8**	**145**	**...**	**2 763**	**...**
	„	1956/57	10	211	...	3 816	...
	„	1955/56	11	250	...	4 463	...
	„	1954/55	11	272	...	5 459	...
	„	1953/54	12	297	...	6 691	...
General and technical	Engineering colleges	1957/58	6	752	...	11 863	2 849
	Other colleges	1957/58	15	1 945	...	22 760	...
	State University-Sofia	1957/58	1	512	...	6 709	3 819
	Total	**1957/58**	**22**	**3 209**	**...**	**41 332**	**...**
	„	1956/57	22	3 055	...	37 275	...
	„	1955/56	22	2 946	...	36 897	...
	„	1954/55	22	2 961	...	33 464	...
	„	1953/54	21	2 864	...	33 155	...
Special	Schools for blind children	1957/58	2	22	...	169	...
	Schools for deaf-mute children	1957/58	8	135	...	926	...
	Schools for backward children	1957/58	17	219	...	1 995	...
	Reformatories	1957/58	6	76	...	564	...
	Total	**1957/58**	**33**	**452**	**...**	**3 654**	**...**
	„	1956/57	30	386	...	3 068	...
	„	1955/56	28	327	...	2 649	...
	„	1954/55	24	225	...	2 074	...
	„	1953/54	20	180	...	1 796	...
Adults	Higher primary courses (grades 5–7)	1957/58	13	147	...	2 826	...
	Primary and secondary courses (grades 1–11)	1957/58	35	536	...	10 216	...
	Secondary courses (grades 8–11)	1957/58	25				
	Total	**1957/58**	**73**	**683**	**...**	**13 042**	**...**
	„	1956/57	93	700	...	14 790	...
	„	1955/56	101	624	...	14 192	...
	„	1954/55	107	503	...	11 746	...
	„	1953/54	114	358	...	8 585	...

3. TRENDS IN SECONDARY EDUCATION, 1939–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General [1]		Vocational [2]		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1939	82 660	...	9 764	...	354	...	93	545	*17*
1940	88 791	...	10 833	...	613	...			
1941	98 587	...	13 000	...	908	...			
1942	107 398	...	9 668	...	1 336	...	127	691	*18*
1943	115 223	...	...	...	...	...			
1944	159 039	...	19 176	...	2 036	...			
1945	183 313	...	18 799	...	1 291	...			
1946	167 660	...	32 113	...	440	...			
1947	162 138	...	35 233	...	568	...	195	684	*29*
1948	144 042	...	48 797	...	3 971	...			
1949	128 888	...	45 769	...	3 202	...			
1950	113 259	...	51 084	...	10 510	...			
1951	114 987	...	55 389	...	11 488	...	182	623	*29*
1952	120 898	...	58 204	...	9 475	...			
1953	109 051	...	57 316	...	10 568	...	181	587	*31*
1954	120 108	...	54 737	...	11 066	...			
1955	133 244	...	48 184	...	10 814	...			
1956	141 672	...	50 280	...	8 989	...	200	570	*35*
1957	146 861	...	53 988	...	7 185	...			

1. From 1939 to 1952: including adult education.

2. Enrolment in technicums only.

BURMA

Secondary education in Burma lasts 5 years, and is based on 4 years of primary schooling. Schools catering for the first 3 years of secondary education are called middle schools and those catering for all 5 years are called high schools. The age range of children in the junior secondary level is generally 11 to 14 years and of the children in the senior level 14 to 16. To raise the rather low standards in all stages of secondary education, arrangements are being made to have an additional year for secondary education and to raise the standards of the Matriculation examination. This plan will take effect by 1960–61.

THE EDUCATIONAL SYSTEM

Education is provided by both state and private agencies. The provision of secondary education was free in all state schools until April 1959, since when fees have been charged. Private schools levy fees from pupils for their own maintenance, as no aid whatsoever is given to them by the State. The part played by private enterprise in the field of secondary education is nevertheless very pronounced, and along with the state system, private secondary education is steadily expanding both as regards the number of institutions and the number of pupils enrolled.

In the administration of education, power of direction and control are vested in the Director of Public Instruction, who carries out the policies laid down by the Ministry of Education. Funds are provided by the Central Government out of revenue.

A clause in the Constitution of the Union of Burma provides that 'no minority, religious, racial or linguistic, shall be discriminated against in regard to admission into state educational institutions, nor shall any religious instruction be compulsorily imposed on it'. Secondary education is thus available to all those who desire it

although, in the case of private schools, children professing a particular religion tend to go to a school established or sponsored by a mission of that religion. Despite the facilities provided by state and private schools only a small minority can take advantage of secondary education, largely for economic reasons.

As a sovereign independent State it is natural that Burma should strive for the adoption of her national language as the medium of instruction. In state schools all subjects are taught in Burmese, with English as a compulsory second language. In private schools, English or the mother tongue of the pupils can be used as the medium of instruction, but these schools must take into account the fact that in the public examination at the end of the first stage of secondary education all pupils are required to answer every paper in Burmese. In the Matriculation examination, papers could be answered either in Burmese or English till this year; as from 1961, answers will have to be in Burmese.

The main problem in secondary education at the moment is to break the bondage of traditional academic education and to develop facilities for technological and agricultural education. Discontent and frustration among pupils arising from a system of secondary education which over-emphasized academic studies has been all too common in the past, and diversified courses of instruction must now be provided to suit different abilities, interests, aptitudes and needs. The provision of courses which are more in accordance with their aptitudes and abilities should enable the pupils to attain higher standards of achievement. So in the field of secondary education, or for that matter at all other levels of education, the task is not only to expand but also to improve. The Second Four Year Plan, 1956–60, has been directed towards the achievement of this objective. Its aims are:

1. To secure an adequate number of fully qualified teachers.
2. To improve the school curriculum on modern lines for the benefit of the children and in line with the national economy of the State.
3. To secure good school textbooks and to distribute them effectively to all state schools.
4. To provide all-out aid for the improvement of discipline among pupils and teachers.
5. To provide sufficient accommodation, school furniture and teaching apparatus for increased numbers of school-children.
6. To open new schools on a more equitable basis.
7. To provide diversified curricula which will divert some pupils from the single-track curriculum leading to the University towards technical, agricultural and vocational courses.

THE DEVELOPMENT OF SECONDARY EDUCATION

Modern secondary education in Burma dates back to the beginning of British rule. The piecemeal conquest of Burma by the British in the nineteenth century led to the gradual decline of the indigenous educational system and the growth of a new system based on the needs of the times as seen by those charged with the administration of the country.

The most urgent need was to have a body of trained subordinates to assist in the new administrative machinery and the new commercial concerns. These assistants needed to have a good knowledge of English and to be familiar with Western ways of thought and methods of work. That paved the way for a new type of secondary education parallel to the old vernacular one.

With this object in view, Sir Arthur Phayre, the first Chief Commissioner of British Burma, formulated a definite educational policy for the Province in 1864. He proposed that the Government should set up central Anglo-vernacular schools in the main towns, and these government schools together with the private schools aided by the Government were to form 'a complete system of sound medium class education'.

As schools grew in number and size it was found necessary to form a government department of education, and this was established in 1866. Its task was to provide a state system of Anglo-vernacular education, grant scholarships to proficient pupils, give grants-in-aid to missionary and other private schools, regulate the publication and distribution of books and direct the course of education throughout the province.

The schools that came into existence were of three types, vernacular schools, Anglo-vernacular schools and English schools, a classification based on the difference in the medium of instruction: the medium of instruction in the vernacular schools was wholly Burmese; in the Anglo-vernacular schools it was Burmese in the primary stage and English in the secondary stage; and in English schools, English was used in both primary and secondary classes.

Vernacular middle and high schools. With the growth of Anglo-vernacular schools, instruction in traditional vernacular schools was also placed on a better footing by the adoption of a curriculum more or less similar to that obtaining in Anglo-vernacular schools except that English was omitted and the medium of instruction was Burmese. This led to a widespread demand for vernacular secondary schools, but the Vernacular Education Committee of 1924 found that the provision of such schools had outstripped demand. It suggested that the numbers of these schools should be limited by confining the establishment of middle schools to townships and high schools to headquarters of a district.

Attendance at vernacular schools in the secondary stage of instruction was small. This was due to the fact that the education given led nowhere. After completing courses in the middle and high schools, pupils found it difficult to obtain employment in the administration or the business world since their studies had not included English, and at the same time they found it difficult to return to the agricultural environment to which most of them belonged. The main fault lay in the curriculum, which offered no sort of technical or vocational courses.

The Government tried to meet the situation by making limited provision for the teaching of English in vernacular schools and by encouraging the production of more textbooks in Burmese for the higher standards of these schools. These measures improved the condition of the vernacular middle and high schools, but beyond helping to make the courses of instruction in the three types of schools more uniform, they did not contribute to a permanent solution.

What was actually needed was a change in the whole bias of instruction, and curriculum providing a basis for subsequent agricultural and vocational education.

As early as the beginning of the twentieth century, Lord Curzon had pointed out that one of the chief defects in the system of instruction was that it was not designed for a farmers' country. The few special schools listed by the Technical and Vocational Education Committee, 1927, offered agricultural education but it could hardly be considered sufficient for a country where the majority of the people depend on agriculture for their livelihood. Not only was agricultural training inadequate but so was that for other rural occupations, notably the cottage industries to which the villagers turned in the intervals between the seasons of work in the fields. The Technical and Vocational Education Committee, 1927, inquired into the extent of provision for training in such trades and found a pottery laboratory and a weaving institute, a lacquer-work school and classes for carpentry and blacksmith work. Almost 10 years after this inquiry, the situation had not improved to any considerable extent according to the Report of the Vernacular and Vocational Education Reorganization Committee, 1936.

Anglo-vernacular and English middle and high schools. The efforts made by the Government to provide and aid Anglo-vernacular and English schools were more successful. These schools gained popularity largely because they served the purpose for which they had been set up, although in the long run they failed to meet the changing social and economic demands.

Through the years, trade increased and administrative services began to expand. As new departments were developed, more assistants were required and more of these schools had to be opened. In the last Annual Report on Public Instruction before the 1939 war, it was stated that there were 32 English secondary schools with an enrolment of 12,194 pupils, and 238 Anglo-vernacular secondary schools with a total attendance of 51,048 pupils.

The very popularity of these schools and their increase in number ultimately turned out to be a disrupting factor in education. The schools went on producing more pupils with the same type of education, who looked forward to entering the University and sought the same kind of employment when they had finished their studies. But administrative posts and the upper civil service could not go on expanding for ever. The supply of 'English educated' students began to exceed the demand and soon brought about the problem of the 'educated unemployed'.

The problem was, of course, not confined to education but affected the whole economic and social environment of the people. It was necessary for people to realize that academic studies did not offer an education complete in itself, and that administrative work was not the only occupation which sustains and develops a country. More schools were needed to provide an education other than a literary one and enough jobs were needed for people so trained. But it was difficult to break the vicious circle: the University favoured the arts courses because of the conditions of employment outside and, because of this, the secondary school curriculum was also mainly literary. The Technical and Vocational Education Committee, 1927, in reviewing the situation, recommended that practical and scientific studies should have an important part in the curriculum, side by side with language, literature and other literary subjects.

At the time there were only a department of engineering in the University, turning out 10 students a year, and the Technical Institute, Insein, giving courses in civil and mechanical engineering and practical apprenticeship courses in carpentry, blacksmithing, fitting and machining. Similarly, there were few special classes and schools for vocational education. These included the normal schools and training classes for teachers, a police training school, signalling classes of the Burma Railways, classes for sanitary inspectors, a forest rangers' school, two veterinary schools, the De La Salle Institute, a survey school and a few orphanages and reformatories.

As the situation in regard to technical and vocational education remained unsatisfactory, the Vernacular and Vocational Education Reorganization Committee was set up in 1936; and by the year 1940 certain improvements had been effected. The number of pupils attending the Government Technical Institute had shown an increase over the numbers given in the report of 1927, and in 1939 evening classes were added. The State Polytechnic was also opened in Rangoon that year. This offered instruction in tailoring and outfitting, dressmaking and needlework, carpentry, bamboo and canework, laundry work and dyeing. Instruction was also provided in advanced accountancy and commerce, English shorthand, Burmese shorthand and English typewriting. The report also recorded 15 government-recognized commercial schools with a total attendence of 683 pupils and the State School of Fine Arts, Rangoon, which opened in 1939. This school offered instruction in painting, drawing, commercial design and Burmese music.

Practical courses were also introduced in the Anglo-vernacular and English schools. The *Quinquennial Report of 1932–37* noted that during the period under review, the curricula for English and Anglo-vernacular schools were broadened by the introduction of courses in general science, mechanics, commerce and business organization and domestic science. Also during the year 1937–38, 1 government English school, 4 aided English schools, 15 government Anglo-vernacular schools and 12 aided Anglo-vernacular schools provided courses in science.

Unfortunately, just as signs of improvement began to show in technical and vocational education, the country was overtaken by the second world war and the whole educational system was disrupted.

Administration

The distinction between the vernacular schools on the one hand and the Anglo-vernacular and English schools on the other became more pronounced when the vernacular system came under a separate authority and was administered under a code distinct from the two other systems. Initially, the Provincial Education Department, established in 1866, was in sole and absolute control of vernacular education. In 1917, control passed into the hands of the nominated divisional school boards. The boards undertook the administration and supervision of vernacular education

within their areas, subject to the general control of the Education Department and in accordance with the orders of the Government and the provisions of the Vernacular Education Code. But in matters such as training of vernacular teachers and public examinations and curricula, the Director of Public Instruction was the controlling authority.

On the establishment of the divisional school boards, the Government, in Resolution No. 14E-53 of 1 November 1916, stated its financial policy in regard to vernacular and Anglo-vernacular education. This so-called '1916 principle' required the whole cost of vernacular education to be borne by local funds. The divisional school boards were not long in existence, for in 1921, by the Burma Self-Government Act, they were replaced by elected local education authorities.

The new local education authorities comprised the district boards and the joint school boards and were composed of members chosen from among the elected district councillors who might under certain conditions co-opt other persons to be members. These new bodies inherited the control as well as the financial liabilities of vernacular education. Their duties and powers included the establishment, management, visiting and maintenance of all board schools within their jurisdiction. In addition they were responsible for the construction and repair of all buildings connected with these schools, and the appointment and pay of the teaching staffs. They were also responsible for the recognition, control, visiting and support of schools under private management. Such control as the Education Department still retained was exercised through the inspectors, who reported on the organization, management and efficiency of the schools. Their role however, was purely advisory, and if the local education authorities could justify their decisions they were not obliged to accept the inspector's advice. The whole system was meant to encourage local interest in education and to promote democratic control in other local affairs. Excessive decentralization, however, was found to be unsatisfactory, accounting for many of the defects and inefficiencies in the vernacular education system.

Finance. The fundamental weakness of the local administration lay not only in the lack of policy and planning but also in the lack of funds. The Government, realizing the inadequacy of local funds at the time of the divisional boards, had proposed to contribute towards them and had made the 'Permanent Settlement' of 1927, under which contributions were made to local funds based on 'normal income' and 'normal and necessary expenditure'. The Permanent Settlement helped the local authorities to some extent but did not solve their financial difficulties. Owing to the restricted and rigid nature of the system, the Vernacular and Vocational Education Reorganization Committee, 1936, recommended that it be abandoned. Nevertheless, the Permanent Settlement, sometimes referred to as the 'Dunn Settlement', was still in operation until 1941.

Unlike the vernacular schools, the English and Anglo-vernacular schools were assured of a regular and flexible supply of funds. These schools were directly or indirectly supported by the Government and were at first given grants under the 'result grants' system. After 1918, however, they were given maintenance grants amounting to half the difference between their approved expenditure and the fee income, the rest being met from private funds. As this was found to be insufficient the quota of grants was revised on 1 April 1938, and the maintenance grants were raised to two-thirds of the difference between prescribed income and expenditure.

The English and Anglo-vernacular schools were not only financially aided by the Central Government, but they also came directly under its control. A Minister of Education was appointed in 1923. Under him was the Director of Public Instruction who was the executive Head of the Education Department and he was assisted by subordinate officials of the Department. Immediate control and supervision was carried out by the inspectors of schools. During the years 1937–38 the Inspectorate consisted of 8 inspectors, 8 assistant inspectors, 98 deputy inspectors, 1 inspectress, 6 deputy inspectresses, and 1 assistant inspector for physical training. The inspectors were required to send detailed reports to the Director of Public Instruction. The curricula and the syllabuses were also prescribed by the Education Department, though as time went on the Department gave more freedom to the heads of schools in these matters.

Apart from the central authority, there were also unofficial bodies which gave advice to these schools. The Educational Syndicate, instituted in 1886, served to keep the Education Department in touch with unofficial opinion. In 1921 the Syndicate was considered to have outlived its usefulness and it was dissolved and replaced by more effective agencies. They were the Anglo-vernacular and European School Advisory Boards, the Text-Book Committee, and a strong non-official element in the University Council and Senate. In 1925 the two Advisory Boards were amalgamated into one, the Secondary Schools Board which consisted of 20 members (12 non-official, 4 official and 4 University representatives). The function of this Board was to control the English and Anglo-vernacular high school and middle school examinations and to advise the Director in connection with secondary education. The compilation and codification of rules and regulations concerning the administration of secondary education was also improved about this time. Between 1918 and 1920 the cumbersome Burma Education Code was replaced by the Educational Rules for Anglo-vernacular and English Schools, the Grant-in-aid Code and the Burma Educational Calendar. These were considered to be more useful and compact publications, and they were still in use at the outbreak of World War II.

After the war the policies and recommendations of the pre-war educational authorities were often referred to and accepted as guiding principles. The war, however, offered an opportunity to make a clean sweep of the anomalies of the past and to conceive and introduce a new system of education more in accord with the social and economic needs of the country.

Reorganization of the secondary education system

In Burma, the term 'secondary education' is now applied to all forms of education above the primary stage, whether this follows the older secondary tradition or whether it has a technical, commercial or other bias. The application

is also made in terms of the ages of pupils concerned. The old parallel ladders of English, Anglo-vernacular and vernacular schools have been welded into one uniform system from the primary stage to the matriculation stage which is entirely state-provided and state-controlled. While putting an end to the system of aided schools of pre-war days the Government has not prevented the establishment of privately run schools, but has left the financing, control and administration of such schools to the respective school managers, subject to the Private School Registration Act of 1951 and the Private Schools Regulations of 1952. A distinctive feature of these regulations is that the schools follow the prescriptive syllabuses of work laid down by the Education Department and present their candidates for 7th standard and the High School Final and Matriculation Examinations conducted by the Government. The weakness of the present system lies here. The pupils in many of the private schools are trained to cram notes and synopses for examination purposes. To lessen the evils of examinations, the use of cumulative record cards, progressive cards and new acquittance certificates (a kind of leaving certificate), was introduced in 1959. With the new system of record cards firmly established it may be possible to explore ways and means to modify the present type of examination.

TYPES OF SECONDARY EDUCATION

Secondary schools, graded according to the nature of work and age-groups, are: middle schools (or junior secondary schools), from standard 5 to 7, for pupils aged 11 to 14 or over, and the senior level of high schools (or senior secondary schools), from standard 8 to 10, for pupils aged 14 to 16 or over. In December 1959 there were 518 state middle schools, with 170,177 pupils; 273 state high schools, with 47,431 pupils, 205 registered private high schools, with 18,518 pupils; and 125 unregistered private high schools. There are also 10 special middle school courses and 13 upper secondary educational institutions.

Examinations are usually conducted in March; the last day of this month is the end of the school year. The school year begins on 1 June every year. The first school term usually terminates about the middle of October, which coincides with the end of the Burmese Buddhist Lent. Holidays last about 10 days. The second term opens about the beginning of November or the last week of October. Another 9 or 10 days' holiday occurs at the end of that term, which falls somewhere round Christmas. The third term begins about the first week of January. Annual summer vacations are taken in April and May.

General secondary schools

To enter middle schools after completion of primary education, students must take the standard 4 regional examination, based on subjects taught during the fourth year in the primary stage and conducted annually in March. Entrance from middle school to high school is decided on the results of the middle school (or standard 7 examination), also held in March. Subjects are the main ones taught in the state middle schools—Burmese, English, mathematics (arithmetic, algebra and geometry) social studies (geography, history and civics) and general science. Besides these, domestic science (for girls), art and physical education, agriculture and industrial arts (for boys) are also taught in certain schools. Two years after passing the middle school examination, pupils are qualified to take the high school final and Matriculation examinations, the subjects for the latter being Burmese, English, mathematics, geography, history and civics, general science, additional mathematics, chemistry, physics and biology, economics of co-operation and agriculture. Subjects for the high school final examination may be taken from among the foregoing and also from among industrial arts, domestic science, art, elementary accountancy, English and Burmese shorthand and typewriting, secretarial practice.

Burmese, English and mathematics are compulsory and the rest optional. A candidate is required to pass in two optional subjects but may attempt three, the two best being taken for assessment. General science cannot be taken in combination with either physics or chemistry.

Matriculated students can proceed to the Rangoon and Mandalay Universities or to intermediate colleges in other localities for further studies. But those who pass the high school final examination and do not intend to enrol at the universities may enter various institutes providing vocational education—technical, veterinary, agricultural—teacher training colleges, schools for the army, the police, the post and telegraph and public health services, accountancy classes, forestry training, etc.

Aims. The aims of secondary education are:

1. To ensure a knowledge of the three R's among all citizens of the Union.
2. To ensure the production of a sufficient number of technicians and technologists.
3. To train and equip young men and women so that they can adequately and efficiently perform their various duties as citizens of the Union.
4. To eradicate illiteracy and produce men and women who possess the 'Five Strengths' (physical, intellectual, moral, social, economic).
5. To perpetuate democracy within the Union.

Summing up, the aim is to give a liberal education and technical training based on secondary education, in order to help pupils become useful elements in the community and the nation and to elevate general cultural standards and help pupils acquire professional skills.

Curricula. The definition of the aims of secondary education created the need to design appropriate curricula. For this purpose, under the direction of the Education Ministry, the Curriculum Development Branch of the Directorate of Education compiled 'Syllabuses for the Welfare State' in 1954 and distributed it to all schools. Each school is expected to formulate its curricula on the basis of the course of study and operate them to suit the pupils' special local interests and capacities and the actual conditions of each school.

In some schools in Rangoon, hours have been set aside for extra-curricular activities.

The names of study subjects have not been changed, but

the content and the methods of teaching them have been improved. For instance in the study of English, besides reading and writing, audio-visual aids are used to accustom pupils to hearing and speaking the language.

Religious teaching and moral instruction are provided for non-Buddhist pupils but the whole of school life is regarded as a part of moral training. For teaching materials, teachers are instructed not to depend solely on textbooks. Many guidance books for teachers are compiled and distributed to schools all over the country. Seminars, conferences and refresher courses are also sponsored by the Ministry of Education.

A flexible policy has been adopted by which the total school hours in any year are allotted with due regard to the functions and significance of subjects. The apportioning of periods for subjects was revised in June 1959. In middle school courses the subjects studied and the number of periods allotted to them per week are: Burmese, 5; mathematics, 9; geography, civics and history, 5; general science, 3; English, 10; domestic science, agriculture, industrial arts and art, 2; physical education, 1.

In high schools, 6 periods are allotted for Burmese, 10 for mathematics, 10 for English and 10 for optional subjects. A teaching period lasts 40 or 45 minutes.

Teaching staff. The qualifications of middle school teachers and high school teachers are not the same. The latter are required to possess a university degree and a teacher's certificate; the qualifications of the middle school teacher are a pass in the Matriculation or high school final examination and a certificate for Junior Assistant Teachership.

Training of senior assistant teachers for high schools is provided in the Faculty of Education under the administration of the University of Rangoon. The three grades of training are: (a) a 2-year course leading to B.A. (Ed.) for those who have passed the intermediate examination; (b) a 1-year course leading to a Diploma in Teaching for those who have passed the degree examination; (c) the Bachelor of Education degree in 1 year for those who have passed either B.A. (Ed.) or D.T.

Training of junior assistant teachers for middle schools is provided in two training colleges for teachers, one at Rangoon, and another at Mandalay. Those who have passed the high school final or Matriculation examination are eligible for admission. The duration of the course is 1 year. Subjects include educational theory and practice, handicrafts and methodology. Special training courses in the teaching of English, general science, agriculture, industrial arts, domestic science, physical education and art are given. Those who specialize in these subjects are appointed as subject teachers in state schools on the completion of the course.

Vocational and technical schools

The Reconstruction Committee of 1947 stated, 'We are generally in agreement with the observations and recommendations of the Campbell Committee (1936) in regard to vocational training. Side by side with the redesigning and reconstruction of the ordinary school system, technical, vocational and professional instruction in the non-university institutions will have to be revised and a system of trade schools and polytechnical institutes developed to meet the local occupational needs, large-scale industrial and commercial needs and the needs of the public utility services and communications for technical skills and training.'

In accordance with the recommendations of the Reconstruction Committee and those of the Campbell Report, the secondary education institutions are charged with the task of preparing pupils to continue in various directions. The curricula for state middle and high schools, with the introduction of the technically and vocationally biased subjects, have become richer and more closely integrated with life. Bifurcation after primary, middle and high school stages respectively is helping pupils to choose suitable courses and to take up vocations for which they are fitted, instead of automatically moving on to the university. The following facilities are provided for vocational education.

For pupils who have successfully completed their primary education and who have not the means to go to an ordinary secondary school, vocational training is available at the artisan training centres at Rangoon and Mandalay, the District Police Training Depot, nursing classes and agricultural middle schools, etc.

On successful completion of the middle school course, pupils who want vocational training may enter any of a number of state institutions: agricultural high schools, technical high schools, pre-medical classes in state schools, rural development training courses, teacher training institutions, commercial schools, midwife and nurse training schools, children's welfare training institutes, etc.

Instruction in domestic science is given in 42 state middle and high schools. Girls can take domestic science as an alternative to industrial arts which is also provided in the curriculum. Home economics, home nursing, cooking, stitching and knitting, sewing, dressmaking, mothercraft and first aid are taught in this course.

Industrial arts is now taught in 52 state high schools, agriculture and animal husbandry in 37 state high and 12 state middle schools. Two state high schools, one in Rangoon and one in Mandalay, are teaching commercial subjects: shorthand, typing, elementary accountancy, book-keeping and commercial correspondence.

Technical or industrial arts subjects taught at the middle school stage are paperwork, ceramics, technical drawing, woodwork, metal work, cane and bamboo work.

At the high school stage, in addition to the subjects taught in middle schools, woodwork, engineering, workshop and machine shop practice and leather craft are taught.

Two government technical institutes, one at Insein and the other at Mandalay, provide technical courses of 3 years' duration. Successful candidates in the high school final and Matriculation examination and the Technical high school examination are admitted to these institutions on passing the entrance examinations. Only those under 20 years of age are selected for admission and each student receives a monthly stipend of 60 kyats for three years. Subjects taught include construction technology, railway, highway and public works engineering, machine tools and design, electric power generation and distribution, electrotechnology, mining technology, etc.

One state technical high school has been opened at Rangoon. The course provided is one of 2 years, and

residential pupils are accepted. Pupils must be under 19 and have passed the middle school examination. Those selected for admission receive stipends of 50 kyats per month.

Matriculation subjects such as English, Burmese, mathematics, chemistry and physics are taught and each pupil must choose one of the technical subjects, namely radio, electrical wiring, automobile mechanics, diesel engines, machine shop practice, sheet metal working, welding and building.

There are two artisan training centres, one at Rangoon and another at Mandalay. Pupils are selected from those who have passed the middle school examination and each selected pupil receives a government stipend of 50 kyats per month. The training course lasts 2 years and covers both theory and practice. Pupils are required to specialize in any one of the following subjects; radio, electricity, machine shop practice, diesel engine repair and maintenance, automobile mechanics, blacksmithing, fitting and welding practice, foundry and moulding practice, and carpentry.

Agricultural schools. For pupils with an aptitude for agriculture and likely to benefit from early training, two state agricultural middle schools, two high schools and one agriculture institute provide consecutive courses.

On completion of primary school, a pupil can enrol at a state agricultural middle school where agriculture is taught (both theory and practice) as the main subject for 3 years, along with other subjects of the ordinary middle school curriculum.

Those desiring to study further can attend one of the two state agriculture high schools. The duration of the course is 2 years and there is an agricultural high school examination at the end of the course. Government stipends are available. More advanced studies in agriculture are provided at the State Agriculture Institute, Pyinmana. Efforts are being made to secure direct admission of those who successfully complete the diploma course in Pyinmana to the Agriculture College, University of Mandalay, so that they may qualify for the B.Sc. degree in agriculture without having to pass the intermediate science examination of the University.

Subjects taught in the State Agriculture Institute are agricultural economics, agronomy, horticulture, plant protection, chemistry, farm mechanics, botany, physical education, extension methods, animal husbandry, and agricultural education.

Other schools

Two Cultural Institutes, one in Rangoon and one in Mandalay, were established in June 1952 and 1953 respectively under the Ministry of Culture. Instruction in music, drama, dancing and art are given both for the primary and secondary stages. The course is of 3 years' duration. A National Library, National Museum, National Gallery of Art, Academy of Art and a National Academy of Music, Drama and Dancing are maintained. Evening classes for these courses are also provided.

Out-of-class activities

The importance of the physical development of children is fully recognized and sports and games of various kinds are encouraged. School and inter-school sports are held annually.

TRENDS AND PROBLEMS

It is a truism that education is conditioned by and conditions society. Educational aspirations must be in harmony with the State of social development and the cultural and economic needs of a country.

The greatest need that faces Burma, as a newly independent nation, is to have a sufficient number of well-trained men to manage the country's affairs and to develop a sound and stable economy. A balanced economy requires improved methods in agriculture and the installation of suitable industries, and consequently particular care must be taken to train men in scientific and technical skills. It is the work of the secondary schools, together with the universities and other institutes, to provide suitable education and training. Burma, as a democratic nation, also desires to extend equal educational opportunity to as many people and at as high a standard as possible. One of the greatest faults in secondary education in the past was that it benefited only a small section of the population, and for only a limited purpose. The steady growth of secondary schools and the all-out efforts to provide technical and vocational as well as academic education in the secondary course are evidence of the fact that past mistakes are being remedied.

[*Text prepared by the Directorate of Education, Rangoon, in March 1960.*]

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STATISTICS

Total population (mid-year 1958 estimate): 20,255,000.
Area: 261,757 square miles; 677,950 square kilometres.
Population density: 77 per square mile; 30 per square kilometre.

Summary of school statistics, 1953–57. Enrolment in public educational institutions from primary to university level numbered 1,617,050 pupils in 1957/58, representing 8 per cent of the estimated population. Some 85 per cent of this

enrolment was in primary schools, 14 per cent in general secondary schools and under 1 per cent at universities. No data are available for recent years on the proportion of girls enrolled. In 1954 girls made up approximately 41 per cent of enrolment in primary schools, 43 per cent in general secondary education and 24 per cent at universities. The teaching staff in primary and general secondary schools numbered nearly 40,000 in 1957/58, an increase of 43 per cent compared with 1953/54. The pupil-teacher ratio in primary schools increased to 41 in 1957/58 against 34 in 1953/54 and in general secondary schools the ratio was approximately 33, compared with 18 at the beginning of the period under review. This development is due no doubt to the very rapid expansion of enrolment in recent years. Since 1953/54, enrolment has increased by 78 per cent in primary schools, more than doubled in general secondary schools, and risen by over 50 per cent at universities. On the other hand, emergency teacher training courses ceased in 1957 and enrolment in teacher training schools at secondary level has steadily declined over the period under review. No data are available for recent years on higher teacher training institutions. (See Table 2.)

Enrolment trends in secondary education, 1934–57. From 1935 to 1939, average enrolment in general secondary education (public and private schools) was 219,000 students, giving an enrolment ratio of 14 in relation to the estimated age group 15–19 years old. Girls made up 10 per cent of enrolment over this period. There was a very severe setback in education between 1945 and 1950 when average secondary enrolment declined to only 23,000 pupils. From 1950 onwards, however, secondary education has steadily expanded and in the years 1955–57 the ratio of general secondary enrolment (public schools only) to the school age population 15–19 years old rose to 11. The proportion of girls enrolled, moreover, increased to over 40 per cent of the total between 1950 and 1954. Data on secondary vocational and teacher training enrolment are incomplete. (See Table 3.)

Educational finance 1958. Total expenditure on education in 1958/59 (fiscal year beginning October) was 158 million kyats, representing about 8 kyats per inhabitant. Of this total, about one fifth was for capital expenditure. (See Table 1.)

Sources. Burma: Directorate of Education, *Schools in Burma;* Central Statistical and Economics Department; *The Union budget in brief, 1958–59; Economic survey of Burma 1955–1958;* other official sources.

1. EDUCATIONAL EXPENDITURE, 1958/59
(in thousand kyats)[1]

A. EXPENDITURE BY PURPOSE

	Amount
Total expenditure[2]	**158 100**
Recurring expenditure	131 800
Capital expenditure	26 300

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure	**131 800**	**100.0**
Central administration	3 500	2.7
Instruction	114 800	87.1
Primary education	63 200	47.9
Secondary education	27 400	20.8
Vocational education	11 200	8.5
Universities (grants)	13 000	9.9
Other recurring expenditure	13 500	10.2
Library and museums	700	0.5
Other expenditure not allocated[3]	12 800	9.7

1. Official exchange rate: 1 kyat = 0.21 U.S. dollar.
2. Budget estimate of the Union Government (including government boards and corporations).
3. Includes some expenditure on scholarships for higher education.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public[1]						
	Total	**1957/58**	**10 751**	**32 900**	**...**	**1 374 056**	**...**
	,,	1956/57	10 720	...	...	1 522 187	...
	,,	1955/56	10 046	...	...	1 155 800	...
	,,	1954/55	10 175	26 582	16 462	1 190 208	491 221
	,,	1953/54	[1]8 888	22 326	12 472	771 826	391 312
Secondary *General*	Middle schools, public[1]	1957/58	452	5 034	...	176 931	...
	High schools, public[1]	1957/58	235	1 955	...	51 092	...
	Total	**1957/58**	**687**	**6 989**	**...**	**228 023**	**...**
	,,	1956/57	687	...	...	232 760	...
	,,	1955/56	630	...	...	175 900	...
	,,	1954/55	633	6 118	3 246	187 518	81 212
	,,	1953/54	549	5 620	2 927	103 654	41 312

1. Including some schools with vocational courses.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Vocational	Technical institutes, public	1957/58	4	...	...	993	...
	Artisan training centres, public	1957/58	5	...	...	770	...
	Agricultural schools, public	1957/58	4	...	...	...	...
	Total	**1957/58**	**13**	**...**	**...**	[2]**1 763**	**...**
	"	1956/57	[2]9	...	...	[2]994	...
	"	1955/56	[2]9	...	...	[2]850	...
	"	1954/55	[2]9	...	...	[2]550	...
	"	1953/54	[2]9	...	...	[2]325	...
Teacher-training	Teacher training institutes, public						
	Total	**1957/58**	**6**	**...**	**...**	[3]**2 418**	**...**
	"	1956/57	6	...	...	4 325	...
	"	1955/56	6	...	...	3 660	...
	"	1954/55	4	56	27	5 570	1 662
	"	1953/54	4	45	19	6 984	...
Higher *Teacher training*	Teacher training institutions, public						
	Total	**1957/58**	**...**	**...**	**...**	**...**	**...**
	"	1956/57	...	...	...	...	...
	"	1955/56	...	...	...	...	...
	"	1954/55	2	68	41	339	140
	"	1953/54	2	65	39	412	197
General and technical	University of Rangoon	1957/58	1			8 868	...
	University of Mandalay	1957/58	1	100	...	1 922	...
	Total	**1957/58**	**2**	**...**	**...**	**10 790**	**...**
	"	1956/57	1	...	...	9 494	...
	"	1955/56	1	...	...	[4]12 491	...
	"	1954/55	1	479	181	7 389	1 739
	"	1953/54	1	482	173	7 149	1 427

2. Not including agricultural schools.
3. The decrease in teacher training since 1957 is due to elimination of emergency training schemes.
4. Probably including students of adult university courses for workers.

3. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment[1] (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	203 893	10	...	...	...	...	204	1 470	*14*
1935	207 341	10	21 361	7	...	...			
1936	208 954	10	...	...	...	...			
1937	217 494	10	24 956	7	...	...	219	1 532	*14*
1938	227 464	10	...	...	...	...			
1939	233 543	10	25 163	8	...	...			
1945	18 530	23	[2]6	—	...	...			
1946	29 370	22	[2]22	[2]27	...	...			
1947	30 500	20	[3]620	[3]47	...	...	23	1 722	*1.3*
1948	17 588	28	[3]1 005	[3]37	...	...			
1949	19 139	...	...	...	...	...			
1950	50 369	48	...	...	...	...			
1951	62 283	46	...	...	...	...			
1952	88 263	43	...	...	117	38	98	1 815	*5*
1953	103 654	40	[4]325	...	6 984	...			
1954	187 518	43	[4]550	...	5 570	30			
1955	175 900	...	[4]850	...	3 600	...			
1956	232 760	...	[4]994	...	4 325	...	212	1 899	*11*
1957	228 023	...	[4]1 763	...	[5]2 418	...			

Note. From 1934 to 1949, figures refer to government schools and recognized aided and unaided middle, high and post-primary schools. From 1950 to 1957, data refer to public schools only.

1. General secondary education only.
2. Commercial schools only.
3. Commercial, technical and industrial schools.
4. State technical high schools and artisan training centres only.
5. The decrease in teacher training since 1957 is due to elimination of emergency training schemes.

BYELORUSSIAN SOVIET SOCIALIST REPUBLIC

THE EDUCATIONAL SYSTEM

Before the Great October Socialist Revolution, Byelorussia was a backward borderland of Tsarist Russia, with 80 per cent of the population illiterate. The primary school system was extremely limited, and there were only a few general or technical secondary schools—*gymnasia*, *real* schools (general secondary schools), and technical and commercial schools (specialized secondary schools)—which charged fees and which practically none but the children of well-to-do parents were able to attend (only 8 per cent of the total number of pupils came from workers' or peasants' families).

After the Revolution, the tremendous task of organizing a new school system was undertaken. The 'Declaration of rights of the peoples of Russia', adopted by the Soviet Government, proclaimed the equality of all the previously oppressed nationalities and their equal rights to free political, economic and cultural development. On the basis of the Declaration, the RSFSR People's Commissariat for Nationalities was set up with national cultural and educational departments, including one for Byelorussia, and as a result of the department's work a People's University was opened in Minsk on 14 February 1918. A start was also made with the establishment of state schools, with instruction in the Byelorussian language. An important factor in raising the standard of school learning was the Soviet Government's decree, over Lenin's signature, on the separation of the Church from the State and the school from the Church; the decree made it illegal to teach religious doctrine in any educational establishment.

The Byelorussian Soviet Socialist Republic was set up on 1 January 1919, and the creation of the sovereign Byelorussian Soviet State and the reconstruction of social life in accordance with socialist principles provided the basis for a rapid victory over economic and cultural backwardness. On 3 January 1919 the Government of the Republic set up a People's Commissariat for Education.

One of the most urgent problem in transforming the schools into an instrument for the Communist education of the workers was the need to develop the principles laid down by the Soviet authorities for school and educational work—the introduction of free and compulsory general and polytechnical education for all children of both sexes and strict observance of the principles of a unified labour school and instruction in the pupils' mother tongue.

The equal right to education enjoyed by all citizens is guaranteed by the organic law of the Byelorussian SSR—the Constitution.

In 1920, for the first time in Byelorussia's history, a unified labour polytechnical school providing general education was established by decision of the All-Byelorussian Congress of Soviets. The length of the school course was to be 7 years, comprising 4 years of primary education, for children aged 8 to 12, and 3 years of secondary education, from age 12 to 15.

This 7-year school provided the requisite training for admission to the technicum (*tehnikum:* specialized secondary school). Considerable attention was also focused on the establishment of vocational schools, which were essential in order to cope with the specific tasks facing the Republic at a time when the national economy was being re-established and developed; this initial system was later modified in accordance with the requirements of the developing national economy and culture of the Republic.

Vocational and technical schools began to be opened, including factory schools and workshop apprenticeship schools (based on the primary school), vocational schools and courses, technicums and educational industrial workshops based on the 7-year schools. To train workers as medium-level specialists in various branches, a network of industrial, agricultural, building construction, medical, teacher training and other types of technicum was developed from 1920 onwards. The following year saw the foundation of the Byelorussian State University. The development of secondary vocational and technical education and higher education facilitated the training of young workers and peasants as leading intellectual workers, and this new intelligentsia played a great part in the development of industry, the reconstruction of agriculture along socialist lines and the raising of the cultural standards of the Byelorussian people.

In 1931, the Byelorussian Government decided in favour of developing a 10-year polytechnical school, and by the end of 1932 the structure of the national education system was as follows: kindergarten (age-group 3–7), primary school (with 4 years' education), 7-year school (with 3 years' education following the primary classes) and secondary school (with 3 years' education following the 7-year school). The technicums and vocational-technical schools followed on the 7-year school, and graduates of general secondary schools, technicums or vocational schools based on the 7-year school could immediately proceed to a higher educational establishment.

The headlong economic development of the Byelorussian SSR produced a demand for enormous numbers of specialists in all branches of the national economy and cultural work, and the network of specialized and higher educational establishments spread rapidly. But the invasion of the country during the second world war interrupted the general progress. For three years the Byelorussian SSR was occupied by enemy forces, who inflicted vast damage on the national economy. Almost all the schools were destroyed and the material losses suffered by educational establishments coming under the administration of the Byelorussian Ministry of Education amounted to 2,500 million roubles. After the war, practically the whole of the educational and material infrastructure of the schools, vocational training establishments, technicums and higher educational establishments had to be supplied anew, and new school buildings, hostels and housing accommodation

had to be built. This was achieved in a very short time. As early as 1945–46, there were 26,221 pupils attending 94 technicums and other schools, while in the school year 1957–58 there were 57,300,000 pupils attending more than 100 technicums and other schools.

The existence in Byelorussia of a wide network of specialized secondary and higher educational institutions has made it possible to increase the number of specialists with a higher or secondary education almost threefold as compared with the pre-war period.

Administration

The administration of public education in the Byelorussian SSR is in the hands of the Council of Ministers, acting through the Ministry of Education. The Minister of Education is responsible to the Supreme Soviet and to the Government of the Republic for the work of his Ministry and of all educational establishments.

The faculties of the pedagogical institutes and the Pedagogical Research Institute which come under the direction of the Ministry are responsible for drawing up school curricula and syllabuses and for producing textbooks and manuals. The Ministry has its own educational publishing house, which issues textbooks, handbooks, directives on teaching methods, scientific and literary works, and material dealing with pedagogical questions and teaching methods.

The schools are administered directly by the district education departments coming under the Ministry and the executive committees of the Soviets of Workers' Deputies, to which public education boards are also attached.

Supervision and inspection. The supervision and regular inspection of schools and teachers is an important factor in raising the standard of the work.

The supervision of the proper organization of secondary school work is carried out by inspectors attached to the area, municipal and district education departments and the Ministry, who see that the laws of the Supreme Soviet, the Government's decisions and the Ministry's directives are observed and verify the standard of general instruction and the organization of educational work in schools and other educational institutions.

It is the school inspector's duty not merely to supervise the schools but also to assist them in carrying out their tasks successfully by giving advice and making recommendations. His main concern should be to produce an all-round improvement in the quality of instruction and education, and see that teaching activities are properly organized. He is expected, above all, to have a sound and thorough knowledge of the work of the schools and the public education authorities, to be constantly studying outstanding results obtained in educational work and disseminating them among schools, and to bring about a steady improvement in the standard of work done in the establishments coming under his supervision.

School inspectors are appointed from among people who have taken a course of advanced teacher training or have had a university education, and who have completed the requisite number of years service in an administrative and pedagogical capacity.

Inspectors attached to district education departments must have had not less than 5 years' service, those attached to municipal and regional education departments not less than 7 years' service, and those attached to the Ministry of Education, not less than 10 years' service. As a rule, school inspectors are appointed from among the best teachers and headmasters with a record of wide practical experience.

A great deal has been done in recent years to increase the number of inspectors and improve the qualifications of education department workers. The Byelorussian Institute for In-Service Training holds monthly courses, which have been attended over the past few years by all inspectors and heads of district and municipal education departments. These courses make a point of giving education department workers practical instruction on questions of inspection and supervision, and of raising the level of knowledge of teaching methods and polytechnical subjects.

Finance. All educational establishments and bodies administering them are fully financed from the state budget of the Republic. School budgets are fixed in relation to the number of pupils and classes in each school. The teachers are paid in accordance with their educational level and length of teaching service. The rates of pay for teachers of grades 1-4 are based on a 24-hour working week or a 4-hour working day, and those for teachers of grades 5-11 on an 18-hour working week or a 3-hour working day. In addition, teachers receive extra pay for correcting pupils' exercise books (subjects: mother tongue, Russian, foreign languages, literature and mathematics). Teachers who act as class leaders or are in charge of subject-rooms or workshops, or who give out-of-class instruction in physical culture, also receive extra pay for these types of work.

Teachers' pay rises by increments of 10 per cent after 5, 10 and 25 years. After 25 years' service they receive a service pension at the rate of 40 per cent of their pay.

All schools in the Byelorussian SSR are part of the state educational system. Teachers' salaries are untaxed. In the vocational secondary and higher educational establishments there is a system of state scholarships which are awarded to all successful pupils and students.

Buildings and equipment. The construction of school buildings and the provision of the necessary equipment are financed from the state budget and from public funds. The executive committees of the Soviets of Workers' Deputies help public and co-operative organizations by providing them with building materials.

The Ministry of Education supplies standard plans for school buildings, and makes grants to cover the cost of the necessary equipment and visual aids. The standard plans are prepared in full accordance with the requirements of school hygiene and optimum conditions for the work of the school. The classrooms are built to a specification of 1.25 square metres per person, while the plans also provide premises for school laboratories, school workshops, the school doctor, teachers' rooms, recreation rooms, gymnasi-

ums, etc. Space is also allowed for a dining-room or buffet. The school equipment must also conform to the requirements of school hygiene, and the classroom furniture is selected to suit the pupils' age-group.

School welfare services. School children, like all citizens of Byelorussia, are entitled to free medical attention. For secondary school pupils it is provided by special school doctors appointed by the public health authories, and by school nurses.

TYPES OF SECONDARY EDUCATION

In 1959, the Supreme Soviet of the Byelorussian SSR adopted the law on strengthening the ties between school and life and on further developing the public education system in the Byelorussian SSR, under which an 8-year period of universal compulsory education is being introduced in the Republic, meaning that all children between the ages of 7 and 15 or 16 will attend school. All the Republic's 7-year schools are to become 8-year schools, and this change marks a further advance in the public education development. The 8-year school is an incomplete secondary labour polytechnical school providing a general education.

Its main objects are to prepare pupils for life and for socially useful work, raise the standard of general and polytechnical education, produce educated people with a sound knowledge of the basic sciences and train young people in a spirit of deep respect for the principles of socialist society, and in the spirit of the ideas of Communism. The guiding principle of school education is the close link between education and work—the practical work of Communist construction.

The 8-year school gives pupils a firm grounding in general and polytechnical subjects, inculcates a love for work and a readiness to undertake socially useful activities, and caters for the moral, physical and aesthetic education of the children.

The educational work at the 8-year school is based on combining fundamental science teaching polytechnical and labour training, and getting the children to engage extensively in socially useful work of a type suited to their age.

The Byelorussian schools do not apply any special tests for assessing pupils' abilities, and the extent to which the latter have assimilated the subject matter prescribed in the syllabus is gauged by the five-mark system, which is used in all schools.

It is not the object of the 8-year school to prepare pupils for any particular occupation. The purpose of the work lessons is to help pupils to visualize certain production processes more clearly, acquire basic habits of work and observe the practical application of scientific laws in various productive processes.

On completing their 8-year schooling, pupils are free to choose which branch of education they wish to pursue.

For completing secondary education following the 8-year school, the following main types of educational establishment have been introduced: a secondary labour polytechnical school providing a general education together with production training (hereinafter termed 'senior secondary polytechnical school'), a school for young workers and peasants, technicums and other specialized secondary educational establishments, and vocational-technical schools.

The senior secondary polytechnical school

This school provides a complete secondary education and vocational training for work in one of the branches of the national economy, and offers a 3-year course (grades 9, 10 and 11), after completing which the pupil is eligible to enter a higher educational establishment or take a job for which his vocational training at the school has fitted him. One-third of the teaching time at this school is devoted to vocational training. Unlike the 8-year school, where the industrial work done is of an educational and character-forming nature, production training at these schools is conducted directly in factories and workshops, on state, collective farms, experimental farms, and building sites, and in the school production training workshops. It is carried out under the guidance of the physics, chemistry, mathematics and biology teachers if they have received the supplementary training needed for such work, or by specialists from industrial and agricultural enterprises—engineers, technicians, builders, technologists or agronomists. Two days a week are normally set aside for production work and training, with a maximum 6-hour working day. The pupils receive wages for the work they do.

Production work is not something isolated from the study of general educational subjects, and the pupils make use of the theoretical knowledge they have acquired and apply it in practice.

The trade which the pupil has learned at school is not necessarily his life occupation. He may, if he wishes, change his occupation at his actual place of work, where various courses are offered.

There are also other types of complete general secondary school in the Byelorussian SSR. For example, for children who are specially gifted in music, painting or dancing, there are complete secondary schools with a bias in one of these directions. Great attention is paid to the instruction and education of physically handicapped children, for whom special schools have been set up. The cost of educating children at these schools is borne entirely by the State. Apart form general education, the children attending these schools receive vocational and labour training.

Some of the 8-year schools and senior secondary polytechnical schools are boarding schools in which pupils are placed at their parents' request. The cost of maintaining orphans and children from large families at these schools is borne entirely by the State. By 1965 the number of children at boarding schools will total 112,000.

Starting on 1 September 1960, schools will be opened at which children and adolescents will spend the entire day. Parents who place their children in these schools can work at their factory without anxiety, in the knowledge that their children are spending their time throughout the day under the guidance of teachers, preparing lessons, going for walks, playing games, working, or in some other useful way, and that they have a hot meal twice a day. The cost of maintaining schools with this extended day will be borne entirely by the State.

Evening (shift) and correspondence schools providing a general secondary education

Byelorussia has a wide network of evening (shift) schools which provide a general secondary education and the Law of 1959 provides for the further extension of this network. Evening (shift) schools and correspondence schools cater for young workers and peasants, or for adults working in production or in various institutions, who have not had a full secondary education but would like to do so. The instruction given is spare-time, and those wishing to obtain a secondary education can attend one of these schools at hours convenient to themselves, without giving up their job. For the greater convenience of workers, the tuition may be given in the evening, at times to suit shift workers, or by correspondence, and in rural areas it is given on a seasonal basis.

The course covers 3 years, and those who complete it have the right to enter a higher educational establishment. The ground covered is the same as at ordinary secondary day schools.

Students taking correspondence courses or attending evening (shift) schools enjoy various privileges, such as extra leave with pay, extra days off, etc.

Technicums and other specialized secondary schools

These have been developed on a wide scale in the Byelorussian SSR. They take graduates of 8-year schools, and give them a complete secondary education and the course at these qualify them as medium-level specialist, with eligibility to enter a higher educational establishment. There is an entrance examination covering the 8-year school programme.

The technicums train specialists for work in industry or agriculture, or in public health, educational or cultural institutions. The course covers 3–4 years. Some of the technicum departments now offer a short course of 2 years for entrants who have already completed the full secondary course.

Technicum pupils who have successfully completed the theoretical part of the course in the set time as well as the course of school work and production work are required to sit for the state examinations or defend their diploma thesis before the State Qualifying Board, after which they are awarded a technicum leaving diploma specifying the qualification they have acquired.

Apart from a general secondary education, the pupils at specialized secondary schools are given the requisite theoretical and practical training in a particular speciality, while in technical and agricultural specialized secondary schools they qualify and obtain a classification rating in a particular trade.

In addition to day technicums and specialized secondary schools, there are correspondence and evening technicums and departments at regular schools. They are intended for young people and adults working in production or in institutions who have not had a complete secondary education, and who attend the courses in their spare time. Thus all workers have an opportunity to continue their studies to higher education level.

Vocational-technical schools

The object of these schools is to train skilled workers for the various sectors of the national economy. They take young people who have completed the 8-year school and wish to work in production. There are urban and rural schools, and they specialize in the various branches of production and provide training on the basis of participation in productive labour in close contact with industrial enterprises, construction works and collective and state farms.

These schools do not provide a complete secondary education, and the school-leavers are free to work in production and continue their education through the correspondence departments of technicums, at evening (shift) schools or at correspondence secondary schools. The subject matter to be taught in these establishments is laid down in the curricula and syllabuses and must conform to trade requirements. The pupils are given a basic acquaintance with their trade in the school workshops or on specially equipped farm-plots, but the final stages of training are conducted at factory workshops, on building sites, on collective or state farms or in some other enterprise, depending on the trade chosen. The course lasts from 1 to 3 years, depending on the degree of complexity of the trade. Pupils receive an apprentice's wages, while in the case of orphans and children from large families the State bears the cost of maintenance.

Teacher training schools

A great deal has been done in the Republic under the Soviet regime to train qualified teachers matching up to the tasks facing the schools. At present (1959), there are 82,708 teachers employed in Ministry of Education schools, including 22,682 with higher educational qualifications, 20,884 who have completed a course at a teacher-training institute and 33,466 who have completed a secondary course in teacher training.

The last-mentioned receive their training at teacher training schools, of which there are eight in the Republic. They train kindergarten teachers, teachers for grades 1–4, teachers for music and singing, etc.

They take graduates of incomplete secondary schools, but in line with the introduction of compulsory 8-year education, will require pupils to have completed the 8-year school. The course takes 4 years. Pupils who have had a complete secondary education are also admitted, and there are departments for them which provide a shortened course of 2 years.

There is an entrance examination, and the pupils' success is evaluated on the basis of their class marks and examination results. Their achievements and behaviour are assessed on the five-mark system, with five as the top mark.

The school year is divided into two terms, and the curriculum prescribes the amount of time to be devoted during the year to theory, class work and teaching practice, as well as length of the holiday and examination periods. The curriculum includes both general and special subjects, as well as physical culture, handwork, drawing and singing.

Special attention is paid to the study of teaching methods for all subjects included in the primary school curriculum,

and to pedagogical science and history, school hygiene and psychology. A considerable proportion of the time is devoted to teaching practice in primary schools, during the course of which note is taken of the student's ability to conduct out-of-class and out-of-school work with the children.

Out-of-class activities

Out-of-class and out-of-school work with schoolchildren is widely developed in the Byelorussian SSR through the organization of groups of various kinds and mass activities, and by drawing the children into socially useful labour. By taking part in practical activities within their powers, they are able to get a better idea of their own abilities and talents. The forms and content of out-of-class work cover a wide range and include educational work, out-of-school reading, technical studies, agricultural biology, sports activities, amateur art-work, excursions and touring, various games and so on.

More and more children are being involved in the work of sports sections and in large-scale physical culture activities. The number of children taking part in physical culture contests and competitions has also increased considerably. In 1959 it exceeded 800,000.

An important part of out-of-school work is aesthetic education, and the young people are given ample opportunity to develop their abilities and gifts. There are choirs, clubs for art and recitation, dramatic and music groups, and folk instrument orchestras. In all these art groups, the children's ability in any particular direction is discovered and developed.

Out-of-school reading is also given a great deal of attention. The Republic has a wide network of children's libraries, which hold readers' conferences and stage discussions on children's books. There is an annual Children's Book Week, and children's libraries and the children's sections of adult libraries arrange meetings between the authors and their young readers.

Out-of-school establishments for children play a very important role in out-of-school activities. In the Byelorussian SSR there are 13 Young Naturalists' Centres and two Young Technicians' Centres, 47 children's sports schools, 80 Young Pioneer homes and 8 children's holiday and excursion centres. The Byelorussian Government and trade unions spend large sums on recreational facilities during the summer and winter holidays. A large number of Young Pioneer camps, sanatoria and tourist centres have been set up and equipped, while, for children who for one reason or another stay in town during the summer, the house committees set up children's playgrounds. All these institutions are equipped with sports material, games, libraries and fiction librairies. The parents' committees attached to schools and the trade union and Young Communist organizations are active participants in all this work.

TRENDS AND PROBLEMS

The continued technical advances in all sectors of the national economy are producing an ever-growing demand for higher qualifications on the part of the workers and collective farmers, and the development of vocational and technical education for young people and an improvement of the standard of training for specialized workers in all economic sectors is particularly important in this connexion.

The Soviet school is required to play an active part in all aspects of creative activity in which the Soviet people is engaged, and it has become necessary to establish even closer links between school instruction and life—the actual work of Communist construction—and raise the standard of the general and polytechnical education of young people still higher.

[*Text prepared by the Byelorussian Soviet Socialist Republic National Commission for Unesco in December 1959.*]

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STATISTICS

Population (Census, 15 January 1959): 8,055,000.
Area: 80,154 square miles; 207,600 square kilometres.
Population density: 100 per square mile; 39 per square kilometre.

NOTE. Educational statistics included with those of the Union of Soviet Socialist Republics.

CAMBODIA

THE EDUCATIONAL SYSTEM

After successfully completing the 6-year course of primary education, Cambodian pupils of both sexes can continue their studies in the various branches of secondary education: general secondary education, given at the *collèges* and *lycées;* technical secondary education, given at the National School of Arts and Crafts, the National School of Commerce, the School for the Training of Assistant Chemical Research Workers, the Kompong-Cham Technical College and at certain vocational training schools, such as the agricultural schools, the School for Assistant Public Works Engineers, and the School for Railway Apprentices; teacher training, provided at the National Teacher Training Institute at Phnom-Penh and at the Teacher Training Centre at Kompong-Kantuot.

Further, at Phnom-Penh, there is an apprenticeship centre which is open to pupils of all ages, provided they have completed their fifth year of primary studies and pass a competitive entrance examination.

Besides the courses at secondary level, instruction of post-secondary standard is given at the National School of Commerce and the National Teacher Training Institute. There are three institutions of higher education: the Law Faculty, which grew out of the former National Institute of Legal, Political and Economic Studies; the Royal School of Medicine, which comes under the Ministry of Public Health; and the Royal School of Administration, which comes under the Prime Minister's Department. In addition, a number of bursaries are available to enable selected students to pursue higher studies abroad. The structure of the Cambodian school system is shown in the diagram on p. 309.

SECONDARY EDUCATION

The aim of secondary education is to continue the intellectual training which Cambodian youth began at the primary schools. In order to be able to pursue their studies at secondary schools, pupils of the higher primary classes must pass a competitive entrance examination. The number of vacancies is fixed by a ministerial order (*Prâkas*), which is submitted to the Council of Ministers for its approval. Candidates for the competitive examination must be not less than 11 nor more than 16 years of age during the year when they sit for the examination. They must have completed their primary studies and present a school record book containing an appraisal of their work by the head of the school they attended.

Administration

Secondary education is administered by two Directorates, assisted by two Technical Councils: the Directorate of Secondary and Higher Education, which is also responsible for teacher training, and the Directorate of Vocational and Technical Education. Owing to their special nature, certain technical schools are directly subordinate to the Ministry of Public Works and the Ministry of Agriculture.

Each *lycée* is directed by a principal (*proviseur*), who is assisted by a vice-principal (*censeur*), a general supervisor and a bursar (*économe*). The principal co-ordinates the work of all the members of his staff and may inspect the classes during lessons. He signs all documents relating to his school and intended for outside services. All expenses for the management of the *lycées* are paid out of the national budget.

Each *collège* is directed by a head (*directeur*), who is assisted by a general supervisor and a bursar; he has the same duties and responsibilities as the principal of a *lycée.*

All expenses for the construction and equipment of schools are paid out of the national budget, but since Cambodia obtained its independence many school buildings destined for secondary education have been built with the help of funds provided by private persons or by the local association for the development of education. State secondary education is free but not compulsory.

The funds allocated to secondary education for the school year 1958/59 amounted to 262,684,250 riels, including 145,734,390 riels for staff, 84,696,200 riels for equipment and 32,286,830 riels for school building.

TYPES OF SECONDARY EDUCATION

General secondary schools

These schools provide a 7-year course divided into two stages, the first stage lasting 4 years and the second, 3 years. Entrants must be not less than 11 nor more than 16 years of age.

The aim of general secondary education is to provide Khmer youth with a humanistic training, i.e., to develop the intelligence and personality of the pupils, to inculcate in them a love for national and international culture and civilization, and to arouse their interest in science and technology.

The following secondary school certificates are conferred: the *diplôme d'études secondaires du premier cycle* (lower secondary school certificate), upon completion of the first stage of secondary education (4 years); the *baccalauréat de l'enseignement secondaire*, which is taken in two parts, the first after 2 years and the second after the third year of the upper stage.

These certificates are conferred on candidates who pass an examination, for which the board of examiners is composed of Cambodian secondary school teachers, under the chairmanship of the Minister of National Education or his delegate.

The study plans and curricula of secondary education are the same for all Cambodian *collèges* and *lycées*, both state and private. They are, as a rule, drawn up by the Council of Secondary Education and Council of Higher Education; but teachers are allowed a certain latitude in the theoretical and practical application of these plans and curricula.

The Council of Secondary Education consists, as a rule, of the Minister of National Education, the Director of Secondary Education and secondary school teachers.

The Minister is responsible for ensuring the application of the curriculum on the local, regional and national levels.

General secondary education is, in a way, the continuation of primary education, but, whereas, during the primary course, only the rudiments of the various subjects are taught, secondary education aims at developing this knowledge with a view to providing pupils with general culture.

The requirements of higher education exercise an influence over the secondary school curricula. That is why, during the final year of the second stage, pupils wishing to specialize in one of the branches of higher education are allowed to choose one of three different classes: the philosophy class, for those wishing to specialize in literature; the experimental sciences class, for those who will be preparing for careers in medicine, pharmacy, etc. and the elementary mathematics class, for those whose university studies will call for specialization in this field.

The time-table, with philosophy as the option, is shown in the table opposite.

If, during the seventh year, the pupil chooses the experimental sciences class he does less philosophy and the time-table for that year is as follows: mathematics, 4 hours; physics and chemistry, 5; natural sciences, 4; philosophy, 5; Indo-Khmer literature, 2; English (or another modern language), 1; history and geography, 4; physical education, 1; total number of hours, 26. If he chooses the elementary mathematics class, the time-table is as follows: mathematics, 9 hours; physics and chemistry, 6; natural sciences, 2; philosophy, 3; Indo-Khmer literature, 2; English (or another modern language), 1; history and geography, 4; physical education, 1; total number of hours, 28.

The subjects included in the secondary school curriculum are adequately co-ordinated. The history programme, for instance, is designed to facilitate the study of Khmer literature, whereas the programme of Indo-Khmer literature is intended to facilitate the study of history in the terminal classes. The programmes are completed by practical work in the laboratories, manual work (modelling, gardening, carpentry), as well as by various new subjects (singing and music, dramatic art, typing, accountancy).

In Cambodia, there are 31 state *collèges* and *lycées* as well as 44 private colleges in the different provinces, and, at Phnom-Penh, a Lycée Français which is conducted by the French Cultural Mission. The total number of pupils attending the state secondary schools is 19,267.

Since the proclamation of the national independence, one of the Government's main preoccupations has been the training of Cambodian secondary school teachers. The National Teacher Training Institute, which was set up in Phnom-Penh, is intended to give future teachers a general training higher than or at least equal to that given during

TIME-TABLE FOR GENERAL SECONDARY SCHOOLS
(in hours per week)

Subject	Year			
	1	2	3	4
First stage				
Khmer	5	6	5	5
Moral and civic instruction	2	1	1	1
French	10	8	7	6
English[1]	—	2½	2½	2½
History and geography	2	2	3	3
Mathematics	3	3	3	3
Natural sciences	2	2	1½	1½
Physics and chemistry	—	—	2	3
Drawing	1	1	1	1
Physical education	1	1	1	1
Total	26	26½	27	27

Second stage (philosophy section)

	Modern section			Classical section		
	5th year	6th	7th	5th	6th	7th
Khmer	4	4	—	3	3	—
Pâli	—	—	—	3	3	—
French	5	5	—	4	4	—
English[1]	2	2	3	2	2	1
History and geography	4	4	4	4	4	4
Mathematics	4	4	2	4	4	2
Physics and chemistry	4½	4½	2	4	4	2
Elementary philosophy	1	1	—	1	1	—
Philosophy	—	—	9	—	—	9
General literature and art	—	—	1	—	—	1
Indo-Khmer literature (including Pâli in the classical section)	—	—	2	—	—	4
Natural sciences	—	—	2	—	—	2
Drawing	1	1	—	1	1	—
Physical education	1	1	1	1	1	1
Total	26½	26½	26	27	27	26

1. Or another modern language.

the second part of the course for the *baccalauréat*. This course is completed by professional training, which comprises the study of psychology and pedagogy, practice teaching of the subject chosen and a *stage* (series of demonstration lessons) under the control of the headmaster. Lastly, courses in Indo-Khmer culture and courses in general culture provide student teachers with a comprehensive picture of the main human civilizations and the principal branches of learning.

The National Teacher Training Institute comprises 8 sections which correspond to the subjects chosen by the students: Khmer language, French language, English language, history, geography, mathematics, physics, natural sciences.

In order to facilitate the teachers' work and the pupils' studies, the National Teacher Training Institute set up a Documentation and Research Centre comprising 7 special commissions (technical studies on teaching and education; linguistic and phonetic studies; literary and aesthetic studies; psycho-pedagogical studies; studies of history and

geography; mathematical and scientific studies; studies of culture and civilization).

The results obtained at this Centre are placed at the disposal of all Cambodian teachers. At present, the commission on literary and aesthetic studies is preparing a literary edition of the Khmer classical texts included in the curriculum.

Vocational and technical schools

Technical education, which was virtually non-existent in 1945, is still in the embryonic stage. In 1945 there was only one establishment, the Phnom-Penh Vocational Training School, and it provided training only for minor industrial posts. Since Cambodia obtained its independence, several schools have been established in order to provide the country with the staff required for its economic development. A Directorate of Vocational and Technical Education was set up in 1958 and attached to the Ministry of National Education. It has direct control over the following educational establishments:

National School of Arts and Crafts. This school, which was established in 1957, is responsible for training technicians for the various branches of public administration as well as for private enterprises. Later on, an engineering section will be organized.

An apprenticeship centre is also attached to this establishment; its task is to train skilled workers for a certain number of branches of industry and the handicrafts.

The school's training course is divided into two stages, lasting 4 and 3 years respectively. At the end of these studies, pupils receive the *Brevet d'enseignement industriel* (industrial diploma) and the *Baccalauréat technique* (technical leaving certificate).

The school recruits its pupils by competitive examination among persons under 18 years of age who have completed their primary education and possess the complete primary school certificate (*certificat d'études primaires complémentaires*).

An accessory competitive examination (*concours latéral*) is also held for the recruitment of pupils for the special class which prepares them for admission to the industrial section; it is reserved for former pupils of the fourth-year class of the modern section of the *collèges* and *lycées*. The school receives day-pupils and boarders. Specialized training is given in the following subjects: general engineering (fitting, machine-tools, forging); carpentry and cabinet-making; sheet-metal work; electricity; motor mechanics; radio (section due to be established in September 1959); technical drawing.

The school finds posts for its pupils, corresponding to their aptitudes and ability, as soon as they have completed their studies.

The course provided at the apprenticeship centre lasts, as a rule, 3 years and successful pupils obtain the certificate of vocational aptitude (*certificat d'aptitude professionnelle*).

Pupils are recruited by competitive examination from among those who have completed their fifth year of primary studies, irrespective of their age. The centre receives day-pupils and boarders.

At present, the centre has only two sections: cutting

GLOSSARY

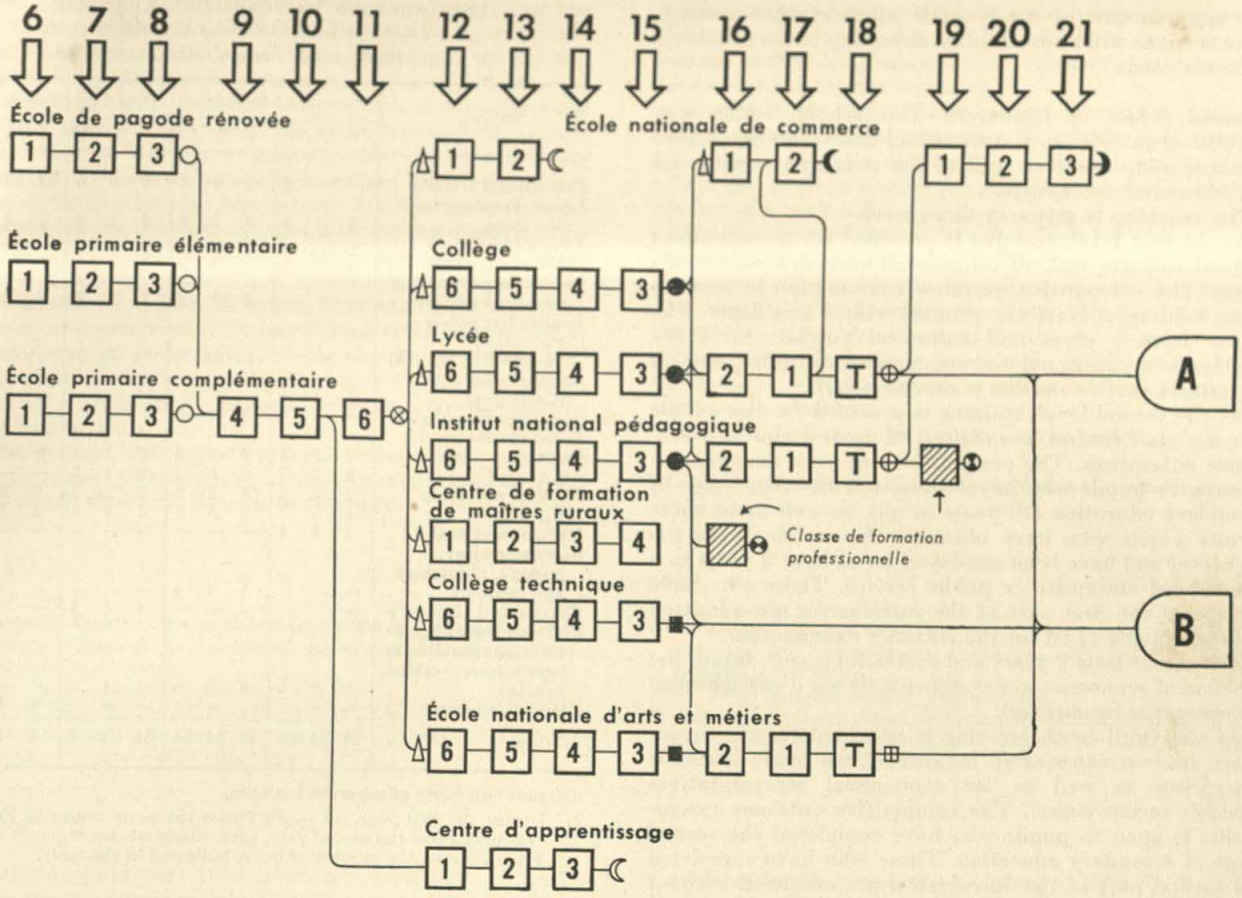
classe de formation professionnelle: see *Institut national pédagogique.*
collège: lower general secondary school.
collège technique: lower vocational secondary school.
centre d'apprentissage: vocational training school.
centre de formation de maîtres ruraux: teacher training school for rural primary school teachers.
école de pagode renovée (modernized pagoda school): lower primary school attached to a pagoda and staffed by Buddhist monks.
Ecole nationale de commerce (National School of Commerce): vocational school of commerce with courses at lower secondary, upper secondary and post-secondary levels.
Ecole nationale d'arts et métiers (National School of Arts and Crafts: vocational secondary school of trades and industries.
école primaire élémentaire: lower primary school.
école primaire complémentaire: complete primary school.
Institut national pédagogique (National Teacher Training Institute): teacher training school with courses at two levels: (a) lower secondary studies plus a one-year course of professional training (*classe de formation professionnelle*) for primary school teachers; (b) complete secondary studies plus professional training (*classe de formation professionnelle*) for secondary school teachers. The Institute also trains inspectors.
lycée: general secondary school.

HIGHER EDUCATION

A. (i) Law Faculty, Royal School of Medicine. Royal School of Administration.
(ii) Institutions outside Cambodia.
B. Various schools and colleges run by the Ministries of Agriculture and of Public Works and Telecommunications for training technicians in their respective areas.

EXAMINATIONS

Baccalauréat de l'enseignement secondaire: baccalaureate (general education).
Baccalauréat technique: baccalaureate (technical education).
Brevet d'enseignement économique et commercial: secondary commercial diploma.
Brevet d'enseignement industriel: secondary technical diploma.
Certificat d'études primaires complémentaires: upper primary certificate.
Certificat d'études primaires élémentaires: lower primary certificate.
Certificat d'aptitude professionnelle: certificate of aptitude for a particular occupation in industry or commerce.
Concours d'admission: competitive entrance examination.
Diplôme de fin d'études de formation des instituteurs: primary teacher training diploma.
Diplôme d'enseignement supérieur commercial: higher commercial diploma.
Diplôme de professorat secondaire du premier cycle: lower secondary school teacher's diploma.
Diplôme d'études secondaire du premier cycle: lower secondary diploma.



Certificat d'études primaires élémentaires ○
Certificat d'études primaires complémentaires ⊗
Concours d'admission △
Certificat d'aptitude professionnelle ☾
Brevet d'enseignement commercial ◖
Diplôme d'enseignement commercial supérieur ◗
Diplôme d'études secondaires du premier cycle ●
Baccalauréat de l'enseignement secondaire ⊕
Diplôme de fin d'études (instituteurs) ⊗
Diplôme de professorat secondaire du premier cycle ⊗
Brevet d'enseignement industriel ■
Baccalauréat technique ⊞

and manufacture of ready-made clothes; shoe-making. Other sections will be established according to the country's economic needs.

National School of Commerce. This school, which was established in 1958, is a state school and trains the future directors and executive staff of the country's commercial and industrial enterprises.

The teaching is given at three levels:

At the first level, training is provided for the executive and subordinate staff of commercial and economic enterprises. The competitive entrance examination is open to those holding at least the primary school certificate. The course lasts 2 years and successful pupils receive the certificate of vocational and commercial aptitude (*certificat d'aptitudes professionnelles et commerciales*).

At the second level, training is provided for the middle ranking staff (*cadres secondaires*) of commercial and economic enterprises. The competitive entrance examination is open to pupils who have completed the first stage of secondary education (10 years in all), as well as to those former pupils who have obtained the certificate at the first level and have been employed for at least 2 years in a commercial enterprise or public service. Those who have completed the first part of the *baccalauréat* are admitted without having to sit for the entrance examination.

The course lasts 2 years and successful pupils obtain the diploma of economics and commerce (*brevet d'enseignement économique et commercial*).

At the third level, training is provided for the senior posts (*cadres supérieurs*) in commercial and economic enterprises as well as for commercial representatives (*attachés commerciaux*). The competitive entrance examination is open to pupils who have completed the second stage of secondary education. Those who have completed the second part of the *baccalauréat* are admitted without preliminaries. Those who have obtained the certificate at the second level and received an average of 14 marks at the final examination, as well as those who have completed the first part of the *baccalauréat*, are also admitted without having to sit for the entrance examination. Holders of the second level certificate who failed to obtain an average of 14 marks at the leaving examination and failed to pass the first part of the *baccalauréat* may also sit for the competitive examination.

The course lasts 3 years and successful pupils receive the higher commercial diploma (*diplôme d'enseignement supérieur commercial*).

School for the Training of Assistant Chemical Research Workers. This school, which was established in 1958, trains technicians for the various public and private services in Cambodia.

Pupils are recruited by competitive examination among those who have completed the first stage of secondary education. The course lasts 2 years, and successful pupils receive the manipulator's certificate at the end of the first year and the assistant chemical research worker's certificate at the end of the second year.

Kompong-Cham Technical College. This establishment, which is to be set up in September 1959, will train specialized workers for various branches of industry. It will recruit its pupils by competitive examination among those who have completed their 6 years of primary education and hold the primary school certificate (*certificat d'études primaires*).

The course will last 4 years and successful pupils will receive the industrial diploma. Specialized training will be given in the following subjects: general engineering; carpentry and cabinet-making; sheet-metal work; electricity; motor mechanics; radio; technical drawing.

Training may be given in other subjects according to the country's needs.

TIME-TABLE OF THE KOMPONG-KUANTOT TEACHER TRAINING CENTRE
(in hours per week per term)

Subject	First year			Second year			Third year			Fourth year		
	I	II	III	I	II	III	I	II	III	I	II	III
Professional training	—	—	2	4	4	4	6	6	6	22	22	22
Khmer language and literature	4	4	4	3	3	3	2	2	2	2	2	2
French (for the average pupils)[1]	5	5	5	4	4	4	5	5	5	—	—	—
French (for particularly advanced pupils[1]	—	—	—	2	2	2	2	2	2	2	2	2
English (for pupils particularly advanced in French)	—	—	—	2*a*	2*a*	2*a*	3*a*	3*a*	3*a*	—	—	—
Social studies (Cambodia)	4	4	4	—	—	—	—	—	—	—	—	—
Social studies (region)	—	—	—	4	4	4	—	—	—	—	—	—
Social studies (world)	—	—	—	—	—	—	4	4	4	—	—	—
Music	2	2	2	2	2	2	2	2	2	—	—	—
Art	2	2	2	2	2	2	2	2	2	—	—	—
Physical education	2	2	2	2	2	2	2	2	2	2	2	2
Mathematics	3	3	3	3	3	3	3	3	3	2	2	2
Hygiene and health	4	4	4	—	—	—	—	—	—	—	—	—
Botany, geology, zoology, physiology and anatomy	—	—	—	4	4	4	—	—	—	—	—	—
Physics and chemistry	—	—	—	—	—	—	4	4	4	—	—	—
Practical work (domestic arts, manual work, agriculture, cattle-raising)	8	8	6	6	6	6	4	4	4	—	—	—
Optional subjects	—	—	—	—	—	—	—	—	—	4	4	4
Totals	34	34	34	34	34	34	34	34	34	34	34	34

a = plus two hours of supervised studies.

1. During the first year, all pupils follow the same course in French (5 hours). From the second year, particularly advanced pupils study French during the number of hours indicated in the table.

Other establishments. Two agricultural schools (primary and secondary) have been established by the Ministry of Agriculture.

The Ministry of Public Works and Telecommunications trains its technicians at two vocational training schools: the School for Assistant Engineers and the School for Railway Apprentices.

Teacher training schools

The aim of the professional teacher training course is to train complete primary school teachers and is reserved for

teacher training school students who have completed the fourth-year class and persons holding the lower secondary school certificate (*diplôme d'études secondaires du premier cycle* or *brevet d'études du premier cycle*).

According to the number of vacancies, this professional training course is also open to former pupils of the fourth-year class of secondary schools, the candidates being recruited by competitive examination. The course lasts 1 year. Successful students receive the teacher's diploma (*diplôme de fin d'études de formation des instituteurs*). The weekly time-table for this course is as follows: Khmer, 2 hours; Khmer culture and civilization, 1; French, 4; mathematics, 2; natural sciences, physics and chemistry, 2; history and geography, 2; moral and civic instruction,1; psychology, 4; pedagogy, 3; school administration and legislation, 1; hygiene and *savoir-vivre* (home economics, for girls), 1; drawing, 1; physical education, 1; solfeggio, 1; total hours, 26.

The general training of student-teachers aims at giving them a thorough knowledge of the primary school curriculum, which they will later have to apply.

This training is completed by practice teaching, which, from the second term on, takes the form of demonstration lessons (*stages*) in primary school classes; there are three demonstration lessons per week.

At the beginning of each *stage*, the student-teacher simply attends lessons given by an experienced teacher; this passive period is followed by an active period, during which the student teacher himself gives lessons under the control of a *maître de stage*.

The Kompong-Kuantot Teacher Training Centre trains new teachers for rural schools. The course lasts 4 years. A competitive entrance examination is organized each year. It comprises, in addition to other tests, dictation, an essay, the solving of problems and an intelligence test.

The teaching staff is composed almost entirely of Cambodians, with the exception of 2 or 3 American experts, who act as advisers.

The weekly time-table is shown in the table on page 310.

[*Text prepared by the Cambodian National Commission for Unesco in December 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 4,740,000.
Area: 66,607 square miles; 172,511 square kilometres.
Population density: 71 per square mile; 27 per square kilometre.

Summary of school statistics, 1953–57. Total enrolment in all educational institutions from primary to university level was about 495,500 in 1957/58, representing approximately 11 per cent of the estimated population. Of the school-going population, 97 per cent were enrolled in primary schools and private secondary schools, about 2.3 per cent in public general secondary schools, 0.2 per cent in technical schools and 0.5 per cent in teacher training schools and university colleges. There were, in addition, 2,521 persons enrolled in adult literacy courses. Girls made up nearly 25 per cent of the enrolment in primary schools (16 per cent in 1953/54), 14 per cent in public secondary schools, and 7 per cent in teacher training schools. Data available on the numbers of teachers are very incomplete. The average pupil-teacher ratio in public elementary and complementary schools was about 51, in pagoda schools 37, in public *lycées* and *collèges*, 35 (44 in 1953/54). It is not possible to compare progress made in teacher training schools over the period under review due to lack of separate data. Compared with 1953/54, enrolment in all primary and private secondary schools had increased by about 76 per cent. (See Table 3.)

Enrolment trends in secondary education, 1930–57. Between 1930 and 1950 the average number of pupils in public general and vocational secondary schools doubled. However,

1. EDUCATIONAL FINANCE, 1958 (in riels)[1]

A. EXPENDITURE BY PURPOSE

	Amount
Total expenditure[2]	**606 309 210**
Recurring expenditure	538 682 110
Capital expenditure	67 627 100

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure	**538 682 110**	**100.0**
Primary education	465 920 430	86.5
Secondary education[3]	72 761 680	13.5

1. Official exchange rate: 1 riel = 0.029 U.S. dollar.
2. Budget estimate.
3. Of which 8,339,660 riels (1.5 per cent) for vocational education.

in relation to the school age population between 15 and 19 years old the secondary enrolment ratio, excluding private schools, moved only from 0.2 to 0.3 in 20 years. Since 1953, public secondary education has made rapid strides. The average enrolment in public secondary general, teacher training and vocational schools increased from 4,309 in the years 1953–54 to 10,151 in the years 1955–57. Although the enrolment ratio more than doubled in 5 years it still stood at only 2.4 in relation to the age group 15–19 years at the end of the period under review. (See Table 2.)

Examination results in secondary education. Forty-seven students passed the first part and 20 students the second part of the *baccalauréat* in 1957–58. There were also 375 successful candidates for the diploma granted by *lycées* and *collèges* at the end of the lower stage of secondary education. Eighty-two teacher diplomas were awarded in 1957/58 and 51 students obtained technical or art diplomas in vocational education. No data are available for earlier years.

Educational finance, 1958. Total public expenditure on education in 1958 was estimated at 606,309,210 riels, representing about 128 riels per inhabitant. Of this total, about 11 per cent was for capital expenditure. (See Table 1.)

Sources. Cambodia: Ministry of National Education, reports; reply to Unesco questionnaire.

2. TRENDS IN SECONDARY EDUCATION 1930–57

School year	Number of students enrolled by type of education				Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational[1]				
	Total	Per cent female	Total	Per cent female			
1930	200	4.0	470	4.3			
1931	211	4.7	475	4.2			
1932	172	7.0	475	4.2	0.6	277	*0.2*
1933	161	6.2	475	4.2			
1934	178	6.2	322	6.2			
1935	195	7.7	235	8.5			
1936	196	9.2	235	10.6			
1937	309	5.8	237	8.4	0.5	303	*0.2*
1938	310	19.0	262	7.6			
1939	352	11.9	305	6.6			
1940	445	11.7	315	6.7			
1941	375	24.8	301	5.6			
1942	435	24.1	279	5.4	0.8	332	*0.2*
1943	664	16.6	262	7.6			
1944	802	14.5	254	7.9			
1945	784	8.7	221	9.5			
1946	683	7.0	180	2.8			
1947	872	9.5	177	11.3	0.9	363	*0.3*
1948	1 139	8.1	165	6.1			
1949	1 284	15.9	212	3.8			
1950	1 251	13.6	164	3.7	1.4	399	*0.3*
1953	[2]3 324	...	257	...	4.3	400	*1.1*
1954	[2]4 620	...	417	...			
1955	[2]6 381	...	570	...			
1956	[2]8 991	...	633	...	10.2	431	*2.4*
1957	[2]13 345	...	534	...			

1. Public education only.

2. Including secondary teacher training.

3. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Pagoda schools, public	1957/58	1 500	2 526	...	93 083	10 909
	Elementary schools, public	1957/58	813	7 077	836	363 257	107 824
	Complementary schools, public	1957/58	840				
	Primary schools, private	1957/58	[1]244	...	...	[1]24 542	...
	Total	**1957/58**	**[1]3 397**	**[2]9 603**	**...**	**[1]480 882**	**[2]118 733**
	„	1956/57	[1]3 164	...	...	[1]417 913	...
	„	1955/56	[1]2 987	...	...	[1]359 211	...
	„	1954/55	[1]2 695	...	...	[1]301 800	...
	„	1953/54	[1]2 621	6 761	[2]461	[1]272 542	[2]42 793
Secondary							
General	*Lycées*, public	1957/58	3	157	...	5 260	453
	Collèges, public	1957/58	14	171	...	6 078	1 187
	Total	**1957/58**	**[3]17**	**[3]328**	**...**	**[3]11 338**	**[3]1 640**
	„	1956/57	[3]15	[3]183	...	[4]8 991	...
	„	1955/56	[3]13	[3]136	...	[4]6 381	...
	„	1954/55	[3]10	[3]89	...	[4]4 620	...
	„	1953/54	[3]9	[3]75	...	[4]3 324	...
Vocational	Arts and Crafts School, public	1957/58	1	34	...	404	...
	School of Cambodian Arts, public	1957/58	1	24	...	130	...
	Commercial schools, private	1957/58	15	...	...	324	...
	Total	**1957/58**	**17**	**...**	**...**	**858**	**...**
	„	1956/57	...	[2]38	...	[2]633	...
	„	1955/56	...	[2]41	...	[2]570	...
	„	1954/55	...	[2]41	...	[2]417	...
	„	1953/54	...	[2]40	...	[2]257	...
Teacher training	Teacher training schools						
	Total	**1957/58**	**[5]28**	**...**	**...**	**2 007**	**139**
	„	1956/57	...	...	...	[6]...	...
	„	1955/56	...	...	...	[6]...	...
	„	1954/55	...	...	...	[6]...	...
	„	1953/54	...	...	...	[6]...	...
Higher							
General and technical	Faculty of Law	1957/58	1	21	...	136	12
	Royal School of Medicine	1957/58	1	23	...	147	19
	Royal School of Administration	1957/58	1	23	...	92	2
	National School of Agriculture	1957/58	1	...	...	...	...
	Total	**1957/58**	**4**	**[7]67**	**...**	**[7]375**	**[7]33**
	„	1956/57	4	...	...	[8]322	...
	„	1955/56	4	...	...	383	...
	„	1954/55	3	...	...	303	...
	„	1953/54	3	...	...	279	...
Adult	Literacy courses						
	Total	**1957/58**	**69**	**86**	**12**	**2 521**	**...**
	„	1956/57	...	...	...	...	...
	„	1955/56	...	...	...	...	...
	„	1954/55	...	...	...	...	...
	„	1953/54	...	...	...	...	...

1. Including data on private secondary education.
2. Public schools only.
3. Not including data on private and foreign schools.
4. Public schools only, including secondary teacher training.
5. Including 25 training schools for monks teaching in pagoda schools.
6. Included in secondary general education.
7. Not including the National School of Agriculture, which enrolled 103 students in 1956/57.
8. Not including the Royal School of Medicine.

CAMEROUN

The former Trust Territory under French Administration became the Republic of Cameroun on 1 January 1960.

Educational policy is decided by the Ministry of National Education, the functions of which were fixed by a decree dated 16 April 1957. Within the Ministry the Directorate of Education comprises sections for primary, secondary and technical education and for youth and sports. The Minister is advised by a Higher Council on Education (Conseil Supérieur de l'Enseignement); this meets at least once a year to discuss questions submitted by the Minister. For purposes of school inspection the country is divided into six regions.

The main objectives of recent policy have been to raise standards by improving the training of teachers, to increase the number of girls enrolled at school, and to close the wide gap in educational development between the north and the south of the country.

Schools are maintained by the Government and by private agencies. Private schools are granted financial aid when an official act of recognition has been passed by the Government, but even unaided schools can be opened only if they are registered with the Ministry. All private schools adopt the same curriculum as public schools.

National education is financed from the country's budget and, representing 14 per cent of the total budget in 1960, is one of the most important elements of public expenditure. Assistance is provided also by the French Government from a fund for aid and co-operation; this covers the salaries of French teachers and a grant for school buildings.

The structure of the school system is derived from the French and the French language is used as medium of instruction. The curriculum and some of the types of school have been modified to suit Cameroun conditions.

Public secondary schools of the academic type are identical with the *lycées* and *collèges* in France, and there are also a number of private schools of similar status. The shorter secondary course is given in *cours complémentaires*, public and private, some of which have a technical bias. In the area of technical and vocational education at secondary level, there is one *collège technique* and a number of apprenticeship centres, preparing students for vocational certificates. Homecraft sections (*sections et cours ménagers*) form another category, and offer courses of between 2 and 5 years. The largest single group of vocational schools are those preparing primary teachers: these are normal schools or courses (in part post-secondary) or else teacher training centres with a course parallel to the first cycle of secondary schooling.

[*Text prepared from official sources by Unesco Secretariat in April 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 3,187,000.
Area: 166,796 square miles; 432,000 square kilometres.
Population density: 19 per square mile; 7 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, there were 308,500 pupils enrolled in all types of education (not including adult education courses). This number represented about 10 per cent of the total population. Of these pupils 95 per cent were enrolled in primary schools, the majority being in private schools. The proportion of girls was 29 per cent in the primary schools, and the average number of pupils per teacher was 50. Between 1953 and 1957, primary school enrolment increased by 70 per cent. (See Table 3.)

Enrolment trends in secondary education, 1947–57. Table 4 shows steady increase of pupil enrolment in all three types of secondary education. The average total enrolment for the period 1955–57 is estimated at about 7 times that for the period 1947–49. Nevertheless the total enrolment for the most recent period is less than 3 per cent of the estimated population 15–19 years old.

Examination results in secondary education, 1953–57. The number of lower secondary school certificates fluctuated between 1953 and 1957, reaching a high point in 1954 and a low point in 1955, and being 16 per cent more in 1957 than in 1953. There was a general increase in the number of other certificates and diplomas granted, and particularly as regards certificates of vocational training, which numbered 159 in 1957 as compared with none in 1953 and 6 in 1954. (See Table 1.)

Educational finance, 1958. For the fiscal year beginning in January 1958, the education budget amounted to 1,422

million C.F.A. francs, not including 304 million francs from the French Government's Investment Fund for Economic and Social Development (FIDES) allocated for 1957/58. The average educational expenditure per inhabitant was therefore about 450 francs without the FIDES allocation (or about 540 francs including FIDES). The distribution of expenditure by level and type of education is shown in Table 2C.

Source. Cameroun Republic: Ministry of National Education, reply to Unesco questionnaire.

1. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Lower secondary school certificate (*Brevet*)	258	17	451	46	251	34	325	46	300	55
Baccalauréat										
First part	26	2	70	5	68	4	83	12	96	8
Second part	21	2	22	3	50	2	32	2	70	—
Certificate of industrial schools (*Brevet*)	7	—	8	—	12	—	12	—	22	—
Certificate of vocational training (technical schools)	—	—	6	—	43	3	126	6	159	5

2. EDUCATIONAL FINANCE, 1958
(in thousand C.F.A. francs)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**1 725 929**
Government of Cameroun	1 422 129
Investment Fund for Economic and Social Development (FIDES)[3]	303 800

B. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**1 725 929**
Recurring expenditure		1 410 543
For central administration	53 185	
For instruction		
Salaries to teachers, etc.	714 846	
Other instructional expenditure	134 937	
Other recurring expenditure	507 575	
Capital expenditure		315 386
Educational facilities	[3]303 800	
Auxiliary facilities	11 586	

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure[4]		**1 422 129**		**100.0**
Central administration		53 185		3.7
Instruction		861 369		60.6
Primary education	573 431		40.3	
Secondary education	249 840		17.6	
General	150 425		10.6	
Vocational	99 415		7.0	
Teacher training	[5] ...		[5] ...	
Higher education[6]	11 086		0.8	
Special education, physical education and sports, etc.	21 603		1.5	
Adult education	2 220		0.16	
Instructional centres for mixed races	3 189		0.2	
Other recurring expenditure		507 575		35.7
Scholarships	130 075		9.1	
Subsidies to private education	375 300		26.4	
Expenditure for research	2 200		0.15	

1. Official exchange rate: 100 C.F.A. francs = 0.48 (approx.) U.S. dollar.
2. Budget estimate.
3. FIDES allocation for 1957/58, which includes 69,300,000 C.F.A. francs for private education.
4. Includes capital expenditure of 11,586,000 C.F.A. francs.
5. Expenditure for teacher training is included elsewhere.
6. Data probably refer to expenditure for students abroad.

3. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergarten, public						
	Total	**1957/58**	**22**	**11**	**11**	**2 200**	**800**
	,,	1956/57	20	10	10	2 000	680
	,,	1955/56	16	8	8	1 550	550
	,,	1954/55	15	7	7	1 500	500
	,,	1953/54	13	6	6	1 300	400
Primary	Primary schools, public	1957/58	649	1 534	...	89 309	26 640
	Primary schools, private	1957/58	1 814	4 324	...	204 691	58 708
	Total	**1957/58**	**2 463**	**5 858**	**...**	**294 000**	**85 348**
	,,	1956/57	2 370	4 927	...	269 599	74 799
	,,	1955/56	2 201	4 823	...	246 223	64 369
	,,	1954/55	1 865	4 266	...	216 061	53 080
	,,	1953/54	1 610	4 230	...	173 444	42 296
Secondary							
General	*Lycée*, public	1957/58	1	39	14	672	...
	Secondary schools, public	1957/58	4	44	26	936	...
	Complementary courses, public	1957/58	6	...	...	...	...
	Secondary schools, private	1957/58	11	[1]122	...	1 556	325
	Complementary courses, private	1957/58	15	...	...	1 002	20
	Total	**1957/58**	**37**	**[1 2]205**	**...**	**[3]4 166**	**...**
	,,	1956/57	36	[1 2]180	...	[3]3 775	...
	,,	1955/56	34	[1 2]121	...	[3]3 326	...
	,,	1954/55	29	[1 2]116	...	3 283	...
	,,	1953/54	15	[1 2]105	...	2 399	...
Vocational	Technical school, public	1957/58	1	28	2	198	...
	Technical complementary course, public	1957/58	*2	22	15	366	...
	Departments of arts and crafts, public	1957/58	21	53	—	566	...
	Departments of domestic science, public	1957/58	*6	13	13	148	148
	Apprenticeship centres, public	1957/58	7	31	—	447	...
	Vocational education, private	1957/58	28	77	...	2 598	985
	Total	**1957/58**	***65**	**224**	**...**	**4 323**	**...**
	,,	1956/57	62	162	...	3 511	...
	,,	1955/56	48	122	...	2 522	...
	,,	1954/55	44	109	...	2 031	...
	,,	1953/54	41	88	...	1 868	...
Teacher training	Teacher training schools, public	1957/58	4	27	10	570	150
	Teacher training course, public	1957/58	1	...	...	...	...
	Teacher training schools, private	1957/58	2	...	...	1 238	...
	Teacher training courses, private	1957/58	5	[1]...	...		
	Total	**1957/58**	**12**	**[1 5]27**	**[6]10**	**[4]1 808**	**...**
	,,	1956/57	[4]11	[1 5]25	[6]10	[4]1 690	...
	,,	1955/56	[4]8	[1 5]21	[6]9	[4]1 065	...
	,,	1954/55	[4]8	[1 5]15	[6]5	[4]990	...
	,,	1953/54	[4]8	[1 5]10	[6]3	[4]883	...
Special	Reformatory school, public	1957/58	1	2	2	90	...
	Centre at Douala, private	1957/58	1	7	7	125	...
	Total	**1957/58**	**2**	**9**	**9**	**215**	**...**
	,,	1956/57	2	5	5	170	...
	,,	1955/56	2	4	4	245	...
	,,	1954/55	2	4	4	234	...
	,,	1953/54	2	4	4	121	...
Adult	Courses for adults	1957/58	400	400	...	8 000	...
	Domestic science training	1957/58	24	8	8	420	420
	Total	**1957/58**	**424**	**408**	**...**	**8 420**	**...**
	,,	1956/57	274	258	...	4 300	...
	,,	1955/56	123	123	...	3 800	...
	,,	1954/55	123	123	...	3 690	...
	,,	1953/54	90	90	...	2 700	...

1. Teachers in private teacher training courses are included with those in private secondary colleges.
2. Not including teachers of complementary courses.
3. Not including enrolment in public complementary courses.
4. Not including public teacher training courses.
5. Teachers in public teacher training schools only.

4. TRENDS IN SECONDARY EDUCATION, 1947–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1947	926	12	280	—	216	2			
1948	759	14	246	—	240	4	*1.3	315	*0.4
1949	854	20	...	—	291	3			
1950	1 052	...	275	—	302	4			
1951	1 143	19	300	—	300	—			
1952	1 880	11	350	—	371	—	3.5	328	1.1
1953	2 399	13	1 868	30	780	10			
1954	3 283	14	2 031	29	1 023	13			
1955	[1]3 326	...	2 522	...	[2]1 065	...			
1956	[1]3 775	...	3 511	...	[2]1 690	...	*9	330	2.6
1957	[1]4 166	...	4 323	...	[2]1 808	...			

1. Not including public complementary courses.

2. Not including public teacher training courses.

CANADA

THE EDUCATIONAL SYSTEM

Canada is a federation composed of ten provinces and two sparsely populated territories north of the provinces. Responsibility for providing and maintaining schools is vested in the provincial legislatures for the provinces, and in the Federal Government for the territories. Both similarities and differences are to be found among provincial organizations for educational administration. The two that diverge most from the general pattern are Quebec and Newfoundland, the former having a dual system of Roman Catholic and non-Catholic schools, and Newfoundland a public denominational system in which four main and some other religious groups operate schools. Throughout the country there is a persistent movement towards providing all Canadians with greater opportunities for more education.

The Federal Government. The role of the Federal Government is relatively small: by the British North America Act of 1867, which united the Canadian provinces, the organization and administration of education was made a provincial responsibility. The federal authorities are, however, responsible for the education of Indians—who are wards of the Federal Government—whether within or outside provincial boundaries, of Eskimos and other people outside the provinces, of members of the armed forces and their dependents, whether within or outside Canada, and of inmates of penitentiaries. Educational and vocational training programmes in the territories are run by the Education Division, Indians Affairs Branch, Department of Citizenship and Immigration, operating under the Northwest Territories Act, Chapter 331 of the Revised Statutes of Canada, 1952. The Department of National Defence is empowered by the National Defence Act, Chapter 164 of the Revised Statutes of Canada, 1952, to enter into an agreement with the provinces to provide schools or give financial support to public schools and to establish and administer schools abroad for the dependents of members of the armed forces.

In addition, the Federal Government provides: (a) matching grants for the development of vocational education, including construction of buildings, purchase of equipment and payment of teachers' salaries; (b) grants to universities and colleges, distributed by the National Conference of Canadian Universities on a *per capita* basis by province and student enrolment per institution; and (c) grants toward scholarships and research, distributed by the Canada Council, the National Research Council, the Defence Research Board and several departments of government.

The Provincial Governments. The organization and administration of each provincial educational system and the operation of all publicly controlled schools in the

system has its basis in the provincial School Act or Acts. The most common practice is to enact one School Law covering both elementary and secondary schools, under which local elected boards administer the schools of the district. But in Ontario, for example, one may find separate elementary and secondary school boards, one elected, the other appointed, operating in the same city but under separate School Laws.

Each provincial government has a Department of Education which is responsible for formal education within the province but which may share responsibility for vocational and adult education with one or more other government departments. Each Department is headed by a Minister of Education except in Quebec, where the Provincial Secretary deals with educational administration and grants, while the Catholic and Protestant Committees of the Council of Public Instruction are responsible for pedagogical matters. The Minister is a member of the Cabinet. Under him is a Deputy Minister or Chief Director of Education, a civil servant, who administers the Department composed of directors and staff responsible for administration and grants, curriculum and textbook services, teacher recruitment and training, supervision and inspection, special services, examinations, registrations, etc.

The School Act or Acts and regulations largely determine the duties and responsibilities of the Department and the establishment and conduct of the schools. A typical Department, among other tasks, draws up programmes of studies; authorizes textbooks and provides lists of approved supplementary readers and library books; issues regulations concerning teachers; regulates the selection and training of teachers, and issues certificates to them; approves the erection of buildings; supervises the operation of the schools; and provides grants to local boards, usually in accordance with a formula which takes account of enrolment, attendance, staff members and need.

Local government authorities may be city school boards, municipal boards, boards of larger units, or rural school district boards operating independently or under the board of a larger unit. The boards are composed of local citizens either elected from among the ratepayers or appointed—usually by the Department or local municipal council. Official trustees have been appointed to act in lieu of a board in some outlying areas and in a few districts where for some reason a board could not be elected.

Under the School Act and regulations a local school board is responsible for the construction, maintenance and operation of such schools as are required for all children of school age. It purchases sites, erects buildings, furnishes and maintains them, employs teachers, and ensures that the school or schools are operated according to regulations.

While most schools are non-denominational, several of the provinces have provisions in the School Law concerning the place of religion in the schools or providing for the establishment of separate schools by religious minorities. Others provide for religious differences through denominational schools. Newfoundland has four superintendents of education representing the four main denominations; these officials come directly under the Deputy Minister and are responsible for the schools of their respective denominations. In Quebec the Roman Catholic French-speaking majority operate one school system; the non-Catholic minority operate a second system with equal privileges before the law. In Ontario, Saskatchewan and Alberta the first school to be established in a school section must be a public school; thereafter a second school, known as a 'separate school', may be established by a Protestant or Catholic minority. In the public schools of other provinces the degree of denominationalism to be found varies according to the School Law, the regulations, or the disposition of the population of the district.

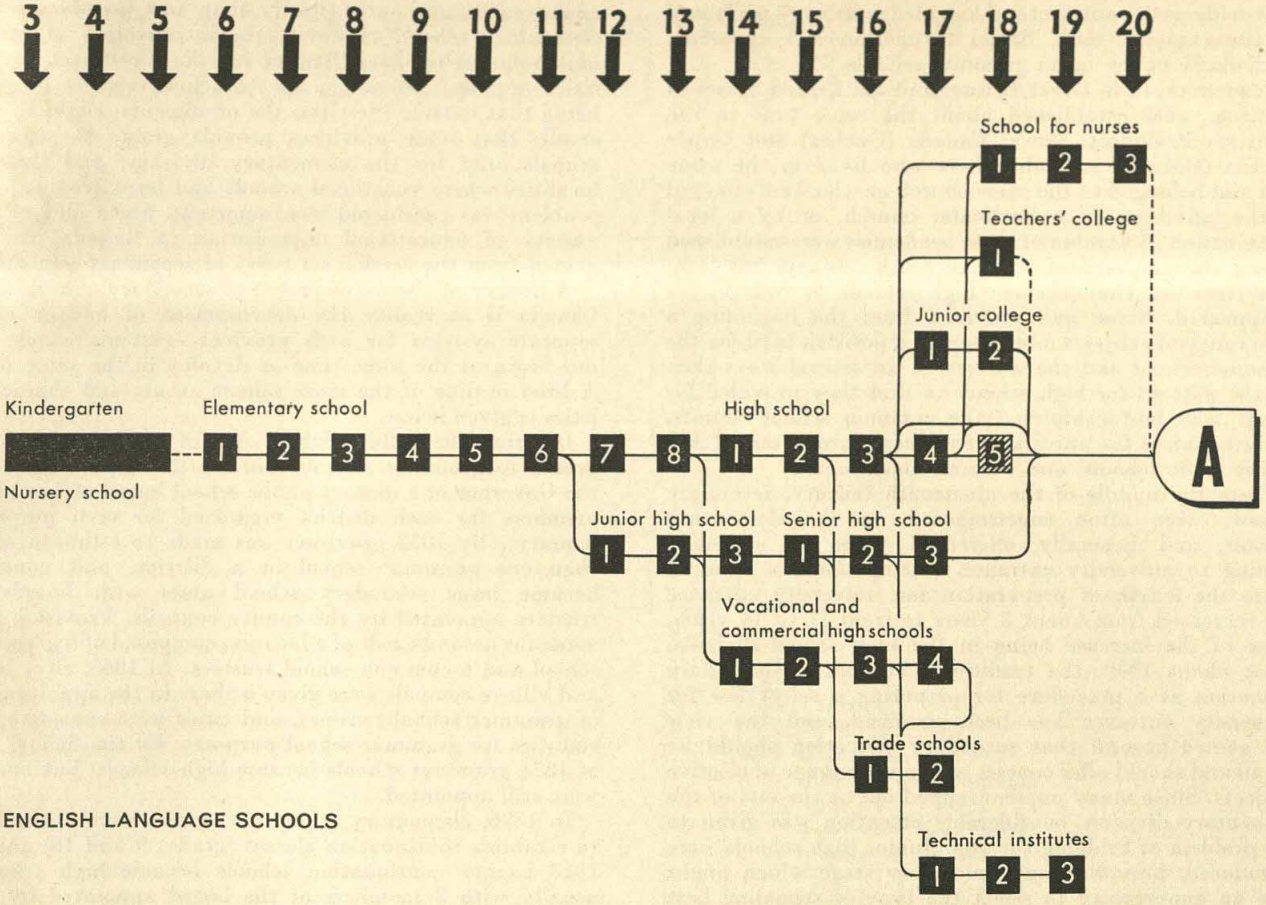
Private agencies. The School Law in most provinces provides that children of school age do not have to attend public school so long as they are receiving efficient instruction elsewhere. A variety of private schools have been established in all provinces, some under church auspices, some under private auspices. A number of these schools provide special services, e.g., testing out new methods and devices, providing education for atypical children etc. Outside Quebec, where perhaps 10 per cent of the school children are enrolled in private schools, there are only about 3 per cent of primary and secondary pupils in private institutions—some 350 schools, more than half of them Roman Catholic. Of the 350, just under half are residential, 120 provide secondary and 122 both primary and secondary instruction. About 47 per cent of the pupils are enrolled in high school grades.

There are also many private schools providing vocational courses at secondary and post-secondary level, either by daytime or evening attendance, or through correspondence courses.

The structure of the school system

Canadian education is commonly referred to as a ladder with steps from kindergarten through elementary, secondary and higher education divisions. Each division leads to the one above. In a limited number of districts in certain provinces the secondary division is further divided into junior and senior. Entrance to secondary schools is made after the successful completion of grade 8 in most provinces, except in those localities where there are junior high schools which admit pupils who have completed grade 6, and after 7 years' primary schooling in Quebec. Considerable attention has been given to making the transition smooth, and in most provinces the only requirement for entrance to secondary schools is promotion from the elementary division. For most pupils the end of elementary education is not a parting of the ways, although to a certain extent there may be some selection; and a limited number who wish, or who are not academically inclined, enter vocational education or leave school.

To provide for students going on to higher education, most secondary schools offer a college-preparatory course, and in a majority of the provinces the final high school year overlaps first year university, so that students who complete this final year enter second-year university. The secondary schools of several provinces also offer terminal courses, which are general courses with many electives, or the various courses found in composite schools. Most of the larger cities have separate schools for technical and commercial education.



GLOSSARY

elementary school: primary school.
high school: secondary school with 4- or 5-year courses of academic, commercial, technical or composite type. The larger high schools may be known as *collegiates.*
junior college: non-degree granting college; some junior colleges combine the upper years of high school and first years of undergraduate study; others have a high school department affiliated to a university.
junior high school: lower general secondary school comprising the two upper grades of the regular *elementary school* and the first grade of *high school.*
kindergarten: pre-primary school for 4- and 5-year-olds.
nursery school: pre-primary school for 3- to 5-year-olds.
school for nurses: vocational training school.
senior high school: upper secondary school.
teachers' college: teacher training college, sometimes known as *normal school.*
technical institutes: vocational training schools with advanced, or post-secondary courses training technicians and technologists.
trade schools: vocational training schools.
vocational and commercial high schools: secondary schools with 4-year courses emphasizing vocational subjects.

A. Institutions of higher education.

Two diagrams (pages 319 and 321) illustrate the main types of educational organization found in the Canadian provinces.

The two official languages in Canada are English and French. In any provincial system where one of these is the principal language of instruction, the other may be taught as a second language. However, the pupil's incentive to learn the second language varies according to such factors as the course of study taken, geographical situation, cultural milieu and probable economic rewards. In some schools other modern languages such as German, Ukrainian or Spanish may be taught as a second or third language, or in some cases used for instruction at school according to regulations.

THE DEVELOPMENT OF SECONDARY EDUCATION

General education. Secondary schools were first established in Canada to prepare students for the professions. For the most part, secondary education was intended for those going on to university, while common schools were intended

to provide such rudiments of knowledge as were necessary for the common man. Social distinction was apparent, particularly in the Latin grammar schools.

Academies, as in Great Britain and the United States of America, were established about the same time in the Maritime Provinces, Lower Canada (Quebec) and Upper Canada (Ontario) by subscribers who lived in the same area and belonged to the same church or who were opposed to the privileges of a particular church, or by a local organization. A number of these academies were established during the first half of the nineteenth century, but from that time on, they became high schools or colleges, or disappeared. Some had provided from the beginning a wide range of subjects and occupied a position between the common school and the university. In several ways they set the pattern for high schools in that they provided for pupils who had completed the common school courses, offered courses for university entrance, normal school and higher trade schools, and were co-educational.

From the middle of the nineteenth century, secondary schools were often superimposed on the elementary schools, and generally offered 3 years of schooling leading to university entrance. During the last hundred years the length of preparation for university entrance has increased from about 8 years to from 11 to 14 years, most of the increase being in the high school division. Since about 1900, the traditional concept of secondary education as a procedure for preparing a select few for university entrance has been modified, and the view has gained ground that secondary education should be for all and should offer courses with a wide range of elective subjects. Since many pupils dropped out at the end of the elementary division, considerable attention was given to the problem of bridging the gap. Junior high schools were introduced, providing an exploratory stage which might give an opportunity to select the type of schooling best fitted for the pupil, to prepare him adequately for senior high school, and to adapt the teaching to that phase of adolescence more satisfactorily than was possible in the elementary school. However, the introduction of junior high schools has been limited for the most part to the cities of some provinces, the principal reasons for this being that outside the cities the enrolments would be too small; that some provinces provide grants to separate schools only for the elementary division; and that in localities where vocational schools had been provided the problem was considered less important. Some idea of the variety of educational organization in Canada can be gained from the section on types of secondary education.

A history of the development of secondary education in Canada is in reality the development of one or more separate systems for each province—systems which did not begin at the same time or develop in the same way. A brief outline of the more salient events and characteristics is given below.

Ontario. The Public School Act of 1807 provided for grants to grammar schools and for the appointment by the Governor of a district public school board of 5 or more members for each district organized for civil purposes (county). By 1853 provision was made to establish more than one grammar school in a district, and counties became basic secondary school units with boards of trustees appointed by the county councils. Provision was made for union boards of education composed of 8 grammar school and 6 common school trustees. In 1865, city, town and village councils were given a share in the appointment of grammar school trustees, and cities were considered as counties for grammar school purposes. By the School Act of 1871 grammar schools became high schools, but boards were still appointed.

In 1896, elementary school authorities were authorized to establish continuation classes (grades 9 and 10) and in 1913 county continuation schools became high schools, usually with 3 members of the board appointed by the county council. In 1946, county councils were empowered, with the approval of the Minister and the municipal

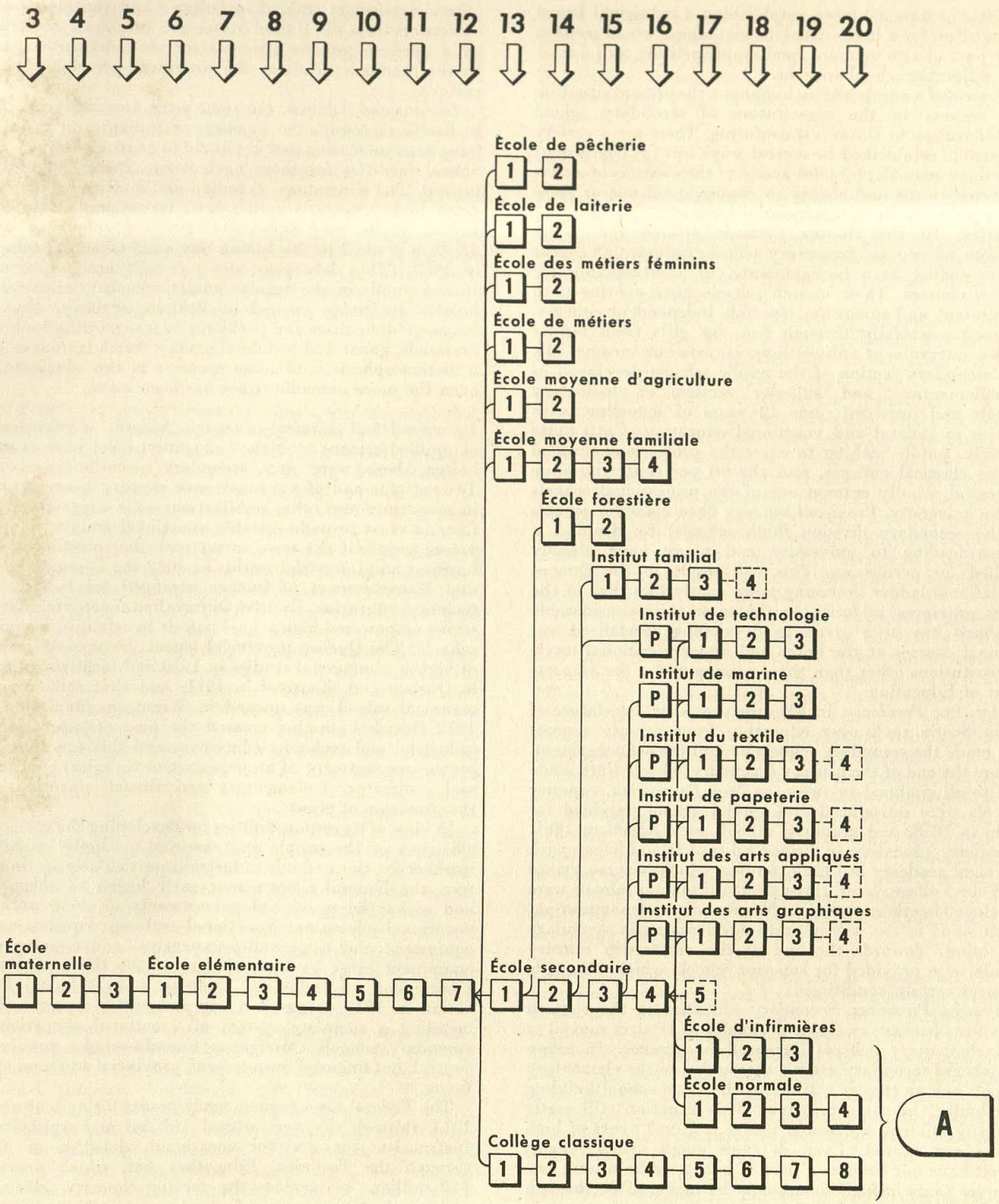
GLOSSARY

NOTE. Separate institutions for boys and girls.

collège classique: secondary school with classical academic course.
école de laiterie: vocational training school for workers in dairying industry.
école de métiers: vocational training school for various trades.
école de pêcherie: vocational training schools for the fishing industry.
école des métiers féminins: vocational training school of women's trades.
école d'infirmières: vocational training school of nursing.
école élémentaire: primary school.
école forestière: vocational training school of forestry.
école maternelle: pre-primary school.
école moyenne d'agriculture: vocational school giving practical training in agriculture.
école moyenne familiale: vocational training school of home economics.
école normale: teacher training school.
école secondaire: general or composite secondary school, including schools previously known as *école primaire complémentaire*, and *école primaire supérieure.*
institut de marine: vocational training school of navigation and marine engineering.
institut de papeterie: vocational training school for workers in the papermaking industry, with courses at secondary and post-secondary level.
institut de technologie: vocational secondary school of technical studies, preparing for a wide variety of trades and industries.
institut des arts appliqués: vocational training school of arts and crafts.
institut des arts graphiques: vocational training school of printing, book manufacturing and related trades.
institut du textile: vocational training school for technicians in the textile industry.
institut familial: advanced vocational training school of home economics.

HIGHER EDUCATION

A. *Écoles supérieures et facultés universitaires:* colleges and university faculties.



FRENCH LANGUAGE SCHOOLS (Province of Quebec)

councils, to pass a by-law establishing a municipal board of education for a high school district which would contain all or part of two or more local municipalities, and one or more adjoining school sections.

Because of a number of such changes, the present situation with respect to the constitution of secondary school administration in Ontario is confusing. There are a variety of districts established in several ways by: (a) legislation; (b) county councils; (c) joint action of the councils of a city, separated towns and county or counties; (d) one or more municipal councils in unorganized territory.

Quebec. In the Roman Catholic system the *collège classique* offered to elementary school graduates an 8-year course ending in a baccalaureate, in addition to some shorter courses. These church schools have continued to the present and somewhat resemble independent colleges, financed essentially through fees, by gifts from former pupils, government subventions, investment income, etc. The secondary section of the public schools developed as 'complementary' and 'superior' sections of elementary schools and provided some 12 years of schooling, with courses in general and vocational education. Until quite recently, pupils wishing to enter the professions enrolled in the classical colleges, and the 30 per cent who were successful usually entered one of the professional schools at the university. Provision has now been made for schools in the secondary division (high schools) to establish a course leading to university and many have already applied for permission. This will result in the Quebec educational ladder becoming more nearly like that of the other provinces in form. At the same time considerable emphasis has been given to developing specialized vocational courses at the lower and upper vocational levels in institutions other than those coming under the Department of Education.

Maritime Provinces. In 1865 the provincial legislature of Nova Scotia took over education from private sources and made the secondary schools part of the school system. Before the end of the century secondary schools were made free to all qualified to enter. In New Brunswick, superior schools were introduced and special grants provided for them in 1858, and grammar schools were added in 1861. Secondary education in Prince Edward Island began with a central academy in Charlottetown, which became Prince of Wales College; later, three smaller grammar schools were developed in other centres. In Newfoundland denominationalism stood in the way of early development in secondary education. Towards the end of the nineteenth century grants were provided for superior schools which were able to meet certain conditions.

Western Provinces. Secondary education in the western provinces became available gradually as settlers moved in and elementary schools increased in number. In many schools the secondary grades were added to the elementary school, one or two at a time, in the same school building and under the same principal. This situation still exists in many villages and towns where 1, 2 or 3 years of high school are offered. Even in some small urban schools which have not become a part of a larger school unit, one or more years of high school may be taken, often through correspondence and with some assistance from the teacher. High school development was influenced greatly by an influx of teachers trained in Ontario and the Maritimes, by settlers from the United States and European countries, by a need to prepare students for the universities, and by the economic needs of the province—principally agriculture.

Indians and Eskimos. For some years now, mainly owing to health measures, the numbers of Indians and Eskimos have been increasing and are likely to continue to increase. School facilities for them have been expanded and improved. The percentage of Indian and Eskimo youth who enter high schools is rather low, for example only 251 Indian pupils were reported in grade 9 compared with 4,239 in grade 2 in the Indian day and residential schools in 1958. (This, however, does not take account of any Indian pupils in the regular public schools.) Schools and hostels are being opened in Eskimo territory. Despite language difficulties and problems of transporting building materials, goods and people, Canada's North is undergoing a metamorphosis, and some progress in the education of even the more nomadic tribes has been made.

Vocational and technical education. Schools of engineering or applied science at higher education level were started before there were any secondary vocational schools. Towards the end of the nineteenth century many articles in magazines and other publications were suggesting that Canada must provide suitable vocational training for her young people if she were to maintain her position in the business and industrial world. In 1882 the Council of Arts and Manufacturers of Quebec arranged for lectures on technical education. By 1896 Ontario had enacted legislation which empowered high school boards to establish technical schools. The Quebec provincial legislature opened schools of higher commercial studies in 1910 and technical schools in Quebec and Montreal in 1911, and that same year a technical school was opened in Winnipeg, Manitoba. In 1912 British Columbia created the post of supervisor of industrial and technical education, and this was followed by the appointment of an organizer of technical education and a director of elementary agricultural education and the provision of grants.

In view of its responsibilities for developing the economic efficiency of the people and ensuring a supply of skilled workers for the nation's industries, particularly in time of war, the Federal Government early began to encourage and assist the provincial governments in their work in vocational education. Vocational training requires costly equipment and is generally expensive, and training and equipment must be kept abreast of the times. A Royal Commission on Industrial Training and Technical Education in 1910 prepared a comprehensive report recommending a complete system of vocational education in secondary schools throughout Canada—under provincial control, but financed from federal, provincial and municipal funds.

The Federal Government made grants for agriculture in 1913, through the Agricultural Aid Act and Agricultural Instruction Act, and for vocational education in 1917, through the Technical Education Act, which provided $10 million 'to increase the earning capacity, efficiency and productive power of employees in industry and mechanical trades'. These were matching grants; the

provinces took the initiative in obtaining them and spending the money.

From 1919 to 1925 other provinces passed Vocational Education Acts, but by that time the impetus from World War I had died down. In 1925 a commercial course was offered in academic schools in Manitoba, a trend towards combining academic and vocational courses which has continued up to the present with composite schools being erected in both urban and rural areas.

During the past decade there has been considerable expansion in the fields of technical and vocational education. At present approximately 200 provincial and municipal institutions offer technical and trade training in Canada. Of these, some 20 to 25 institutions provide mainly post-high school, or advanced technical courses; about 100 provide high school industrial courses, and 75 or 80 have trade courses for apprentices.

Legal basis

All publicly supported secondary schools, whether academic, vocational or composite, are established under the appropriate School Law enacted by the provincial legislature or by the Federal Government in the few situations mentioned previously. As was pointed out above, the provincial School Law usually covers both the elementary and secondary divisions, but in Ontario there is a separate law for each division and in Saskatchewan collegiates and vocational high schools may be established under Secondary School Regulations and high schools under the School Law.

Participation by the Federal Government in vocational education is for the most part carried on through the Canadian Vocational Training Branch of the Department of Labour. The legislative authority for all commitments of this Branch is the Vocational Training Co-ordination Act of 1942, which provides for co-operative action between federal and provincial governments in this field. The Act authorizes the Minister of Labour to undertake vocational training projects to fit persons for vital industries and defence, the conservation and development of natural resources or any work in the national interest, and to assist the unemployed. To this end the Minister may enter into agreement with the provinces to operate such projects and to share the cost on a 50–50 basis for any of the following: continuation of projects already operating under the Youth Training Act; projects recommended by the Vocational Training Advisory Council to provide vocational training for apprentices and supervisors; the development and carrying on of vocational training on a level equivalent to the secondary school level; projects for rehabilitation and technical training in primary industries.

The Federal Government has provided for appropriate provincial authorities to organize and operate the training projects and encourages programmes deemed to be in the national interest. Vocational and Technical Training Agreement No. 2 is the basic agreement under which assistance is provided for facilities, buildings and equipment for training programmes. The present agreement covers a 5-year period from 1 April 1957. The capital appropriation is allotted to provinces on the basis of their population aged 15 to 19; the rest is allotted for operating costs of approved programmes in institutes of technology, trade institutes and vocational departments of high schools. A Vocational Correspondence Agreement, April 1950 to March 1955, has been extended, a year at a time, to provide assistance in revising approved vocational correspondence courses which are available to all Canadian residents.

Administration

Most of the provinces have an advisory council which meets once or twice a year to consider matters of policy in education and advise the Minister. Typical representatives are members of the Department of Education, the university, the teachers' federation, the school trustees' association and other interested bodies.

Changes in policy are effected by legislation, usually introduced by the Minister after consultation with other members of the Cabinet and after consultation with the Deputy Minister and other Departmental officials. Implementation of policy is left to the Department.

The director of curriculum normally organizes one or more committees and conducts meetings throughout the province before introducing changes in the curriculum, usually on a trial basis. Since the universities are interested in the high school graduates who will enter college, university officials have normally been consulted about the courses of study, and the setting of examinations for high school seniors. In some cases they may permit collegiates and high schools to recommend their better students for entrance without examinations.

In recent years there has been widespread interest in problems related to the selection of university students and the equity and validity of final examinations for selection. Research surveys are being conducted in Ontario, Alberta and the Maritime Provinces to determine just how effective present selection methods are and to advise on changes which should be implemented. In British Columbia emphasis has been on trying out new methods.

Vocational advisory committees are used extensively at federal, provincial and local levels of government to assist in developing and operating the various programmes. Generally they consist of government, employer and employee representatives, sometimes with representatives of other interested groups. They meet regularly to consider types of courses needed and course content, and may assist in maintaining standards, sometimes acting as examining boards.

Control. The provincial Department is responsible for the enforcement of the School Law and Regulations pursuant to the law, and certain members of the Department such as directors and inspectors are appointed to carry out this task and ensure that the schools are operating as prescribed. The Department maintains some degree of uniformity in the secondary schools through prescribing the curricula, selecting lists of books or prescribing texts, the certification of teachers and through the appointment of superintendents to inspect the schools.

Supervision and inspection. Most of the provincial Departments of Education, in selecting their inspectorial staff, provide for a limited number of superintendents or in-

spectors whose work is at the secondary level exclusively. Secondary inspectors may have their office at the provincial capital, from which they travel to inspect the secondary schools, in which case they are usually responsible for a particular area and work with the district superintendents in inspecting a school, or they may be allocated to a section of the province. Inspectors in the other provinces inspect both elementary and secondary schools; they are usually allocated to an area, or are employed by a city board.

Requirements for appointment vary, but the selection is usually made by a civil service commission from candidates who possess an advanced degree in education, have included in their studies a course for administrators, and have had several years of successful experience in teaching, according to inspectors' reports, etc.

The supervisory staff are responsible for direction of the public school service and the maintenance of satisfactory standards of instruction in the classrooms. They promote co-operative and group supervision among the principals and teachers, assist with conventions and institutes, and otherwise provide leadership, and in many cases participate in an increasing number of surveys into building needs, administrative reorganization and instructional programme improvement.

The CEA-Kellogg Project in Educational Leadership 1952–56, the aim of which was to clarify the role of the superintendent, work out practical solutions encountered in individual superintendence and bring together a fund of knowledge and materials on school supervision and administration in Canada, has focused attention on this area with good results as shown from improved communication between administrators, a change to participative direction, and an appreciation of the position of supervisors and the need for courses in supervision.

Finance. Secondary schools are supported from revenue from local tax receipts, grants from the provincial government, and in a few cases from fees. In addition, grants for vocational secondary schools, including vocational departments of high schools (instruction, buildings and equipment) are made from federal funds. The bases on which provincial operating grants are paid vary from province to province, but generally take into account the number of teachers, and possibly their certificates, the number of pupils, the number of days the school was open and the relative ability of the district to support its schools. Building grants are often on a shared basis for approved construction.

TYPES OF SECONDARY EDUCATION

Some idea of the variety of secondary schools in Canada can be obtained from the following summary of types of secondary school organization by province.

Beginning with the Western Provinces, there are in British Columbia high schools, junior and senior high schools separately, junior-senior high schools, and superior schools taking courses up to grade 10. The latter are usually attached to elementary schools, the other types of secondary school may or may not have an elementary division. In Alberta junior high and senior high divisions are common but may be found in the same school. Saskatchewan has high schools and collegiate institutes but the principal difference between the larger high schools and smaller collegiates is one of name and of the Act under which they operate. Technical collegiates are found in the cities. In the villages and small towns the high school is often an integral part of the all-grade school but may offer only some years of high school. Secondary education in Manitoba is similar except that in the city of Winnipeg there are also a number of junior high and senior high schools.

In Ontario there are academic, technical and commercial collegiates and composite high schools in the cities, and outside the cities, town, village and county high schools, most of which are academic. Quebec has a greater variety of secondary schools, or divisions of high schools, than most provinces. There are the *collèges classiques* for boys and girls, of which the first 4 years are secondary. There are high schools for boys which provide a choice of commercial, scientific, general, industrial or agricultural sections, with an academic college preparatory course now being added. There are also trade schools. Girls may enter academic, general, commercial or general sections in the high schools; the general section leads to teacher training in normal schools, nursing or home economics.

As regards the Maritime Provinces, New Brunswick has high schools, vocational schools, rural and urban composite schools, the rural composite schools generally being for pupils of grade 7 and up throughout the counties in which these schools are situated. Nova Scotia recognizes junior and senior high school divisions, including rural regional high schools. In Prince Edward Island there are secondary divisions in the schools of the larger centres and some secondary education is offered in the colleges. In Newfoundland high school instruction is given in many one-room schools as well as in the larger centres. At present a considerable number of regional schools are being organized. Radio programmes are used to supplement correspondence courses for secondary pupils in remote rural areas.

Between 60 and 70 per cent of all children who are enrolled in grade 1 of elementary school later enter high school, but a much smaller percentage complete a secondary course. In the cities the pupils may enter academic, technical or commercial secondary schools or courses, or may cut across these lines where there are composite schools. In small towns and villages the pupils normally have to take the academic course and in the smaller schools there are usually few options.

Pupils completing the elementary division in rural schools may be fortunate enough to live in a district where there is a central rural high school or where transportation is provided to a centralized high school in a town or village. Otherwise they must either go away to high school or depend exclusively on correspondence courses, getting what help they can from the local elementary teacher. In those provinces where larger units are organized there is usually provision for central high schools, and in at least two provinces more attention is being given to organizing larger units for secondary schools than for education at primary level. Usually this requires the erection of a central school building with buses to transport the pupils, but in a

few places where transportation is difficult dormitories have been provided. Many of these schools are of the composite type. Their increasing numbers represent a strong trend.

The view is often taken that there should be a minimum of from 300 to 500 pupils in such schools so that courses may be offered in the academic, commercial and technical fields and possibly home economics, agriculture, etc., and so that the classes will not be too small for efficient school management. New Brunswick regulations recommend that rural high schools be located wherever there are sufficient pupils, so long as the area is of suitable size and amply provided with roads. The plant should contain at least four academic classrooms, facilities for manual subjects and domestic science, an auditorium-gymnasium, laboratories, a library, facilities for hot lunches, adequate space for sports, garden and a demonstration plot; hostels for boarders and a teacherage where necessary. It should also be a community centre.

General secondary schools

Educational requirements for entry have been mentioned in the section on the structure of the school system. In some schools the entrants are divided into three streams on the basis of one or more of the following: public school examinations, intelligence tests, standardized achievement tests, and teachers' ratings. In a few cities the very bright are grouped in separate classes and 'opportunity classes' are provided for the less gifted. Provisions for the more able students may include extra promotions, extra options, or an enriched curriculum.

Since there is wide variety in the organization of curricula, and even in the number of subjects taught in a grade, it is not possible to provide a sample time-table for Canada as a whole. The curricula described below are those for Ontario, selected because in some ways it is a 'middle-of-the-road' province in these matters and the work undertaken in its high schools can perhaps be considered fairly representative of what goes on in the high schools of provinces other than Quebec.

The Ontario curriculum in the academic schools is designed to prepare students for entrance to the universities, teachers' colleges, nursing schools and such, through providing a well-balanced cultural education. In the first year students take a wide variety of subjects, 5 being compulsory: in the second and more advanced years the number of compulsory subjects is reduced, thus providing for individual differences and wishes, but choice is limited by university requirements. (Some years ago Greek, Latin and possibly two or more modern languages were necessary for entrance to some or most university courses, but such requirements have been gradually dropped, although a second language is still required for entrance to certain faculties or for advanced degrees.)

Pupils are expected to keep in mind university requirements for the various courses and to select the appropriate studies. It is also intended that in the choice of courses, the optional subjects selected should be persevered with from year to year so that some degree of specialization may be attained. It is further suggested that the more able students take an extra option, and others the minimum number required.

CURRICULUM OF GENERAL COURSE IN CITY HIGH SCHOOLS (ONTARIO)

Grade	Compulsory subjects	Optional subjects[1]	
9	English Social studies (geography) Mathematics (arithmetic and algebra) Physical education Vocational guidance	Science French Latin Art Music Home economics	Industrial arts Typing Business practice
10	English Social studies (Canadian history) Physical education	Mathematics (algebra and geometry) Science French Latin	Art Music Home economics Industrial arts Typing Business practice
11	English History Physical education	Algebra Physics French Latin Commerce Home economics Industrial arts	Art Music Agriculture German Spanish Italian Greek
12	English History Physical education	Geometry Chemistry French Latin Commerce Home economics Industrial arts	Art Music Agriculture German Spanish Italian Greek
13	English composition English literature Physical education	History Algebra Geometry Trigonometry Physics Chemistry Biology	Latin French German Greek Spanish Geography Music

1. In grades 9, 11, 12 and 13 the student chooses any 3 or 4 of the subjects listed; in grade 10 any 4 or 5. Outside the cities there would be fewer options, the actual number being dependent on the size of the school and the number of teachers.

A somewhat similar course of study is drawn up for commercial and vocational high schools. Both these types of schools include courses in English, social studies, physical education and mathematics, and provide for a number of options similar to those offered at the academic schools. The vocational courses offered at the high schools are intended to prepare students for types of work rather than for particular jobs.

In determining the time-table for a school it may be decided that optimum benefits can come from 8 periods of 40 minutes a day, which allows for 5 periods a week for most subjects. Only in Quebec is supervised study conducted on a large scale, although 'library periods' are included in most public school programmes. All provinces require homework of the students, the amount normally increasing grade by grade.

Methods in teaching vary rather widely. They include the lecture method, question and answer, discussion, laboratory period, demonstration and various combinations

of these. Auditory and visual aids are in fairly general use, including radio programmes, some of which are prepared for a province or several provinces, television programmes, tape recordings and the use of tape recorders for language and speech classes, records, filmstrips, etc.

The amount of guidance provided varies from province to province and from school to school, and may include both educational and vocational guidance, with some help in solving social and economic problems. To help the students make vocational choices the schools often provide useful literature, make use of films, and hold 'vocation nights' at which people from various walks of life talk about their work. Counsellors are provided in many schools; some are qualified to interpret psychological test data, others teach part time and depend more on interviewing and offering advice.

The schools normally report to the parents in the fall (September–November), at the end of December, at Easter, and make a final report for the year at the end of June. Where Departmental examinations are used for the final years, reports come from the Department of Education. Promotions at secondary level are normally made at the end of the school year; pupils may be held back if they have failed in 3 or more subjects. At one time province-wide examinations were conducted for all high school grades. At present they are usually held only for the senior year or for the last 2 years of high school, and even then a fair percentage of students who have done satisfactory work during the year, as determined by the school tests, may be recommended for the next grade or for entrance to university.

Vocational and technical schools

Vocational education financed from public sources is provided in three types of institution:

1. Vocational secondary schools operated by certain municipal school boards which provide vocational and academic classes, in which the students' time is divided more or less evenly between the two; these courses have a definite occupational objective and workshop instructors must be qualified tradesmen with teacher training.
2. Trade schools, usually operated under provincial government departments, which offer a variety of courses, ranging in length from a few weeks to 2 years, for youth and others who are either employed or seeking employment. Emphasis is placed on the development of skill in a particular trade. Students range from grade 8 to high school graduation. Courses are flexible and can respond rapidly to community needs. Facilities vary from temporary quarters to modern, well-designed trade schools.
3. Technical institutes which offer post-secondary, or advanced, technical courses for youth who expect to be employed as technicians or technologists, often with emphasis on science or mathematics in a general or specific field. There are also vocational correspondence courses provided by the provincial governments.

Trades are often taught through apprenticeship courses. About half of the apprentices attend the provincial trade schools for part of their apprenticeship; the other half are trained on the job by the companies which employ them. The armed forces provide training for their recruits, ranging from simple trade training to the production of skilled technicians in a variety of fields.

Evening classes are offered in most of the technical and trades schools. The courses usually extend over 20 weeks in the fall and winter months with sessions of 2 or 3 hours. They are designed for employed persons who desire upgrading through greater knowledge of trade theory and practice.

A description of vocational education in all provinces would require too much space. Instead, provisions in Quebec and Ontario will be described, these two different systems covering between them most of the various kinds of organization found throughout Canada.

Quebec. A separate Department of Youth and Social Welfare assists in the vocational education and social adjustment of young people, and several government departments operate more than 50 schools offering trade and technical courses. These are at two levels: technical courses of 3 years and trade courses requiring 2 years.

The technical courses consist of approximately two-thirds technical and academic studies, and one-third shop practice. Entrants must have completed 3 years of high school, or 2 years of high school plus an additional preparatory year. Emphasis is on a core of academic and technical subjects which is common to all courses and the same in all schools. The shop speciality is an option selected from a wide variety of skilled trades including: automobile mechanics, construction, woodworking, diesel mechanics, electricity, electronics, foundry work, furniture making, linotype operating, press operating, typography, offset printing, industrial chemistry, machine-shop practice, marine trades, papermaking, plumbing and heating, refrigeration, sheet-metal working, textile designing, weaving, toolmaking, welding, etc.

Students may take the first 2 years of the course in any of the 36 trade schools. Standard annual examinations are set and a 'jury' is selected to judge the standing of all graduates. The basic course comprises algebra, geometry, trigonometry, physics, chemistry, sociology, mechanics, electricity, drafting, sketching, history, geography, language, cost accounting and industrial legislation. There are 7 specialized schools for automobile work, furniture making, graphic arts, marine courses, papermaking and textiles. Tuition fees are from $40 to $50 a year for residents of the province, $100 for other Canadians and $200 for non-Canadians. There are many scholarships and bursaries.

The trade courses of 2 years' duration are made up of two-thirds shop practice and related theory, and one-third academic studies. Completion of grade 7 or grade 9, and success at an entrance examination are the requirements for enrolment in trade school courses. Although emphasis is on trade practice and theory, students spend about 15 periods a week on courses in language, drafting, mathematics, science, social studies, and business practice. The following trade courses are offered: automobile mechanics, auto body repair, electricity, foundry work, machine shop, pattern making, radio servicing, refrigeration, sheet metal working, smithing, welding and woodworking. Not all of these trade courses are offered in all schools. Special

courses are organized from time to time for upgrading tradesmen and in some schools shorter courses are still offered. Commercial courses are given in the regular secondary schools.

Full-time trade courses, mainly in the building trades, are given to apprentices in 10 centres, but these are under the Department of Labour. One of the trade schools specializes in the shoe manufacturing trade. Additional courses in areas related to their interests are offered by schools under the Departments of Fisheries, Agriculture, Lands and Forests, and Mines.

Ontario. Vocational education is a responsibility of the Department of Education, and is provided in provincially operated institutes of technology, municipally operated secondary schools and one institute of trade which provides trade training for apprentices and fee-paying students.

The institutes of technology provide post-secondary training for technicians and technologists in a variety of courses. The best known, Ryerson Institute, offers 21 full time 3-year courses such as architectural, aeronautical, chemical, electrical, gas, mechanical and metallurgical technologies. Three other institutes offer some of these courses with one specializing in mining, another in textiles. The former Lake Head Institute is now a junior college offering first year university work and 2-year technical courses in mining and forestry.

Industrial and commercial courses at high school level are offered in over 60 vocational, commercial and composite high schools. The courses of study, which have already been referred to under 'General secondary schools', are designed to give (a) the foundation of a general education to ensure good citizenship, and (b) specialized basic training in various fields of work. Courses last 4 years and lead to an industrial secondary school diploma in one of the 25 specialized shop and commercial subjects, e.g., aircraft mechanics, applied electricity and electronics, auto mechanics, drafting, machine shop practice, and trades connected with construction.

For the most part the other provinces are following the Ontario pattern of providing post-secondary institutes, secondary schools combining vocational training with general education, and provincial trade schools. Advisory committees are organized for most institutes.

A start has been made towards providing vocational training for residents of the territories. Academic and vocational courses in mechanical trades and building construction were begun in Yellowknife in September 1958 and despite difficulties it is expected that the programmes will expand.

In all provinces there are private trade schools. The majority are business and commercial schools but others offer training in welding, electricity, printing, beauticulture, barbering, etc. A few others provide correspondence courses on a wide variety of subjects. Most of these advertise on a national basis and some of them are branches of companies operating outside Canada.

Secondary school teachers

Teachers in secondary schools are generally university graduates with a bachelor's degree and one year of professional training. Of recent years, there has been a trend towards having all teacher training given in the universities or in colleges affiliated to the university. In British Columbia, Alberta and Saskatchewan, secondary teachers in training, after completing high school, take a 4-year course, one-quarter of the time being devoted to professional training, the other three-quarters to academic subjects. Teachers may also enter post-graduate schools to obtain advanced degrees in education.

There is comparatively little active recruitment of secondary school teachers as it is hoped that the profession will attract sufficient teachers. The present situation is difficult because the number of secondary pupils is increasing rapidly, while teachers must be recruited from age-groups born when the birth rate was lower and the population smaller.

Out-of-class activities

Since these activities are optional, it is difficult to generalize about them for they vary considerably from one school to another in all provinces. School boards and parents, however, usually encourage teachers to assist with sports, music and the formation of suitable clubs. The sports programme may come rather close to being a part of the physical education programme, or may be quite distinct with organization and participation off the school grounds. Among the programmes undertaken are calisthenics, tumbling, baseball, football, basketball, hockey, curling, etc. Participation in games may be within the school, inter-school, or by membership in a municipal or other league. Clubs include glee clubs, choir, drama, photography, radio, stamp collection, checkers or chess. Occasionally some group excels and earns local or national acclaim. Individuals may get started in an activity which becomes a life-long avocation or vocation for them.

Student councils, whose members are elected by the student body for the year, are common. Usually they have considerable autonomy although guided by one or more staff advisers. To a certain extent they may operate the sports programme, have some control of student discipline, earn money through plays, concerts, exhibitions and such, run a school paper, and be responsible for the school yearbook.

In some schools membership of school athletic teams is contingent on good class work as well as athletic ability. Some schools give letter or other awards for proficiency in competitive sports, and for excellence in field or track events at a field meet.

Some pupils do not take part in extra-curricular activities because they hold part-time jobs which require much of their out-of-school time. Some take these jobs to earn money to defray expenses, others because they want more spending money.

TRENDS AND PROBLEMS

In Canada there are some educational problems which are common to all provinces, although perhaps not equally acute in all cases, and others which are found only in one or several provinces. Likewise present educational trends

are at different stages of evolution and are progressing with different degrees of momentum from province to province. Some of these are a result of expanding frontiers, growth of industry and urbanization, some degree of inflation, a high birth rate and greater demands on the schools. Others have resulted from a lack of selection of secondary school entrants according to ability, a scarcity of well qualified teachers, and a lack of motivation on the part of many students who are often strongly influenced by the social group to which they belong.

Canada's population has increased by some 1.5 per cent per year during the past 15 years. In 1948, 350,000 babies were born; in 1956 the number had increased to 450,700. After 10 or 11 years many of these children will be entering high school. At the present time 250,000 pupils enter the publicly operated secondary schools each year, compared with 129,000 only 10 years ago. For every 30 to 40 pupils in excess of the previous year's total an additional room and teacher are required—which gives some idea of the extent of the problem of obtaining money, schools and qualified teachers.

High school enrolment is growing in all provinces. This expansion, while general, is particularly noticeable in the suburbs of the cities and is part of a continuous movement towards urbanization. The need to provide equal high school facilities for rural youth presents probably a more difficult problem. Considerable progress has been made; the 1951 census data showed that 93.5 per cent of rural children aged 10–14 were at school, a figure slightly higher than that for urban children. At ages 15–19, however, only 38.2 per cent of the rural population remained at school compared with 42.7 per cent of urban youth of the same ages. These figures were, however, considerably better than those for 1941 when only 30 per cent of rural youth 15–19 remained in school compared with 41.3 per cent of urban youth. Much of this improvement has been due to an increase in the number of central high schools, whether in a town or village or rural areas, and the expansion of school bus services and other means of transportation, or in a few cases the use of hostels.

Today two-thirds of all elementary school pupils enter high schools and many of those who drop out do so because of financial reasons or because there is no high school for them to attend. There has been little selection according to ability among high school students, who exhibit a wide range of native and acquired abilities. This may account for some of the criticism of Canadian education found in papers, magazines, books, and elsewhere. The provinces have not solved the problem of providing a curriculum which satisfies the needs of all pupils; nor is it likely that they will do so for some time, since too many conflicting forces, ideas, and hopes are at work. Differences of opinion centre on a number of points. Must the high school provide for everyone or should it be selective, eliminating all those who will not be a credit to the institution and warrant a college education? Is the answer to provide many electives so that all may benefit? Should pupils be allowed to select subjects at will? Is the composite school the answer or is it detrimental to good scholarship? Is streaming enough, or is it necessary also to have differentiated curricula leading to further education and to various occupations? What should be the basis for streaming? These are the kinds of questions being asked, and there is no one acceptable answer to any particular problem. Meanwhile most provinces are making changes in organization, curricula and teacher training and generally improving their system.

Lack of motivation on the part of many pupils, dropouts and retardation indicate unsolved problems for which the organization, the curricula, the teacher and the pupil have at times been blamed. To improve the situation an education survey was undertaken by the Canadian Education Association in 1942, and a report was also produced by a Canadian Research Committee on Practical Education. The CEA-Kellogg Project in Educational Leadership was begun in 1952 and, in some measure, continues today. All of these have had an influence on changes which have been introduced during the past 15 years. Recently the Atkinson Study in Ontario, and somewhat similar studies in Alberta and the Maritimes—the essential aim of which is to identify and 'measure' senior students and see what happens to them after leaving school—have been undertaken with a view to throwing light on such problems as providing a better selection device for university entrants.

There is need for expansion of vocational education. While a fair percentage of all employees can be quickly trained on the job, there are still many inadequately trained personnel filling semi-skilled and skilled jobs, and unfilled demands in many areas. More technical, vocational and trade schools are being organized each year. One problem at present is that whereas most city pupils who finish the elementary division have a choice of type of secondary school, this is only true for rural pupils who live in an area served by a composite school. Unfortunately in some city schools a practice has grown up of directing pupils who do poorly in academic courses to vocational schools, whether they have any vocational ability or not.

Today more is expected of the schools than ever before. They are in fact turning out many more well-educated graduates than previously, despite criticism from all sides, often offered because the passage of time has enabled the shortcomings of the schools of previous generations to be glossed over. Canada's present acute need for more and better scientists, engineers, and technicians in the face of keener world competition has pointed up the demands on our schools at a time when they are bursting at the seams from record enrolments.

[*Text prepared by the Canadian National Commission for Unesco in July 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 17,048,000.
Area: 3,851,116 square miles; 9,974,375 square kilometres.
Population density: 4 per square mile; 2 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, there were over 3.8 million pupils and students enrolled in all levels of education. This figure does not include some 340,000 adults attending evening and other part-time courses in general and vocational subjects; 33,000 students enrolled in summer session, evening, correspondence and other university courses; 6,000 students receiving post-secondary vocational education below the university level; an unknown number of pupils enrolled in private secondary vocational schools; and at least 40,000 pupils in schools for special education. Thus it may be estimated that about one-fourth of the total population was receiving formal education of some kind. Kindergarten classes in elementary schools accounted for about 3 per cent of the total reported enrolment; elementary grades (1–8 or 1–7) for 74 per cent; secondary education for about 20 per cent and institutions of higher education for 3 per cent. The proportion of girls was 49 per cent in kindergarten classes; 48 per cent in the elementary grades; 50 per cent in general secondary schools; 82 per cent in teacher training institutions; and 23 per cent in other institutions of higher education. Women teachers made up about 83 per cent of the teaching staff in public primary schools, where there was an average of 27 pupils per teacher as compared with 17 pupils per teacher in the private schools.

Between 1953 and 1957, enrolment had increased by 18 per cent at the primary level, by 14 per cent at the secondary level, by 27 per cent in the teacher training schools, and by 33 per cent in the institutions of higher education. (See Table 3.)

Enrolment trends in secondary education, 1930–57. Between 1930 and 1948, total enrolment in secondary education, general and vocational, increased by nearly one-half. The proportion of girls fluctuated between 55 and 59 per cent. From 1950 to 1957, there was another increase of 49 per cent in total enrolment of secondary schools (including vocational education provided in these schools). The proportion of girls remained constant between 51 and 52 per cent. Taking average enrolment by 5-year periods, the increase was nearly one-third between the 1930–34 and 1945–49 periods, raising the enrolment ratio from 35 to 45, when related to the estimated population 15–19

years old. For the period 1955–57 the enrolment ratio is calculated at 49, based on the enrolment of secondary schools only. (See Table 4.)

Examination results in secondary education, 1953–57. Table 2 gives partial data on examination results, covering only certain types of vocational courses. There was a 42 per cent increase in the number of trade school certificates granted in 1957 over 1953, and a 24 per cent increase in vocational commercial certificates. The number of certificates for marine, fishery and forestry courses increased two and a half times and the number of home economics and nursing school certificates one and a half times over the same five-year period.

Educational finance, 1956. In 1956, total expenditure on education amounted to 911 million Canadian dollars (including debt service of 82 million dollars), averaging 57 dollars per inhabitant. Seven per cent of this amount came from the Federal Government, 40 per cent from the Provincial Governments, 43 per cent from local authorities, and the rest from tuition fees, gifts and other sources. Recurring expenditure, representing 84 per cent of the total expenditure, was distributed by level and type of education as shown in Table 1C.

Source. Canada: Dominion Bureau of Statistics, replies to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1956
(in thousand Canadian dollars)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**911 065**
Federal government	64 429
Provincial governments	366 652
Local authorities	394 463
Tuition fees	53 865
Gifts, endowments, etc.	4 844
Other sources not specified	26 812

B. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**911 065**
Recurring expenditure		769 195
For Central administration	25 843	
For instruction		
Salaries to teachers and other instructional expenditure	558 725	
Other recurring expenditure	184 627	
Capital expenditure		
Educational and auxiliary facilities		60 090
Debt service		81 780

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent
Total recurring expenditure		**769 195**	**100.0**
Central administration		25 843	3.4
Instruction		558 725	72.6
Pre-school, primary and general secondary education	433 111		56.3
Vocational education, secondary level	7 739		1.0
Teacher training, secondary level	7 461		0.97
Higher education	87 689		11.4
Special education	3 553		0.46
Adult education	1 561		0.2
Other education not specified	17 611		2.3
Other recurring expenditure not specified		184 627	24.0

1. Official exchange rate: 1 Canadian dollar = 1.042 U.S. dollars.
2. Closed account.

2. EXAMINATION RESULTS IN SECONDARY EDUCATION[1], 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Trade school certificate	4 232	...	4 597	...	5 044	...	5 459	...	6 017	...
Vocational certificate (commercial)	4 812	...	5 373	...	5 575	...	5 758	...	5 970	...
Trade school certificate (marine, fishery, forestry)	519	—	785	—	876	—	1 154	—	1 317	—
Vocational certificate (home economics)	315	315	396	396	428	428	511	511	515	515
Nursing school certificate	484	484	602	602	796	796	742	742	713	713
Vocational certificate	78	...	88	...	77	...	81	...	101	...

1. Certain types of vocational course only.

3. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Public elementary schools (Kindergarten classes)	1957/58	*2 800	[1]3 600	[1]3 600	116 936	57 348
	Private elementary schools (Kindergarten classes)	1957/58	*280	[1]350	[1]350	5 138	2 540
	Total	**1957/58**	***3 080**	**[1]3 950**	**[1]3 950**	**122 074**	**59 888**
	„	1956/57	*2 970	[1]3 730	[1]3 730	[2]111 846	[2]54 655
	„	1955/56	*2 910	[1]3 610	[1]3 610	[2]103 132	[2]50 310
	„	1954/55	*2 850	[1]3 500	[1]3 500	[2]98 955	[2]48 152
	„	1953/54	*2 850	[1]3 500	[1]3 500	[2]95 627	[2]46 748
Primary	Elementary schools, elementary junior high schools, all-grade schools, public	1957/58	28 384	103 365	85 453	[4]2 765 188	[4]1 328 412
	Elementary schools, elementary junior high schools, all-grade schools, private	1957/58	*650	4 306	...	[4]72 983	[4]39 436
	Total	**1957/58**	***29 034**	**107 671**	**[3]85 453**	**[4]2 838 171**	**[4]1 367 848**
	„	1956/57	*28 930	*102 850	[3]81 624	[2][4]2 719 947	[2][4]1 313 118
	„	1955/56	*28 900	*97 540	[3]77 259	[2][4]2 643 780	[2][4]1 279 306
	„	1954/55	*28 880	*91 936	[3]72 640	[2][4]2 473 066	[2][4]1 195 132
	„	1953/54	*28 800	*86 850	[3]68 476	[2][4]2 404 683	[2][4]1 165 084
Secondary							
General	High schools, continuation schools, collegiate institutes, public	1957/58	[5]3 167	[6]26 450	[6]11 245	[7]588 416	[7]298 365
	Secondary schools, private	1957/58	*680	[6]*3 108	[6]...	[7]33 011	[7]17 491
	Total	**1957/58**	**[5]*3 847**	**[6]*29 558**	**[3][6]11 245**	**[7]621 427**	**[7]315 856**
	„	1956/57	[5]*3 839	[6]*28 348	[3][6]10 802	[7]663 118	[7]288 056
	„	1955/56	[5]*3 835	[6]*26 883	[3][6]10 187	[7]522 093	[7]267 931
	„	1954/55	[5]*3 831	[6]*25 384	[3][6]9 581	[7]476 560	[7]246 536
	„	1953/54	[5]*3 822	[6]*24 022	[3][6]9 046	[7]437 665	[7]228 998
Vocational	Public composite schools with commercial departments	1957/58	[8]350	*1 800	...	[9]54 342	...
	Public trade schools with commercial departments	1957/58	[8]6	*35	...	[10]682	...
	Public family schools and institutes and composite high schools with home economics depts.	1957/58	[8]220	*430	...	[9]8 580	[9]8 580
	Public technical and composite high schools with art departments	1957/58	[8]11	*45	...	[9]639	...
	Public trade schools offering private nursing	1957/58	[8]11	*60	60	[10]1 144	[10]1 144
	Public trade schools offering training in marine fishery and forestry	1957/58	[8]10	*70	—	[10]1 469	—
	Public trade schools of service occupations	1957/58	[8]30	*110	...	[10]2 082	...
	Public composite high schools offering technical education	1957/58	[8]150	*1 300	—	[9]26 012	—
	Public trade schools—trade training	1957/58	60	*770	—	[10]15 380	—
	Public composite high schools offering agricultural education	1957/58	[8]110	*300	—	[9]1 194	—
	Public agricultural schools	1957/58	30	*180	—	[10]1 681	—
	Total[3]	**1957/58**	**[11]988**	***5 100**	**...**	**113 205**	**...**
	„ [3]	1956/57	[11]939	[12]*4 030	...	[12]102 991	...
	„ [3]	1955/56	[11]899	[12]*3 875	...	[12]98 695	...
	„ [3]	1954/55	[11]851	[12]*3 670	...	[12]92 450	...
	„ [3]	1953/54	[11]800	[12]*3 285	...	[12]83 013	...

1. More than half the teachers in public kindergarten classes and all teachers in private kindergarten classes teach also in elementary schools. They are included in both pre-primary and primary education.
2. Enrolment in private schools is estimated.
3. Public schools only.
4. Enrolment in grades 1–8 in all provinces except Quebec, where 'elementary' level comprises grades 1–7.
5. Including secondary schools providing vocational courses.
6. Including all teachers teaching in secondary grades only, minus an estimate for those teaching vocational subjects, plus a proportion of those teaching both in primary and in secondary grades.
7. Enrolment in public schools includes students in vocational courses. Enrolment in private schools refers to academic courses only, not including students in secondary grades of normal schools and classical colleges in Quebec province, who numbered 19,998 (F 2,716) in 1957/58.
8. Number of institutions where the type of training mentioned is offered. Institutions offering more than one type of training are listed under each type.
9. Full-time students taking the regular vocational programme at the second level and who spend at least 50 per cent of their time in the vocational field with the other 50 per cent allotted to social sciences, history, languages, mathematics and sciences, etc.
10. Full-time students taking a trade course of a very practical nature.
11. Including duplications, since institutions offering more than one type of training are counted as many times as there are types of training offered. The actual number of institutions is around 500 to 600.
12. Not including data on agricultural education.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Higher							
Teacher training	Teacher training institutions, public						
	Total	**1957/58**	**80**	**1 271**	**676**	**10 050**	**8 250**
	"	1956/57	*80	*1 250	*670	*9 500	*7 800
	"	1955/56	*84	*1 200	*640	*9 150	*7 500
	"	1954/55	*86	*1 170	*620	*7 950	*6 500
	"	1953/54	*90	*1 130	*600	*7 900	*6 500
General and technical	Degree-granting universities and colleges	1957/58	339	[13] *12 550	[13] *1 750	[14] *94 500	[14] *22 200
	Public art schools and art departments of institutes	1957/58	6	*37	...	390	...
	Public home economic institutions and commercial departments	1957/58	21	*37	...	417	...
	Public institutes of technology and specialized institutes	1957/58	26	*360	...	5 332	—
	Public medical centres	1957/58	5	*25	...	94	...
	Public school of gardening	1957/58	1	*5	...	24	—
	Total[15]	**1957/58**	**339**	[13] ***12 550**	[13] ***1 750**	[14] ***94 500**	[14] ***22 200**
	"[15]	1956/57	...	[13] *12 300	[13] *1 700	[14] *85 600	[14] *19 800
	"[15]	1955/56	...	[13] 12 066	[13] 1 669	[14] 79 834	[14] 17 968
	"[15]	1954/55	...	[13] 11 711	[13] 1 567	[14] 75 873	[14] 17 740
	"[15]	1953/54	283	[13] 11 789	[13] 1 595	[14] 70 985	[14] 16 403
Special	Schools for mentally retarded children	1953/54	55	826	570	15 792	6 118
	Schools for particularly gifted children	1953/54	5	64	50	1 591	787
	Schools for blind and deaf children	1953/54	15	358	232	2 900	1 375
	Schools for children with speech defects, cerebral palsy, etc.	1953/54	98	328	292	15 787	6 383
	Schools for delinquent children	1953/54	32	220	126	2 786	948
	Schools for orphaned and neglected children	1953/54	33	151	100	3 485	1 090
	Total	**1957/58**	...	...	...	...	...
	"	1956/57	...	...	...	...	...
	"	1955/56	...	...	...	...	...
	"	1954/55	...	...	...	...	...
	"	1953/54	238	1 947	1 370	42 341	16 701
Adult	Short courses, evening, extra-mural and exterior courses under university auspices	1957/58	[16] 1 795	[17] 345	...	63 259	...
	Publicly operated general night schools	1957/58	...	...	...	139 611	...
	Publicly operated vocational night schools	1957/58	...	...	...	136 743	...
	Total	**1957/58**	...	...	...	**339 613**	...
	"	1956/57	...	...	...	[18] 254 885	...
	"	1955/56	...	...	...	274 233	...
	"	1954/55	...	...	...	269 186	...
	"	1953/54	...	...	...	255 763	...

13. Including part-time teachers, numbering: *5,550 (F. *750) in 1957/58, *5,400 (F. *700) in 1956/57, 5,347 (F. 693) in 1955/56, 5,237 (F. 612) in 1954/55, 5,286 (F. 695) in 1953/54.
14. Including students enrolled in part-time regular winter session; not including students in summer session, evening, correspondence and other courses, who numbered: *32,700 (F. *12,200) in 1957/58, *31,800 (F. *12,000) in 1956/57, 30,705 (F. 11,803) in 1955/56, 28,987 (F. 11,801) in 1954/55, 23,814 (F. 9,152) in 1953/54.
15. Not including post-secondary vocational education below university level. Data on publicly operated institutions of this kind are as follows: in 1957/58: 59 institutions, *460 teachers, 6,257 students; in 1956/57: 52 institutions, *430 teachers, 5,834 students; in 1955/56: 52 institutions, *390 teachers, 5,393 students; in 1954/55: 44 institutions, *360 teachers, 4,852 students; in 1953/54: 42 institutions, *315 teachers, 4,328 students.
16. 34 institutions reporting.
17. 24 institutions reporting.
18. Not including courses under university auspices.

4. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled		Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General and vocational				
	Total	Per cent female			
1930	332 858	58			
1931	360 695	56			
1932	370 357	55	363	1 035	*35*
1933	377 368	56			
1934	376 076	55			
1935	384 914	55			
1936	397 199	55			
1937	413 329	56	414	1 085	*38*
1938	436 539	55			
1939	435 577	56			
1940	420 367	57			
1941	413 946	59			
1942	402 183	59	415	1 100	*37*
1943	400 738	59			
1944	436 976	58			
1945	470 526	57			
1946	482 638	57	480	1 072	*45*
1947	479 537	56			
1948	485 458	57			
1950	418 053	52			
1951	425 382	52			
1952	449 817	52	459	1 076	*43*
1953	479 914	51			
1954	522 135	51			
1955	522 093	51			
1956	663 118	51	569	1 168	*49*
1957	621 427	51			

Note. Data for 1930 to 1948 refer to secondary and vocational education; from 1950 to 1957, data refer only to secondary schools (including vocational courses provided in these schools) exclusive of some 20,000 pupils enrolled at classical colleges in Quebec province.

CEYLON

THE EDUCATIONAL SYSTEM

Education in Ceylon is universal, compulsory and free. It is universal in the sense that there are no restrictions of caste, creed or community in the matter of admission to schools or of educational provision in general. It is compulsory between the ages of 5 and 14, except where there is no school within a reasonable distance of the pupil's home. Lastly, it is free from the kindergarten up to and including university; the only exceptions to this rule are a handful of unaided schools which do not receive grants from the Government and are permitted to charge fees.

The statutory basis of the educational system as a whole is Ordinance No. 31 of 1939—'an Ordinance to make better provision for education and to revise and consolidate the law relating thereto'—as amended by Ordinance No. 26 of 1947, by the Education (Amendment) Act No. 5 of 1951, the Education (Amendment) Act No. 43 of 1953 and the Education (Amendment) Act No. 37 of 1958.

Section 32 of the Principal Ordinance No. 31 of 1939

empowers the Ministry of Education to make regulations (known as the Code) for the purpose of giving effect to the principles and provisions of this Ordinance.

The 'dual' system of educational control operates in Ceylon. Schools are owned either by the Government or by private (denominational) bodies—roughly 53 per cent of the 7,674 schools in 1958 were owned by the Government and 47 per cent by private bodies. However, in all but a few unaided schools, the entire cost of salaries and almost the entire cost of the maintenance of schools is met out of government funds. Since 8 May 1957 the establishment of private aided schools has been stopped.

Till quite recently schools were classified not only according to the method of financing, i.e., as government and assisted schools, but also as English, bilingual, and vernacular schools. While the division of schools into government and assisted continues, with the addition of a new category—unaided schools—the division into English, bilingual, and vernacular has ceased. The medium of education today is English only in the case of a very small number of children whose mother tongue is English and of a comparatively small number of Muslims. The vast majority of the children are educated through the medium of Sinhalese or Tamil, with English as the compulsory second language from standard 3 (the fourth year) onward. The mother tongue was introduced as the medium of instruction in 'English schools' in 1947 in the lowest class; thereafter it was introduced progressively from year to year to the next higher class. On 1 January 1953 the mother-tongue began to be used as the medium of instruction in the lowest class of secondary schools (standard 6). Thereafter it continued to be used progressively until in 1959 it became the medium of instruction in the Higher School Certificate (final class). The only exception to this rule has been that certain science subjects have been permitted to be taught in English at the senior secondary and the H.S.C. stage and that certain other subjects like foreign languages and mathematics may also be taught in the English medium until further notice, partly for want of suitable textbooks and partly for want of teachers qualified to use the national language medium.

The provision of education is solely the responsibility of the Central Government. No local government authority in Ceylon makes any contribution whatsoever towards the cost of education in the country. The Ordinance, however, provides for local advisory committees to help the Government by advising it on such matters as the need for and siting of new schools. These committees consist of the Government Agent of the district, the Education Officer, the Member of Parliament, representatives of local government institutions, divisional revenue officers, etc.

The structure of the school system is shown in the diagram on page 335.

THE DEVELOPMENT OF SECONDARY EDUCATION

A turning point in the history of secondary education in Ceylon was the decision to hold the Cambridge Senior and Junior Local examinations in the Island as from the year 1880; up to that time, the vast majority of schools made no provision for education beyond the primary stage. The holding of the Cambridge local examinations in Ceylon introduced the element of competition and provided a very necessary fillip. In 1882 the London Matriculation examination was introduced.

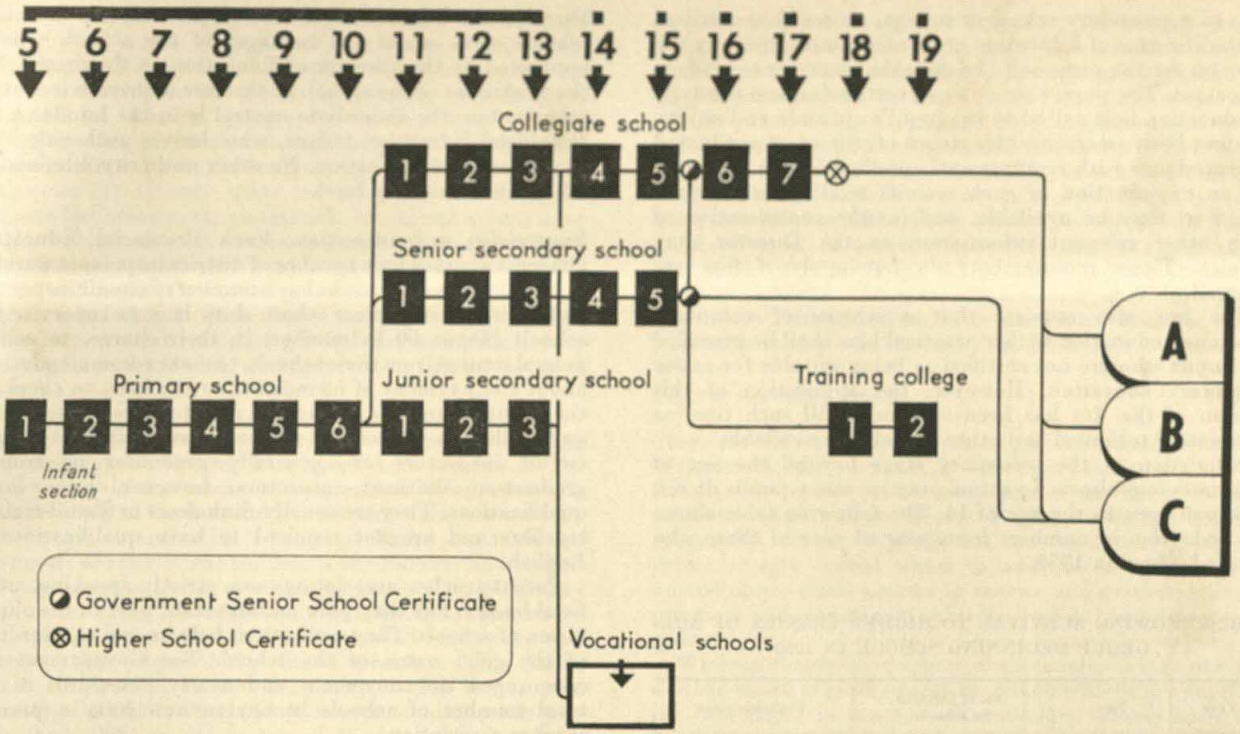
The report of Mr. J. J. R. Bridge, an Inspector of Schools of the English Board of Education, along with that of an Education Committee appointed in 1911 to survey and make recommendations on secondary and higher education, also played an important part in the development of secondary education. The committee recommended the establishment of a university college and suggested that Sinhalese and Tamil be made compulsory second languages in the primary classes; it also recommended the establishment of an Elementary School Leaving Certificate to be awarded on the results of an examination taken in standard 8 (at the end of the ninth school year), and the development of commercial education and a system of grants for school buildings. As a result of a recommendation by this committee, the system of 'payment by results' which had been in vogue in the large majority of schools up to 1911 was altered and grants began to be paid to assisted schools on the basis of average attendance of pupils.

During the first quarter of the present century there were thus two streams of secondary education: one (and this was much the broader) led beyond standard 5 to the Elementary School Leaving Certificate; the other led to the Cambridge Junior and Senior Certificates and the London Matriculation. Strangely enough, the stream leading to and ending with the Elementary School Leaving Certificate was not regarded as providing a secondary education. Subjects taught included English and the mother tongue, arithmetic (only a very small number offered mathematics), history, geography, rural science, hygiene, and shorthand, book-keeping and typewriting. Indeed the last three subjects were in a sense the *raison d'être* of the course and the examination. Those taking the E.S.L.C. were generally regarded as being prepared for commercial careers in mercantile establishments and on plantations. A fair number would enter government service as railway guards, booking clerks, apothecaries, surveyors, etc.

The stream that led up to the Cambridge examinations was regarded as preparing for the learned professions—law, medicine, etc. In actual practice, however, the majority found their way into the Civil Service. For 90 per cent at least of the 'English' schools, helping their pupils to obtain government employment was the main goal of education. This does not mean that character training was neglected or that there was no effort to give a good general education.

The inadequacy of the Elementary School Leaving Certificate examination as an end in itself was realized and early in the 1930s it was renamed the Junior School Certificate Examination and a new examination, taken in standard 10 and known as the Senior School Certificate Examination was started. These examinations were conducted in English as well as in Sinhalese and Tamil. The syllabuses did not reach as high a standard as those for the Cambridge examinations, and to start with only the rural schools were interested in preparing pupils for the Senior Certificate examination.

When the Cambridge examination first, and a little later, the London Matriculation examination were given up, the



GLOSSARY

collegiate school: complete general secondary school.
infant section: the first three classes of the primary school.
junior secondary school: lower general secondary school.
senior secondary school: general secondary school not preparing for university.
training college: teacher training college.
vocational schools: vocational training schools not under the Education Department.

HIGHER EDUCATION

A. Law College.
B. University.
C. Technical College.

J.S.C. and S.S.C. examinations became more popular. The J.S.C. was also dropped subsequently as it was felt that two examinations in the final years of schooling imposed too big a strain on pupils. For the last 15 years the S.S.C. (Senior School Certificate) examination has been the only examination and the numbers taking it have increased from year to year. Today nearly 100,000 take the December examination and more than half that number the one held in July-August. Following English practice, the examination was renamed the General Certificate of Education (Ordinary level) Examination in 1954.

Legal basis

Secondary education is governed by the same laws and regulations as govern education in general (see above). The Education (Amendment) Act, No. 5 of 1951, established the following types of school: (a) primary school, which provides full-time education up to and inclusive of standard 5 (a 6-year course with a 2-year infant department taking the place of standard 1); (b) junior secondary school, which provides full-time education from standard 6 up to and inclusive of standard 8; (c) senior secondary school, which provides full-time education above standard 8 and up to and inclusive of the standard of the Senior School Leaving Certificate examination or of an equivalent examination approved by the Director for the purpose, whether or not such school also provides full-time education from standard 6; (d) a college, that is to say a school which provides full-time education up to and inclusive of the standard of the Higher School Certificate examination or of an equivalent examination approved by the Director for the purpose, whether or not such school also provides full-time education from or above standard 6.

A primary school may be maintained and administered together with a junior secondary school or a senior secondary school but not maintained together with or in the same premises as a college.

This Act also made provision for selection at the end of the junior secondary stage (standard 8). A pupil is not admitted (or promoted from a lower class) to any senior

class in a secondary school or college, unless he is certified by the Director of Education or an officer authorized by the Director for the purpose to be suitable for senior secondary education. The pupil cannot be so certified unless the type of education best suited to the pupil's aptitude and ability has first been ascertained by means of: (a) a test conducted in accordance with requirements specified by the Director; (b) an examination of such records relating to his past career as may be available, and (c) the consideration of such other relevant information as the Director may require. These requirements do not apply if fees are charged.

The law also requires that a scheme of voluntary continued education with a practical bias shall be provided for pupils who are not certified as being suitable for senior secondary education. However, the application of this section of the Act has been suspended till such time as alternative technical and other schools are available.

Education at the secondary stage beyond the age of 14 is not compulsory. In actual practice many pupils do not continue even to the age of 14. The following table shows the reduction in numbers from year to year of those who entered school in 1950.

TABLE SHOWING SURVIVAL TO HIGHER CLASSES OF AGE-GROUP BEGINNING SCHOOL IN 1950

Year	Age	No. of children in schools	Probable class
1950	5—6	164 101	Lower kindergarten
1951	6—7	171 270	Upper kindergarten
1952	7—8	173 963	Standard 2
1953	8—9	167 798	Standard 3
1954	9—10	159 110	Standard 4
1955	10—11	148 023	Standard 5
1956	11—12	128 982	Standard 6
1957	12—13	119 512	Standard 7
1958	13—14	103 724	Standard 8
1959	14—15	89 699	Standard 9

Administration

Secondary education, like primary education, is planned and organized by the Department of Education with the advice and control of the Ministry of Education. A Central Council advises the Director of Education on matters referred to it. The Chief Inspector's Section of the Department of Education is responsible for revision of the curriculum and of syllabuses as and when such revision is necessary. No textbook can be used in schools unless it is on the list of books approved by the Educational Publications Advisory Board, of which the Director of Education is the chairman. On the question of policy, the Ministry makes decisions and gives directives.

Control. Primary and secondary education are controlled solely by the central educational authority, i.e., the Ministry of Education acting through the Department of Education. In the case of government schools, the head of the school is directly under the control of the Education Officer of his province, who in turn comes under the Director of Education. Heads of private (i.e. assisted) schools work under the manager of the school, who is appointed by the Director of Education on the proposal of the proprietor of the school. In the case of private (assisted) schools, too, the immediate control is in the hands of the Provincial Education Officer, who derives authority from the Director of Education. No other authority administers schools at secondary level.

Supervision and inspection. Each Provincial Education Officer is assisted by a number of district inspectors working in his office. In addition he has a number of circuit inspectors and assistant inspectors whose duty it is to supervise the schools (about 60 in number) in their charge, to collect annual returns from these schools, to make recommendations about the payment of increments to teachers, to check on the furniture and equipment and maintenance of the schools and buildings. Education officers, district inspectors and circuit inspectors are generally graduates or trained graduates. Assistant inspectors, however, have lower qualifications. They are usually Sinhalese- or Tamil-trained teachers and are not required to have qualifications in English.

Parent-teacher associations are, strictly speaking, unofficial bodies, but they play an important part in the supervision of schools. They act both as helpers and as guardians of the good name of the school. The Government has encouraged the movement and nearly two-thirds of the total number of schools in Ceylon now have a parent-teacher association.

Finance. The entire cost of education in government schools is borne by the Government. In the case of assisted schools the entire salary cost of 'eligible' teachers is borne by the Government, and in addition these schools receive a grant for maintenance and equipment; the 'eligible' staff is calculated on the average attendance. As already explained, no fees are charged except in the case of a few unaided schools. But no assistance is given to parents.

Buildings and equipment. The Code of Regulations for Assisted Schools, which may be regarded as applying to all schools in the Island, lays down requirements for accommodation, furniture, apparatus, sanitation, etc. It specifies that classrooms must provide 13 square feet per unit of average attendance of all pupils, and have a minimum length and breadth of 9 feet.

School welfare services. Every child in school is given a free midday meal on each school day; this meal consists of a 2 oz. bun and a glass of milk reconstituted from 1½ oz. of skim milk powder.

TYPES OF SECONDARY EDUCATION

Up until quite recently the only type of secondary education available to pupils in Ceylon schools was the strictly academic type. At the end of the 6-year primary stage (standard 5) the pupil went on to standard 6 (or form 1) either in the same school or in a neighbouring school which had provision for classes beyond standard 5. The education

provided at the secondary stage included science and mathematics in only about 10 per cent of the schools; these also taught Latin—and a handful of schools provided courses in Greek. In the remaining schools, the education consisted of history, geography, civics, hygiene and physiology, art, physical education and religion, in addition to the mother tongue, the compulsory second language and arithmetic. It is only quite recently that facilities for subjects like woodwork, metalwork, handicrafts, etc., have been provided; and up to now not more than about 5 per cent of all schools provide a practical education. In schools where facilities for the teaching of science and mathematics existed, admission to these classes was generally restricted to the better pupils, the less gifted being compelled, very often against their wish, to study the usual core of arts subjects.

Further education open to secondary school leavers. All learning in secondary schools has in a sense been geared to the requirements of the entrance examination for admission to the University of Ceylon, and it is the aim of every secondary school pupil to enter the University. There are, however, two points of restriction: the first is the number and combination of credits to be obtained at the G.C.E. (Ordinary level) examination, in addition to qualifying for the award of the Senior School Certificate; the second is the very stiff entrance test imposed by the University. This latter cannot be avoided as the University, which has a total capacity of about 2,300 students, is able to admit each year only about 900, or one in ten of those who seek admission.

The Vidyodaya and Vidyalankara Universities, two Pirivena universities which were inaugurated a little over a year ago, promise opportunities to those for whom the University of Ceylon has failed to provide. These universities offer degree courses to external as well as internal students and thus give an opportunity to a large number of secondary school leavers who have had to enter employment, because of poverty for example, but who wish to obtain a degree.

The Ceylon Law College admits students who have obtained a certain number and combination of credit passes at the G.C.E. (Ordinary level or Advanced level) examinations; the number of admissions to the courses for advocates and proctors is about 50 each year.

The Ceylon Technical College functions as a separate department under the Ministry of Education and is the principal institution in the Island providing training for junior technical grades. The courses of study are: (a) engineering, (b) vocational and (c) commercial. Recently junior technical schools under the control of the Director of the Ceylon Technical College have been opened at three provincial centres—Kandy, Galle and Jaffna.

The Department of Agriculture conducts schools of agriculture and farm schools and about 20 centres in various parts of the Island. It provides for the education of both men and women. The lower courses are for those who have reached standard 8; the higher courses are for those who have completed their secondary education.

The school year. Secondary, like primary, schools are open for a minimum of 180 days a year; the actual number of sessions varies between 180 and 200. The school year is divided into 3 terms, separated by vacations usually lasting about 4 weeks. The following arrangement for government schools in the current year will serve as a sample: first term, 4 January to 8 April; second term, 3 May to 28 July; third term, 22 August to 2 December. Assisted schools are free to fix their own school terms and some of them close for 6 to 7 weeks in April-May when it is hottest in Ceylon. All schools must close on the 13 public holidays, most of which are days of religious significance. The heads of government schools may at their discretion grant 3 holidays each year. The school week lasts from Monday to Friday, and each day must last 5 hours at least; in practice many schools work 6 hours a day.

General secondary schools

There are only two main types of general secondary school in Ceylon: (i) the rural school which prepares pupils for the G.C.E. (Ordinary level) examination in the following subjects: Sinhalese or Tamil, English, religion, history, geography, civics, hygiene, art and arithmetic; (ii) the urban or city school which in addition to the subjects named above offers courses in science and mathematics, in practical and commercial subjects, and in home science for girls.

While in theory the purpose of these schools is to provide a broad-based general education, which will equip a pupil for life in general, in practice all secondary schools have the immediate aim of preparing pupils for the G.C.E. (Ordinary level) examination, which in turn is the key either to higher studies or more often to employment. There has been hardly any vocational education in schools, and there are comparatively few vocational schools to which a pupil can go on leaving school. Every pupil in secondary school therefore aims at employment primarily—and generally prefers a white-collar job to one in which he will have to use his hands. This is most unfortunate in a country like Ceylon which depends on agriculture for its sustenance.

Except in the case of schools which have primary as well as post-primary sections under the same roof, selection for secondary education is usually by a competitive test held by each school separately. There is no common entrance test. The tendency is for pupils to try to gain admission to the better class of schools even where there is provision for secondary education nearer home. The result is that there is a great demand for admission to the better schools and a great deal of disappointment when admission cannot be obtained. The conditions for entry to the senior secondary stage have been mentioned under 'Legal basis'.

The central school. Special mention must be made of this particular development in the educational system of Ceylon. About 1945 the system of central schools was started. The idea was that in each of the 50 electorates which then existed, a secondary school with facilities for residence should be set up so that promising pupils from primary schools in the area might have the chance of receiving a better type of secondary education without having to migrate to bigger schools in towns. Each central school was also to have a hundred free scholars—50 boys and 50 girls selected on the result of a competitive test held annually

for applicants from the various primary schools in the electorate. The pupils thus selected were provided with free board and lodging and at one stage with free books and clothes. If they progressed satisfactorily up to the school leaving examination stage, their scholarship was extended for 2 or 3 years to enable them to study for university entrance; and if they were successful in gaining admission to the university, the scholarship was further extended to enable them to read for a degree in the university.

This system has now operated for nearly 15 years with excellent results. While in the past the great majority of admissions to the university were from urban schools—and these were mainly assisted denominational schools—at present at least 40 per cent of the admissions to the university in the faculties of arts and oriental languages are from the central schools. A large number of these schools have now been equipped with laboratory facilities, and science teachers have been included in the staff, so that in the near future it may be expected that a proportionately high percentage of admissions to the faculties of science and medicine will also be from the central schools. These schools are all equipped with workshops for the study of practical subjects. They also have specialized teachers for music and dancing.

A typical time-table for the 3-year junior stage at one of these schools is given below; each teaching period lasts 40 minutes.

TIME-TABLE OF JUNIOR STAGE OF CENTRAL SCHOOL
(in periods per week)

Subject	Standard 6	Standard 7	Standard 8
Religion	2	2	2
Intellectual development			
Sinhalese or Tamil	6	6	6
English	10	10	10
Arithmetic	3	3	3
Elementary mathematics	2	2	3
General science	2	2	2
History	2	2	2
Geography	2	2	2
Civics	2	2	2
Health and physical development			
Health lessons	1	1	1
Physical training	2	2	2
Practical development			
Handicrafts or gardening (boys) or home science (girls)	4	4	3
Aesthetic development			
Singing	2	2	2
Art	2	2	2
Oriental dancing or music (optional)	2	2	2

The teaching staff in these schools is made up of partly trained graduates, graduates, and partly secondary-trained teachers.

The teaching is generally well organized, the senior master in each subject being responsible for the organizing of the work in that subject throughout the school.

Fortnightly or monthly tests and three term tests are regularly held. In recent times the keeping of cumulative records and a guidance programme have been introduced.

Vocational and technical schools

Reference has already been made to the following: The Ceylon Technical College; the junior technical schools at Kandy, Galle and Jaffna; the School of Agriculture and the farm schools conducted by the Department of Agriculture.

In addition to the above, the Department of Rural Development and Cottage Industries conducts weaving schools in several parts of the Island. There are also a few schools where coir work, mat weaving, toy making, pottery, rattan work and similar crafts are taught. The Lanka Mahila Samiti—a women's organization—also runs a number of needlework and handicraft classes for women. There are 20 carpentry schools conducted by the Department of Rural Development. Each school has provision for 24 pupils. A secondary education is not necessary for admission to these schools. An advanced 4-year course in woodwork is also provided by the same department. When this project is in full swing, it will provide for the training of 800 carpenters at a time.

Teacher training schools

There are 22 institutions, of which 12 are government owned and the rest 'assisted-denominational', which provide a total of nearly 4,500 places for teacher-trainees. The course lasts 2 years and provides a broad-based general education in the first year and a specialized scheme of teacher training in the second. The staff consists of trained graduates and secondary-trained teachers for the most part. The pupils in these institutions are prepared for work in primary schools and in the junior classes of secondary schools.

In addition to the above, two Government Training Colleges, those at Maharagama and Palaly, train specialist teachers for secondary schools. The Training College at Maharagama has specialized courses for science teachers, teachers of mathematics, of handicrafts and of English as a second language. The College at Palaly provides courses for science, mathematics and English. One of the aims of these institutions is to train teachers to teach science, mathematics, etc., through the medium of Sinhalese and Tamil. The Maharagama institution serves the Sinhalese-speaking areas and the one at Palaly the Tamil-speaking areas.

Other specialized schools

The Government College of Fine Arts, which is the only institution of its kind in the Island, provides courses of instruction at an advanced level in drawing and painting, sculpture, art, crafts, North Indian music and Kandyan dancing. No tuition fees are charged for any of these courses. The standard of work compares very favourably with that of similar institutions abroad. Day as well as evening courses are offered and about 500 students at a time benefit from the courses provided.

Out-of-class activities

Between 100 and 200 schools are run on the lines of English 'public schools' and have the prefect system. Most

of the other schools have a system of class monitors who assist in a smaller measure in the running of the school.

Very great emphasis is placed on physical development outside the normal school curriculum. In the head office of the Department of Education there is a Deputy Director of Education responsible for the organization of physical and health education and of games in schools. An effort has been made in recent years to provide each of the 110 inspectors' circuits in the Island with a good-sized, well-laid-out playing field. In addition, most of the central schools and the bigger assisted schools have good playing fields. Every encouragement is given to athletics; competitions are run annually—first at a sub-circuit and circuit level, then at district, provincial and finally at an all-Island level. In this way nearly 5,000 of the 8,000 schools in the Island are involved in the annual all-Island athletic championships. Netball, volleyball, wrestling and other competitions are held annually. Many schools have junior and senior cadet corps. Scouting and Guiding are very popular.

TRENDS AND PROBLEMS

The big problem the Government of Ceylon is attempting to solve is how to gear the educational system to the national economy. The kind of education imparted in many schools is still bookish and determined by the needs of examinations rather than by those of the country's economic development. To correct this tendency school workshops for practical training are being set up, the teaching of science and mathematics is being intensified, and every encouragement is being given to the provision of training in gardening and agriculture for every schoolchild. Side by side with these problems are those occasioned by the switch-over from English to the mother tongue media, the difficulties of finding suitable teachers, suitable textbooks and suitable background literature, and the effective teaching of English as a second language. These and other problems are receiving the earnest attention of the Government and of educationists.

[*Text prepared by the Ceylonese National Commission for Unesco in April 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 9,388,000.
Area: 25,332 square miles; 65,610 square kilometres.
Population density: 371 per square mile; 143 per square kilometre.

Summary of school statistics, 1953–57. In 1957, total enrolment in all educational institutions was about 1,892,000 pupils, representing nearly 21 per cent of the estimated population. Of total enrolment, some 77 per cent were pupils in primary classes, 22 per cent in general secondary education, 0.2 per cent in teacher training schools, 0.3 per cent at university colleges and 0.1 per cent in special educational institutions. There were, in addition, about 2,400 people enrolled in night school classes. Girls made up about 46 per cent of enrolment in primary and secondary education and 27 per cent at the University of Ceylon. The teaching staff in all primary and general secondary classes numbered 57,469 in 1957 of whom 48 per cent were women. The average pupil-teacher ratio in primary and general secondary classes was 33 in 1957 against 34 in 1953. Compared with 1953, enrolment in primary and general secondary classes had increased by 20 per cent, in teacher training colleges by 25 per cent and in university colleges by 9 per cent. (See Table 2.)

Enrolment trends in secondary education, 1930–57. Enrolment in general secondary education, excluding some private schools, rose from 58,697 pupils in 1930 to 413,993 in 1957, an increase of over 600 per cent. Over the same period, the

1. EDUCATIONAL FINANCE, 1957/58 (in rupees)[1]

A. EXPENDITURE BY PURPOSE

	Amount
Total expenditure[2]	**206 308 877**
Recurring expenditure	192 130 062
Capital expenditure	4 520 274
Debt service	9 658 541

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure[2]	**192 130 062**	**100.0**
Central administration	4 224 321	2.2
Inspection	2 408 210	1.3
Instruction	169 330 255	88.1
Primary and secondary education	166 359 323	86.6
Vocational education	148 272	0.08
Teacher training	2 701 878	1.4
Adult education	120 782	0.06
Other recurring expenditure	16 167 276	8.4
Miscellaneous supplies to government schools	2 953 512	1.5
Miscellaneous grants, school meals, repairs, publications, etc.	13 213 764	6.9

1. Official exchange rate: 1 rupee = 0.21 U.S. dollar.
2. Not including data relating to the University of Ceylon.

proportion of girls to total enrolment rose from 27 per cent to 47 per cent. Enrolment in secondary-level teacher training had increased since 1945 by about 130 per cent. The estimated school-age population of 15–19 years rose from 549,000 in the period 1930–34 to 818,000 in the three years 1955–57, and the ratio of pupils enrolled passed from 11 in the years 1930–1939 to 42 in 1955–57. (See Table 3.)

Examination results in secondary education 1953/54–1957/58. From the data available on examination results, it appears that some 18,000 candidates, of whom over a third were girls, passed the Senior School Certificate in 1956/57. In the same year the Higher School Certificate was awarded to 313, of whom one third were girls, and there were 1,533 successful candidates, one fifth girls, for the General Certificate of Education at Advanced Level. Comparisons with earlier years are difficult owing to the incompleteness of the figures. (See Table 4.)

Educational finance, 1957/58. Excluding the University of Ceylon, total expenditure on education in 1957/58 (fiscal year beginning October) was 206,308,877 rupees, representing about 22 rupees per inhabitant. Of this sum, about 2 per cent was for capital expenditure and 5 per cent for debt repayment. The distribution of the remainder, 93 per cent, by level and type of education is given in Table 1B.

Sources. Ceylon: Department of Education, Statistics Branch, reply to Unesco questionnaire; Department of Census and Statistics, *Statistical Abstracts of Ceylon 1954–58*, and other publications.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary and Secondary[1]	Schools, public	1957	3 921	29 437	13 964	987 942	452 043
	Schools, aided private	1957	2 317	24 858	12 926	791 088	374 877
	Schools, unaided private	1957	98	1 348	642	23 666	8 739
	Estate schools, private	1957	881	1 115	211	73 047	27 281
	Temple schools, private	1957	179	711	—	6 688	—
	Total	**1957**	**7 396**	**57 469**	**27 743**	**[2]1 882 431**	**[2]862 940**
	„	1956	6 953	51 742	24 832	1 719 582	788 849
	„	1955	6 819	49 822	23 593	1 659 140	759 639
	„	1954	6 706	48 286	22 961	1 613 192	740 225
	„	1953	6 538	46 389	21 750	1 565 355	711 835
Teacher training	Teacher training colleges, public	1957	12	193	57	2 672	1 180
	Teacher training college, aided, private	1957	7	57	16	850	437
	Total	**1957**	**19**	**250**	**73**	**3 522**	**1 617**
	„	1956	18	227	71	2 829	1 463
	„	1955	18	211	63	2 905	1 447
	„	1954	19	222	64	3 088	1 463
	„	1953	19	234	72	2 814	1 409
Higher	University of Ceylon, public	1957	1	227	...	2 718	728
	Law college, public	1957	1	22	...	240	—
	Technical college, public	1957	1	58	...	2 163	63
	Total	**1957**	**3**	**307**	**...**	**5 121**	**791**
	„	1956	3	304	...	4 713	724
	„	1955	3	262	...	4 449	709
	„	1954	3	259	...	4 199	656
	„	1953	3	297	...	4 704	1 015
Special	Special schools						
	Total[3]	**1957**	**8**	**64**	**34**	**1 027**	**243**
	„ [4]	1956	2	43	26	326	126
	„ [4]	1955	2	56	37	324	128
	„ [4]	1954	2	41	29	320	127
	„	1953	2	38	25	314	128
Adult	Night schools, aided, private						
	Total	**1957**	**19**	**118**	**...**	**2 415**	**...**
	„	1956	20	164	...	3 286	...
	„	1955	22	171	...	3 423	...
	„	1954	20	179	...	3 581	...
	„	1953	21	184	...	3 691	...

Note. About 60 per cent of the schools in Ceylon have classes from kindergarten to end of general secondary education, i.e., from kindergarten to standard 10. For this reason it is impossible to give separate figures for primary and secondary general education respectively.

1. Data on secondary vocational schools are not available for recent years. In 1954 there were 16 schools enrolling 2,024 (F. 914) pupils.
2. Including 1,455,727 (F. 664,541) primary level pupils and 426,704 (F. 198,499) general secondary level pupils in 1957.
3. Comprising the following: Leper Asylum and institutions for children suffering from tuberculosis, for deaf and blind children, for juvenile offenders and Welikada prison.
4. Schools for deaf and blind children only.

3. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education				Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Teacher training				
	Total	Per cent female	Total	Per cent female			
1930	58 697	27	980	46			
1931	60 955	25	1 139	45			
1932	59 810	27	1 033	46	60	549	*11*
1933	61 938	29	836	46			
1934	54 655	28	753	45			
1935	59 362	28	791	47			
1936	57 329	29	792	48			
1937	61 864	30	932	44	63	585	*11*
1938	64 022	31	984	43			
1939	66 925	31	1 283	58			
1940	...	...	...	...			
1941	...	...	...	...			
1942	52 129	...	...	...	...	622	...
1943	59 251	...	...	...			
1944	82 673	33	...	...			
1945	89 621	35	...	...			
1946	118 779	35	1 516	46			
1947	152 764	35	1 236	37	*161	704	**23*
1948	214 310	37	1 472	35			
1949	222 308	38	1 982	54			
1950	244 293	39	2 065	53			
1951	262 756	39	2 464	37			
1952	271 609	44	2 535	48	274	786	*35*
1953	284 660	41	2 814	50			
1954	295 780	41	3 088	47			
1955	299 427	42	2 905	50			
1956	307 678	42	2 829	52	343	818	*42*
1957	413 993	47	3 522	46			

1. Government and assisted schools only.

4. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953/57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Senior School Certificate . .	[1]1 654	[1]469	[2]7 272	[2]2 852	[2]10 572	[2]4 418	[2]18 003	[2]7 834	[1]2 852	[1]1 186
Higher School Certificate . .	...	...	159	38	223	45	313	99	...	...
General Certificate of Education	...	...	1 598	158	1 438	177	1 533	301	1 014	207
City and Guilds	136	—	98	—	128	—	123	—	105	—

1. July results only.

2. July and December results.

CHILE

THE EDUCATIONAL SYSTEM

Public education

The constitutional and statutory provisions relating to education include Article 10(7) of the Constitution, which guarantees freedom of education and stipulates that public education shall be a principal concern of the State and that primary education shall be compulsory. As a consequence of the unitary administrative organization of the State established by Article I of the Constitution, the Central Government assumes almost complete responsibility for financing and administering the educational system, through a Ministry of Education.

The Ministry of Education comprises the Superintendency of Education, the *Subsecretaría* (office of the Under-Secretary, administrative head of the Ministry), and the Directorates-General of Primary Education, of Secondary Education, of Agricultural, Commercial and Technical Education, and of Libraries, Archives and Museums.

Article 1 of Law No. 104, which set up the Superintendency of Education, provides that that body is responsible, under the authority of the Government and without prejudice to such guarantees in the matter as are contained in the Constitution, for the general direction and supervision of national education, i.e. education provided directly by the State.

The Superintendency of Education comprises the National Council of Education, the Oficina Técnica de Investigaciones Educacionales y Servicios Especiales (charged *inter alia* with conducting technical investigations and organizing special services) and the National Education Fund.

The National Council of Education consists of the Minister of Education, who presides over it, the Superintendent of Education and Under-Secretary (*Subsecretaría*), the rectors of the University of Chile and the State Technical University, the rectors of private universities recognized by the State, the Directors-General of Education, the Dean of the Faculty of Philosophy and Education of the University of Chile, the Director of the Instituto Pedagógico Técnico (specialized training college for teachers in vocational schools) and representatives of various teachers' associations, bodies connected with production and with private education, parents' associations, etc.

A network of services responsible to or connected with the Ministry of Education has also been established. Among the most important of these are the National Committee for Assistance to Schools (Junta Nacional de Auxilio Escolar); the Society for the Construction of School Buildings (Sociedad Constructora de Establecimientos Educacionales), and the Fund for the Building and Equipment of Public Educational Establishments (Fondo para la Construcción y Dotación de Establecimientos de la Educación Pública).

Since, under the terms of its Constitution, Chile is a unitary State, there are no provincial governments as such with authorities elected by popular vote. The *Intendentes*, who are the highest authority in each province, are appointed directly by the President of the Republic and, by delegation of powers, administer the provinces and superintend all the provincial services.

The Primary Education Service is the only one which has provincial authorities: the provincial directors who, like the *Intendentes*, are appointed by the central authorities, to whom they are directly responsible. Coming under the provincial directors of primary education there are also departmental or local directors.

Under Article No. 101 of the Constitution, the administration of communes devolves upon the municipalities, which are responsible in particular for promoting education (Article No. 105(2) and (3) of the Constitution) and for attending to primary schools and other educational services financed from municipal funds.

In compliance with these provisions some municipalities support educational establishments, mainly primary schools.

The structure of the Chilean school system is shown in the diagram on p. 345.

Primary education is governed by the Law on Compulsory Primary Education passed in 1920 and promulgated in its final form by Decree No. 5291 of 22 November 1929. This law establishes the principle of compulsory schooling for children between the ages of 7 and 15 and up to the sixth year of primary schooling. Attendance at rural schools is compulsory only up to the fourth year of study if no complete school is within reach. The law also accepts the principle of experimentation and specifies the standards to which experimental schools should conform. The Directorate-General of Primary Education administers and supervises the work of all the country's primary schools, pre-primary classes, vocational primary schools and courses, experimental schools, primary classes in consolidated schools; schools for handicapped children; primary schools for adults and adult education courses; civic literacy groups and fundamental education centres.

General secondary education is governed by various decrees (see below under the section 'Legal basis') which describe its aims and objectives, its curricula and syllabuses, the organization and operation of *colegios* (private schools) and the system of marking examinations and promotions. The Directorate-General of Secondary Education is responsible for the administration and supervision of all *liceos* (general secondary schools) in the country, of the primary schools attached to *liceos* (*escuelas primarias anexas*) and of the secondary classes in consolidated schools.

Secondary vocational and technical education comes under the Directorate-General of Agricultural, Commercial and Technical Education. It encompasses industrial schools, technical schools for girls, agricultural schools, commercial institutes and polytechnical institutes. The aims, curricula

and syllabuses and the organization of establishments in this branch of education are laid down in decrees issued by the Ministry of Education (see below).

Higher education is governed by the Organic Law on University Education, establishing the structure of the University of Chile and its relations with the private universities, which was promulgated by Decree No. 280 of 20 May 1931. The State Technical University was established by Law No. 10259 of 27 February 1952, which also determined its organization.

Staff coming under the Directorate-General of the Ministry of Education are governed, in general, by the Administrative Law (Decree No. 256 of 29 July 1953) which lays down standards and benefits applying to all civil servants and, in particular, by the *Estatuto del Magisterio* (Decree No. 280 of 5 August 1953) regulating the teaching profession.

Private education

In accordance with that provision of the Constitution which guarantees freedom of education, private education, from pre-primary to university level, has developed alongside public education. The Superintendency of Education is responsible for ensuring that private education is conducted in accordance with the aims and interests of the nation.

Under the provision of Chapter III of the General Regulations for Primary Schools and the Regulations for Private Secondary Schools (*colegios*), the latter must report their existence to the Ministry of Education and furnish any information needed for a proper appreciation of their operation. In addition to these requirements, school premises must meet certain standards of safety and hygiene and must be equipped with such teaching facilities as textbooks, instructional material, laboratories, playgrounds, libraries, etc. Private schools must use the official curricula and syllabuses and accept the technical supervision of the Ministry of Education. The secondary *colegios* must present their pupils for examinations before official boards and must conform to the recognized standards in regard to marking, examinations and promotions. Primary, secondary and technical-vocational schools providing free education are entitled to an annual subvention equivalent to 50 per cent of the annual cost of maintaining a pupil in the corresponding state schools (Law No. 9864 of January 1951). Fee-paying secondary *colegios* are entitled to an annual subvention equivalent to 25 per cent of the average cost per pupil in state secondary schools (Article 104 of Law No. 10343).

Private universities are subject to the provisions of the Organic Statute of the University of Chile, Article 45 of which stipulates: 'Private university establishments may organize their educational services as they think fit. But instruction leading to degrees or diplomas conferred by the State University shall conform to the curricula and syllabuses approved by the university council for the faculties of that university'. The equivalence of some professional diplomas granted by recognized private universities with those conferred by the (State) University of Chile has been established under subsequent laws. They include the diplomas of state teacher, civil engineer, architect, bachelor of laws and agricultural expert.

Factors affecting the provision of education

The population of Chile may be described as homogeneous. The aboriginal population, which is gradually being assimilated, today forms barely 2 per cent of the total. Because of the ethnic unity of the nation there is also cultural and linguistic unity, and this has encouraged the development of an educational system that is uniform in all its aspects, whether of aims and content or of organization.

The existence of economically weaker groups and the persistence of barriers to social mobility have led to the development of two types of primary education, provided respectively in common primary schools (*escuelas primarias comunes*) and primary departments attached to *liceos*. These factors also explain the existence of two types of secondary education: a general secondary education for pupils who hope to go on to the university; and a technical-vocational education, provided by vocational continuation classes (*cuarto grado vocacional*) in primary schools, the commercial, agricultural and industrial schools and the technical schools for girls, for pupils whose education normally ends in these establishments.

These same factors also account for the existence of a system of private fee-paying education side by side with the system of free state schools financed from public funds, from the pre-primary to the university level. Private education has developed extensively, especially at the secondary and higher levels. Most private *colegios* are financed by the Catholic church through its congregations.

THE DEVELOPMENT OF SECONDARY EDUCATION

By the end of the nineteenth century two parallel types of post-primary education were already established: one of a general nature, represented by the *liceo*, the other of a technical and vocational nature and represented by various kinds of school.

Liceos originated in the National Institute, which was set up in 1813, and until the latter part of the nineteenth century they developed along the lines of the French *lycée*.

When the University of Chile was founded in 1842 the functions of the Superintendency of Education were delegated to the Rector and the University Council, and the *liceos* then came directly under the university's Faculty of Philosophy and Humanistic Studies. From this time on secondary education acquired a form of its own, and with the promulgation in 1879 of the Law on Secondary and Higher Education it became even more closely linked with higher education.

Under this law private secondary *liceos* and *colegios* were placed under the authority of the Council of Public Education (Consejo de Instrucción Pública), which acted as the Superintendency of Education, though they continued to be directly responsible to the Faculty of Philosophy and Humanistic Studies of the University of Chile.

In 1880 the aims, organization and teaching methods of the *liceos* began to come in for criticism, which culminated in 1889 in a reform of the curricula. Under this reform a concentric plan of studies was adopted in place of the system of successive courses followed until that time. The first curricula, drawn up in 1893, were based on the ideas

and recommendations which had led to the reform. At this same time a school of higher education, the Instituto Pedagógico, was established at the University of Chile for the training of secondary teachers, and new organizational and teaching methods were tried out there with the help of German teachers specially recruited for the purpose.

With the adoption of the concentric plan the studies pursued at the *liceos*, which until then had been dominated by the idea of a general cultural education without any form of practical training, were greatly enriched by the addition of technical subjects. On the arts side emphasis was placed on the teaching of Spanish and modern foreign languages, while the science side acquired greater importance. The simultaneous organization of the separate branches through the 6-year course afforded the studies considerable consistency.

Nevertheless the Chilean *liceo* came in for further criticism at the General Congress on Public Education (Congreso General de Enseñanza Pública) held in 1902 and changes were suggested which culminated in the National Congress of Secondary Education (Congreso Nacional de Enseñanza Secundaria) in 1912. It was at this time of great educational activity that were propounded the fundamental problems which still preoccupy the Chilean nation. These are: (a) the need to free secondary education from the influence of German teaching methods and to give it a direction and content more in keeping with the national situation; (b) the need to revise the exclusively humanistic objectives of the *liceo*, hitherto regarded as a selective school concerned solely with preparing students for admission to the university; (c) the need to determine the place of the *liceo*, as a school of general education, in relation to establishments of a technical or vocational nature; (d) the desirability of broadening the aims of the *liceo* so that, as well as preparing students for professional studies, it shall also develop their general intelligence and character; (e) the need to supplement the acquisition of theoretical knowledge by its application in practice; (f) the need to establish continuity of study between primary and secondary education and between both of these and technical education; and (g) the advisability of introducing some elasticity into the curriculum, so as to allow for individual differences.

With the object of making the secondary school less closely dependent on the university, and of ensuring that it should not be directed solely to preparing students for the liberal professions, the Directorate-General of Secondary Education was set up in 1927 as a part of the Ministry of Education and took over the administration of this branch of education.

In 1928 a curriculum divided into two cycles was tried out in the *liceos*; the first cycle (3 years) was common to all, and the second (also 3 years) had three parallel sections (humanistic, scientific and technical). Technical *liceos* were also set up, providing specialized vocational instruction from the first year of studies.

For various reasons this reform was suspended before the end of the year. But a year later new proposals for a secondary education, adapted to social requirements and to the interests, needs and abilities of the adolescents, were formulated in Decree No. 22 of 8 January 1929.

This decree set forth the aims of secondary education,

GLOSSARY

auxiliar de campo especializado: see *escuela agrícola.*

enseñanza media: secondary education.

escuela agrícola: vocational secondary school of agriculture with courses at two levels (*grados*), the lower course comprising two cycles (*ciclos*). The first cycle of the lower course plus a third year of specialized training leads to qualification as specialized agricultural assistant (*auxiliar de campo especializado*); the second cycle plus a third year to qualification as specialized agricultural worker (*práctico agrícola especializado*); the upper course trains agricultural technicians (*técnicos agrícolas*).

escuela consolidada: consolidated, central school with complete primary course and the first cycle of secondary general and technical education (I° *ciclo enseñanza media*).

escuela de párvulos (infant school): pre-primary school.

escuela especial: primary school for handicapped children.

escuela experimental: experimental primary school.

escuela granja (farm school): complete rural primary school with curriculum adapted to needs of rural children and with extensive grounds for practical work in agriculture.

escuela hogar: primary boarding school, intended mainly for needy children.

escuela industrial: vocational secondary school providing technical training for industrial occupations (*grado de oficios*). Students may take specialized courses (*especialización*) after two or four years' study.

escuela normal: teacher training school.

escuela primaria de primera clase: complete (lit. 'first class') primary school, sometimes having continuation vocational classes (*grado vocacional*).

escuela primaria de segunda clase: incomplete (lit. 'second class') primary school.

escuela primaria de tercera clase: incomplete (lit.'third class') primary school.

escuela técnica femenina: vocational secondary school for girls.

escuela vocacional: vocational training school equivalent to the *grado vocacional* of the primary school (see: *escuela primaria de primera clase*).

especialización: specialization (*esp. práctica:* see *instituto de comercio*).

grado de oficios: see *escuelas industriales.*

grado vocacional: see *escuela primaria de primera clase.*

instituto de comercio: secondary vocational school of commerce with courses organized in three cycles (*ciclos*); on completing the first cycle students may take a specialized (terminal) year of practical studies (*especialización práctica*).

jardín infantil (kindergarten): pre-primary school.

liceo común: general secondary school of traditional type.

liceo renovado: general secondary school of modern type with a more flexible curriculum than the *liceo común.*

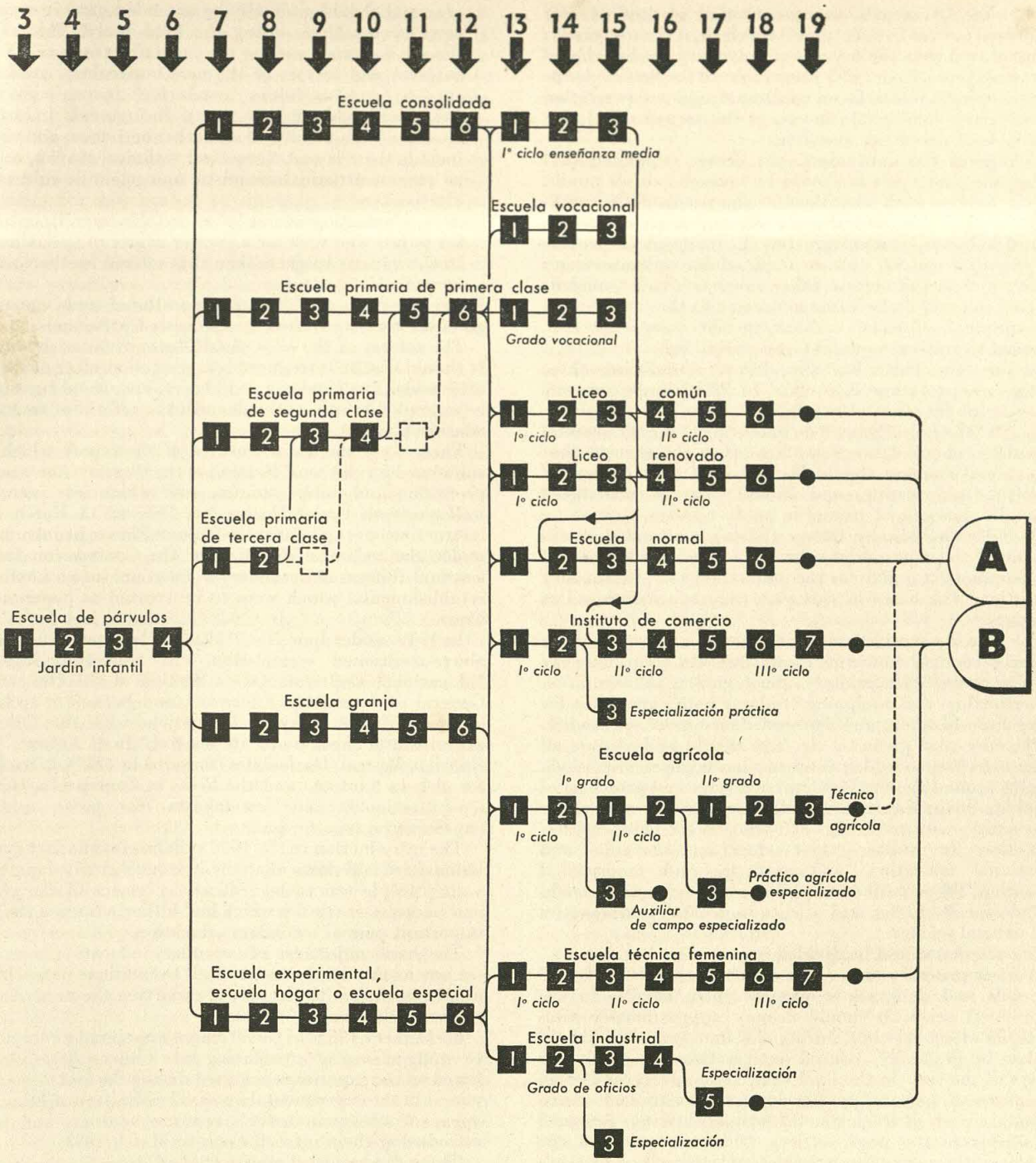
práctico agrícola especializado: see *escuela agrícola.*

técnico agrícola: see *escuela agrícola.*

HIGHER EDUCATION

A. *Universidad:* university.

B. *Universidad técnica:* technical university, and
Instituto pedagógico técnico: specialized training college for teachers of technological subjects.


3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Escuela consolidada
1 2 3 4 5 6 1 2 3
1° ciclo enseñanza media
Escuela vocacional
1 2 3
Escuela primaria de primera clase
1 2 3 4 5 6 1 2 3
Grado vocacional
Escuela primaria de segunda clase
1 2 3 4
Escuela primaria de tercera clase
1 2
Liceo común
1 2 3 4 5 6
1° ciclo
II° ciclo
Liceo renovado
1 2 3 4 5 6
1° ciclo
II° ciclo
Escuela normal
1 2 3 4 5 6
A
Escuela de párvulos
1 2 3 4
Jardín infantil
Instituto de comercio
1 2 3 4 5 6 7
1° ciclo
II° ciclo
III° ciclo
3 Especialización práctica
B
Escuela granja
1 2 3 4 5 6
Escuela agrícola
I° grado
II° grado
1 2 1 2 1 2 3
Técnico agrícola
1° ciclo
II° ciclo
3 Auxiliar de campo especializado
3 Práctico agrícola especializado
Escuela técnica femenina
1 2 3 4 5 6 7
1° ciclo
II° ciclo
III° ciclo
Escuela experimental, escuela hogar o escuela especial
1 2 3 4 5 6
Escuela industrial
1 2 3 4
Grado de oficios
Especialización
5
3 Especialización

which were to include the preparation of students for specialized studies in vocational schools or at the university. It also stated that the 6 years of secondary studies should be divided into 2 cycles of 3 years each. In the first cycle the major emphasis was to be on vocational guidance in relation to secondary vocational schools, in the second in relation to schools of university standing.

As regards the curriculum, the decree stipulated that during the first cycle it should be common to all pupils, subject only to such variations as the needs of the pupils might require. The second cycle was to include a common core of subjects, compulsory for all, designed to provide the essential general culture required for any university career; a choice of certain other subjects which would be stressed in order to facilitate admission to the universities; and optional subjects, without specific vocational aim, designed to cultivate special tastes or aptitudes.

Despite the fact that the decree introducing these changes was to come into effect in 1929, conditions were not yet ripe for its implementation.

In 1932 the Liceo Manuel de Salas, the first experimental secondary school, was set up. Since then the concept that educational changes should be subjected to a process of criticism, and testing, and should only be introduced gradually, has gained ground in public opinion.

On 5 March 1945, by Decree 1036(a), a commission was appointed to prepare and submit for the consideration of the Government a plan for the gradual reform of secondary education. The bases of this plan may be summarized as follows:

The *liceo* is conceived as an institution which provides a typical secondary education for adolescents, continuing the training given by the primary school, guiding the formation of personality and equipping students with experience for living and with the knowledge needed for specialized studies.

The education given by the *liceo* should be based on all those activities in which modern man engages and which revolve around the fundamental processes and problems of social life. It should aim at the all-round development of the personality, with particular attention to six main sectors: education for health, social education, economic and vocational education, and aesthetic and recreational education. The scientific and philosophical education should include social studies and science in general, mathematics and natural science.

The studies should be divided into:

1. A basic general course (*plan común*), compulsory for all pupils and designed to prepare them for life in the broadest sense. It should occupy approximately two-thirds of school time during the first year and should then be gradually reduced until it takes up a third or less of the time in the final year. It should cover the six sectors of personality development mentioned above and, in each of them, should include activities designed to provide the pupil with a minimum quota of the information, experience, habits and attitudes which are essential to equip him for life in society.
2. A 'variable' course (*plan variable*), also compulsory, designed to allow of the adaptation of education to individual differences, to discover and develop vocations and to provide specialized training. It should occupy approximately one-third of school time during the first year and should gradually be extended until it occupies most of the time during the final years. This course should contain, within the overall structure of the subjects and sectors of the core curriculum, groups of studies and activities conducive to specialization (whether rapid or long-term), in manual, industrial, commercial, agricultural and other activities, and should include the relevant theoretical technical studies, as well as various artistic, humanistic and scientific subjects as electives.
3. A supplementary course (*plan complementario*), optional, for pupils who wish for a greater degree of specialization in the various subjects than that offered by the variable course.

Every *liceo* should have an educational and vocational guidance service, staffed by specialized personnel.

The reform of the *liceo* should be carried out by stages. It should first be introduced into a small number of schools, after which the curricula, syllabuses, etc., should gradually be extended to other schools until the reform of secondary education is complete.

These were the main features of the report which was submitted for the consideration of the Ministry, the teaching profession and public opinion, and which was extremely well received. Under Decree No. 1687 of 13 March 1946, instructions were given for the Reform Plan to be introduced, under the technical direction of the Commission for the Gradual Reform of Secondary Education, into a number of establishments, which were to be treated as experimental *liceos*.

In 1949, under Law No. 9320, Article 3 (provisional), the above-mentioned commission was converted into the Educational Experimentation Section of the Directorate-General of Secondary Education and became a technical organ of the Ministry of Education, with the following experimental *liceos* under its control: Juan Antonio Ríos, Gabriela Mistral, Darío Sálas (founded in 1947), Liceo No. 6 for girls in Santiago and the *liceos* at Concepción, Quilpué (co-educational) and Antofagasta (for girls), and the experimental *liceo* for girls.

The introduction to the 1952 syllabus for the first cycle of humanities laid down that the harmonious development of young people was to be realized by means of the general and humanistic studies which had hitherto formed the most important part of secondary education.

The basic objectives of secondary education were thus set out as the development of all the various potentialities of adolescents, with the aim of satisfying the needs both of the individual and of society.

In January 1953 the Government appointed a commission to study means of introducing into Chilean *liceos* changes based on the experience acquired during the first 7-year trial period in the experimental *liceos*. The Ministry of Education approved the commission's recommendations and began introducing them into all *liceos* in March 1953.

Three fundamental aims were laid down for the *liceos* in the reform plan submitted by the commission: preparation for democracy, all-round development of the personality, and preparation for earning a living.

The changes introduced into Chilean *liceos* in 1953 comprised the establishment of 1 hour of class council (*consejo de curso*), for purposes of educational guidance;

the introduction of 3 hours of the 'variable' course in the third year of humanities, to bring out the pupil's special aptitudes and interests and to provide a practical pre-vocational training for pupils not continuing with their studies; the establishment of specialization (*diferenciados*) courses in letters, biology and mathematics for pupils in the sixth year of humanities, to provide them with a systematic preparation for higher university studies; the organization of classes by subjects in the *liceos*, the introduction of a new system of marking, examinations and promotions; and the establishment of guidance services.

Technical and vocational education. In the early twentieth century, secondary technical or vocational education was provided by the following types of school which, except for those specifically mentioned, came under the Ministry of Industry and Public Works:

Practical agricultural schools, set up in 1885.

Handwork centres, which came under the Inspectorate-General of Primary Education. These centres worked to a plan promulgated by Decree No. 5222 of 23 October 1907, and offered a 2-year course following on from the sixth year of primary school. When the Law on Compulsory Primary Education was passed, in 1920, the centres were turned into vocational continuation schools (fourth stage of the primary school[1]).

Schools or workshops for girls, which were first established in 1875 and, after 1900, were renamed vocational schools for girls.

Trades schools, founded in 1850 by the Faculty of Philosophy and Humanistic Studies in co-operation with the municipalities.

Industrial schools, the first of which, the School of Arts and Crafts in Santiago, was opened in 1849.

Schools of Mining, the first of which was founded in the town of Copiapó in 1858, based on the courses of mineralogy which for the previous 20 years had been given in the *liceo* of that town.

Commercial institutes, begun in 1898 and including the Technical Commercial Institute coming under the Ministry of Education.

All these establishments, set up in different forms under different bodies, were gradually taken over by the Ministry of Education and, from 1942, by the Directorate-General of Vocational Education established by Decree No. 6/4817.

Technical vocational education, which developed slowly in relation to general secondary education, has expanded rapidly in the past 60 years to meet the new economic needs of the nation. It is also to be noted that vocational training has been broadened through the gradual introduction of cultural subjects and now provides a fuller education for the pupils. At the same time the importance of vocational exploration in the first year is now accepted as a necessary preliminary to the selection of a professional specialization. In addition, it is worth pointing out that this branch of education, which in the early years developed disjointedly and without reference to other branches, now tends to form an integral part of the school system. Its first connexion was with primary education, for which it served as a continuation school. Later, it was linked up with secondary education, thus providing pupils with the opportunity of continuing their studies at various levels. Lastly, the creation of the State Technical University, in 1952, completed the process of incorporating vocational education in the national educational system.

1. The ordinary 6-year primary course is divided into three stages (*grados*) of 2 years each.

Legal basis

The following are some of the main laws and regulations governing secondary education:

Decree No. 22 of 8 January 1929 on the aims and objectives of secondary education.

Decree No. 3409 of 31 May 1935 approving the objectives of secondary education and the curricula for the first and second cycles of the *liceos*.

Decree No. 3865 of 31 July 1941 laying down rules for the approval of textbooks used in secondary schools.

Decree No. 2943 of 26 May 1944 approving the general regulations for *liceos* (*Reglamento General de Liceos*).

Decree No. 8473 of 2 October 1951 approving new syllabuses for the first cycle (first, second and third year of humanities) and determining the aims and objectives of the general secondary schools (amending Decree No. 3409 of 31 May 1935).

Decree No. 75 of 12 January 1955 approving the curriculum of the country's secondary schools.

Decree No. 10000 of 13 September 1956 regulating sports in secondary schools.

Decree No. 1336 of 17 February 1949 governing the vocational guidance service in secondary schools.

Decree No. 842 of 4 February 1959 approving the regulations on marking, examinations and promotion for secondary school pupils.

Decree No. 6016 of 25 June 1959 amending Decree No. 842 of 4 February 1959.

Commercial education. Decree No. 2397 of 27 April 1954 approving the curricula for commercial education courses and establishments (subsequently amended by Decree No. 5814 of 27 December 1958).

Decree No. 2892 of 11 May 1954 approving the curricula for commercial evening courses.

Technical education for girls. Decree No. 770 of 3 March 1955 approving the curriculum of technical educational establishments for girls.

Agricultural education. Decree No. 2806 of 10 May 1954 approving curricula for agricultural education courses and establishments (first stage and third year of specialization).

Decree No. 2954 of 22 April 1957 approving the general agricultural training curriculum for the third year of specialization.

Decree No. 2560 of 25 May 1956 approving the curriculum for the second stage in agricultural schools.

Decree No. 9106 of 13 October 1954 approving the curriculum for agricultural schools for girls.

Industrial education. Decree No. 3120 of 30 April 1957 approving the curriculum for the first course in industrial schools.

Vocational continuation education. Decree No. 9226 of 16 September 1948 approving the curriculum for primary education and its fourth stage (vocational training).

The application of the Law on Compulsory Primary Education, through which general primary education lasting for 6 years has become universal, has had the following effects on the expansion and diversification of secondary education:

1. The preparatory sections of *liceos*, which formerly offered 4-year courses, now work on a 6-year plan and are called *escuelas primarias anexas* (primary departments attached to secondary schools).
2. Before the above-mentioned law was passed, primary pupils who had completed their sixth year used to have to pass a special examination before they could start on their first year of humanities, thus losing two years' seniority; now they are on the same footing as pupils of the *escuelas primarias anexas*.
3. Primary school children now have many more opportunities of continuing their studies.
4. There are more secondary schools and the financial and social background of the pupils is now more diverse.
5. There has been a growing diversification of vocational and technical education and a greater flexibility in the secondary schools curricula, conducive to vocational exploration, the cultivating and developing of special aptitudes and interests, and specialized preparation for higher studies. Hand in hand with this has gone the introduction of educational and vocational guidance services.

Administration

Power to determine the structure and general operational norms of secondary education, and of all the departments of the Ministry of Education, is vested in the National Congress, which occasionally delegates that power to the Executive. In virtue of the functions assigned to the President of the Republic by the Constitution (Article 60), the Executive, consisting in this case of the President of the Republic and the Minister of Education, approves the decrees laying down the standards governing the organization and internal operation of the Directorates-General concerned and the establishments coming under them.

In performing this function the Executive is advised by the Directorate-General concerned and by the Superintendency of Education.

In compliance with existing statutory provisions, the Directorate-General of Secondary Education is responsible for the technical and administrative direction of secondary education. It carries out these duties through the Administrative Department, the Pedagogical Department, the Inspectorate-General (*Visitación General*) and the relevant sections.

The Administrative Department comprises the following bodies: the Secretariat-General, which is a general administration office responsible for facilitating the handling and internal transmission of all matters of which the Directorate-General or the bodies coming immediately under it must be aware or on which they must take action; the Personnel Section (*Sección Escalafón y Propuestas*), which is responsible for everything connected with personnel movements (proposals for appointments, transfers, exchanges, dismissals, etc.) and the Examinations and Private Secondary Schools Section, which is responsible for the control of examinations and promotion of pupils in secondary schools, both State and private.

A commission, presided over by the Director-General and consisting of one official representing the Minister and two appointed by the Director-General from among the supervisory officials, investigates applications for appointment to the service and puts forward the names of three candidates from among whom the Minister makes a final selection.

The Pedagogical Department comprises the Technical Section (*Sección Técnica y de Orientación*) which is in general charge of the technical work of teaching and the educational and vocational line followed by general secondary schools, and the In-Service Training and Experimentation Section (*Sección de Perfeccionamiento y Experimentación*) which is responsible for improving teaching standards, for controlling all aspects of the experimental secondary schools and for making known the results of the experiments carried out in those establishments.

The Inspectorate-General consists of four inspectors responsible respectively for the humanities, sciences, technical subjects and the primary departments of secondary schools (*escuelas anexas*). Each inspector is responsible for personnel administration and the supervision of instructional methods in his particular group of subjects.

The Directorate-General also has 10 educational advisers on the various subjects. They are attached to the In-Service Training Section and are responsible for preparing syllabuses, textbooks and educational material for the experimental secondary schools and for supervising the teaching given in both experimental and general secondary schools.

A technical council, presided over by the Director-General and composed of the heads of all departments and sections and the inspectors-general, advises the Director-General on all matters concerning curricula and syllabuses, the organization and functioning of the *liceos*, standards for marking, examinations and promotion and, in general, all problems affecting the operation of the service.

Under current legislation the Directorate-General of Agricultural, Commercial and Technical Education is responsible for the technical and administrative direction of the vocational education service.

The functions of this directorate are carried out through the following organs: the departments responsible for the technical and pedagogical direction of agricultural, commercial and industrial education and of technical education for girls; the Administrative Department, which controls the establishments and personnel coming under the Directorate-General and which consists of the Personnel Section (*Sección Escalafón, Propuestas y Resoluciones*) and the Degrees and Diplomas, Examinations and Private Secondary Schools Section (*Sección Títulos y Grados y Exámenes y Colegios Particulares*); and the Pedagogical Inspectorate (*Visitación Pedagógica*) which is responsible for studying, in co-operation with the departments concerned, the curricula, syllabuses, textbooks and other aspects of the various schools and establishments.

The Secretariat-General is a general administrative office which fulfils the same functions as the Secretariat-General of the Directorate-General of Secondary Education.

Control. The control of secondary schools, both general and vocational, is a responsibility of the Ministry of Education and is exercised through the Directorate-General concerned and the principals of schools. At the same time, all administrative acts of the Ministry are subject to control by the Department of the Comptroller-General of the Republic (*Contraloría General de la República*), which is responsible for examining the legality of decrees issued by the executive on matters which require approval by decree (personnel appointments, transfers, exchanges and leave; changes in curricula and syllabuses; and payment of moneys under the operating budget of the Ministry of Education, in accordance with the relevant laws and regulations.

The principal of each school is in charge of all the school's activities and directly responsible for its operation.

Supervision and inspection. Supervisory functions in secondary education are exercised by the Directorates-General, the Inspectors-General, the heads of the Pedagogical Departments and Technical Sections and the Educational Advisers. In educational establishments such functions are performed by the respective principals and, in the case of agricultural, commercial and technical schools and institutes, by the heads on the educational and technical sides. All these officials must hold the diploma of state teacher, engineer or technician in their particular subjects, according to the provisions of the Statute of the Teaching Profession (Article 10), and must have a certain number of years' service, varying from 3 to 15 years according to the case (Article 49 of the same statute).

As regards grading, the principals of establishments may not be promoted to higher office unless they qualify for inclusion in List 1 (of merit).

Finance. State education is financed from funds derived from the sources listed below:

1. The Ministry of Education, chapter of the national budget.
2. The Fund for the Building and Equipment of Public Educational Establishments (Law No. 11766 of 24 December 1954).[1]
3. The funds derived from various items of the national budget, in accordance with Law No. 7869 which established the Society for the Construction of School Buildings and provided that the Treasury should acquire shares in it. These funds come from the balances of fiscal resources not reserved for other specific purposes by special laws, from income derived from the tax on bequests and donations, and from other sources.
4. The funds of the National Committee for Assistance to Schools and of the provincial and local Committees for Assistance to Schools. Apart from the moneys specifically set aside for this purpose in the national budget, the funds are made up of contributions from the municipalities and the Social Security Service, of legacies, donations and gifts, and of other resources.
5. Enrolment fees and contributions towards the cost of materials used in the handwork and domestic economy classes of secondary schools.
6. The income derived by secondary vocational schools from the sale of articles made by the pupils.
7. The funds derived under Law No. 11575 (Article 36) of 14 August 1954, which allocates, for a period of 20 years starting from 1 January 1956, 0,5 per cent of all direct and indirect fiscal taxes and customs and export dues, for buildings and scientific research.
8. Ten per cent of the income derived from the taxes levied on the major copper producing concerns is allocated under Law No. 11818 (Article 27) of 5 May 1955 to the State Technical University and the Austral University.

A part of the budgetary resources of the Ministry of Education is used for the payment of subventions to private secondary schools, in accordance with Law No. 9864 of 25 January 1951 granting a subvention for each pupil attending non-fee paying private secondary education establishments and of Article 104 of Law No. 10343 granting subventions to fee-paying private secondary schools.

Schools are also maintained by the municipalities from their own funds (in an amount of 5 per cent of their budget).

Funds to be used for the payment of the staffs of educational establishments are allocated by the Annual Law on the Budget. Funds for the lease of land or buildings, for maintenance and repairs, educational material and school equipment, general office expenses, libraries, in-service training courses and other variable expenses are included in the budget in global form and are allocated by the Directorate-General concerned through decrees issued by the Ministry of Education.

School buildings and equipment are financed by the Ministry of Education through the Society for the Construction of School Buildings and the Fund for the Building and Equipment of Public Educational Establishments.

In addition, the construction of some school buildings is financed by the Ministry of Public Works.

Buildings and equipment. The standards governing school buildings and equipment are laid down by the Premises, Furniture and Materials Section of the Ministry of Public Education, the Society for the Construction of School Buildings, the Ministry of Health and the Municipalities.

School welfare services. A number of schools have welfare services providing medical, dental and social care for the pupils. The welfare work covers boarding arrangements, food, clothing, scholarships, school holiday camps and rest centres.

Contributions towards the maintenance of these services are made by the Social Welfare Department of the Ministry of Education, the National Health Service, the School Welfare Funds (Rentas de Auxilio Escolar) and parents' associations.

1. This fund is made up of contributions from the municipalities and private persons and from various taxes: 0.25 per cent on the salaries or remuneration received by advisers to public, semi-public or independent institutions and joint-stock companies; 0.75 per cent on the salaries of employees and workers, payable by the chief or employer, etc.

TYPES OF SECONDARY EDUCATION

On completing his primary school proper (6 years of study), a pupil now has the choice of two major types of secondary education: general secondary education, and specialized

vocational or professional secondary education. These two types of education are usually provided by separate schools: the secondary *liceos* and *colegios* which offer a general humanistic, scientific and technical education with no specific vocational aim; and schools or institutes which prepare their students for work in agriculture, commerce or industry. Some establishments also combine a general education with pre-vocational or professional training—as, for instance, the experimental *liceos* and the consolidated schools, whose secondary cycle includes commercial and technical subjects as well as academic studies.

General education is provided in both full-time and part-time schools.

Educational and vocational guidance for primary school pupils is given by the class teachers under the supervision of guidance specialists maintained by the Directorate-General of Primary Education in all provincial and local directorates of education. These officials are directed and supervised by a technical adviser on vocational guidance from the same Directorate-General. Such guidance includes the provision of information to pupils and parents on the various educational opportunities available on completion of primary schooling, interviewing pupils, activities designed to discover the interests and aptitudes of pupils through specialized courses of vocational education, advice on educational and vocational matters, and the following up of all this.

In secondary schools, the school year begins on the first Monday in March and ends on 24 December. Secondary schools are open for 235 working days a year, and this represents the working year for teachers; the school year for pupils consists of 225 days. Secondary schools are open every day from Monday to Saturday. During the school year there are 10 public holidays, 1 week in September to celebrate the national holiday, and a winter holiday of 2 or 3 weeks in July.

A normal day in a full-time school varies between 6 and 8 classes. The number of hours worked each week in general secondary schools varies from 31 to 37 and in technical vocational schools from 36 to 43.

General secondary schools

The aim of the *liceos* is to provide adolescents with a moral, intellectual, aesthetic, vocational and physical training designed to ensure the all-round development of their personalities and to prepare them for life in a democratic society and for earning their living.

Secondary education lasts for 6 years and is divided into two cycles of 3 years each.

To be admitted to the first year of humanities, a pupil must be at least 11 (eleventh birthday in the course of the school year) and must not be more than 15 years old; he must have satisfactorily completed the sixth year of primary schooling and must have passed the entrance examination for which candidates are required to sit when there are not enough places available (this examination includes Spanish and mathematics).

When the number of first-year pupils allows, parallel classes are formed and the opportunity is taken to form groups that are homogeneous from the point of view both of age and of the stage of advancement reached. This also applies to the other classes.

The curriculum comprises: (a) Subjects compulsory for all pupils: Spanish, history and geography, philosophy (5th and 6th year), civics, a language of Latin origin (French, Italian, Latin or Portuguese), English or German, mathematics, science, physics and chemistry, visual arts, handwork for (boys), domestic economy for (girls), music and physical education. One hour of class council (*consejo de curso*) is also included. (b) A group of subjects from which one or two must be chosen and which forms the variable course for the third year of humanities. Religious instruction is optional and is only available during the first cycle. (c) Subjects in the specialization course on either the arts or the science side, taken during the 6th year. These specialization courses take up approximately half the weekly time-table and pupils must opt for one of them (see curriculum below).

The reformed and experimental *liceos* have curricula similar to the foregoing but they devote more time to educational guidance activities, the variable course, the specialization course (4th, 5th and 6th year), the optional subjects and, in general, to educational activities aimed at providing guidance and social training for the student.

In all *liceos*, the progress of pupils is appraised not only on the basis of their performance in the various subjects

TIME-TABLE FOR GENERAL SECONDARY SCHOOLS
(in periods per week)

	Years					
	1	2	3	4	5	6
BASIC GENERAL COURSE						
Spanish	5	5	4	4	3	—
History and geography	3	3	3	4	3	2
Philosophy	—	—	—	—	3	3
Civics	—	—	—	—	2	2
English or German	4	4	4	3	3	3
French, Italian, Latin or Portuguese	—	4	3	3	4	3
Mathematics	5	4	4	3	3	—
Natural science	3	3	3	3	3	—
Physics	—	—	—	3	3	—
Chemistry	—	—	—	3	3	—
Visual arts	2	2	2	2	2	2
Religious instruction	1	1	1	—	—	—
Handwork or domestic economy	2	2	4	4	—	—
Music	2	2	2	1	1	1
Physical education	3	3	3	2	2	2
Class council	1	1	1	1	1	1
Electives (*plan variable*)	—	—	3	—	—	—
	31	34	37	36	36	19

SPECIALIZATION (in addition to 6th year subjects of Basic General course)	6th year	
	Arts	science
Spanish	6	3
History and geography	6	2
Mathematics	—	3
Mathematics and physics	3	—
Natural science	—	4
Biology and chemistry	3	—
Physics	—	3
Chemistry	—	3
	18	18

but also in regard to the growth of their personality. For this purpose the school year is divided into three terms. At the end of each term marks are awarded and are communicated to the pupils' parents or guardians. For these end-of-term appraisals, as for the end-of-year examinations, practical tests and oral questions are used whenever necessary. Encouragement is given to work throughout the year by assigning to it a coefficient equal to 60 per cent, as against 40 per cent for the end-of-year examination.

At the end of the sixth year of humanities, a secondary school leaving certificate is granted by the Directorate-General of Secondary Education. Pupils wishing to sit for the *Bachillerato en Humanidades* examination must hold this certificate.

Vocational and technical schools

Commercial institutes. These schools, the aim of which is to train technicians for the various branches of trade, offer a 7-year course of studies divided into three cycles of 2, 3 and 2 years respectively.

To be admitted to the first year of these schools, pupils must have completed the 6 years of primary schooling, must be at least 12 and not more than 17 years of age at the time of enrolment, must be physically fit to undertake the studies involved and must pass an entrance examination. General secondary school pupils may join other courses of the commercial institutes, after taking an entrance examination, in the following conditions: (a) students who have completed the first, second or third year of humanities may join, respectively, the second, third or fourth year of special commercial studies; (b) students who have completed 6 years of humanities may join the preliminary course for the third cycle.[1]

At the end of the second cycle students receive the diploma of commercial studies, and at the end of the third cycle the certificates of accountant, company secretary or commercial representative.

The first cycle covers not only vocational subjects (business correspondence, commercial mathematics, elements of commercial practice, book-keeping, typewriting and commercial products) but also such general subjects as Spanish, English, history and geography, natural sciences, penmanship, drawing, physical education, music, domestic economy (for girls) and handwork (for boys). One hour a week is devoted to class council. At the end of this cycle those students who do not wish to continue regular studies can take a 1-year specialization course leading to the diploma of assistant clerk, assistant secretary or assistant salesman.

In addition to class council and some general subjects (Spanish, English, physics, psychology, human biology and hygiene, physical education and music), the second cycle covers such professional subjects as commercial practice, statistics, chemistry, merchandizing, customary law, fiscal laws, customs procedure, foreign trade, etc. At the end of this cycle students move on to more specialized studies.

1. The aim of the special courses and of the preliminary course for the third cycle is to help pupils from the general secondary schools to transfer to commercial schools by providing specially adapted courses which will enable them to catch up in the various subjects without much loss of time.

In the third cycle the general cultural subjects include social and cultural problems and English. A few subjects of general professional interest are studied but most of the time is given over to specialized training for the following professions:

Accountants. The subjects studied include financial mathematics, higher accountancy, the preparation and organization of systems of accounting, business organization, foreign trade, commercial policy, etc.

Company secretaries. Drafting, shorthand-typing, office organization and administration, general psychology and the psychology of advertising, customary law practice, etc.

Commercial representatives. Merchandizing, sales psychology, transport, market surveys, credit and banking, fiscal legislation, etc.

Graduates of the commercial institutes may sit for the *Bachillerato en Economía*, which qualifies them for admission to the School of Economics and Commerce of the University of Chile.

Vocational schools for boys. The aims of these schools are: (a) to offer fifth- and sixth-year primary school pupils the opportunity of discovering their vocations, and (b) to provide elementary training in crafts and industrial techniques. Instruction is based on a 3-year curriculum.

Boys wishing to take up vocational training proper must be at least 15 years of age and must have completed the sixth year of primary schooling. A certificate of proficiency is given at the end of the course.

Industrial schools. The purpose of industrial schools is to train operatives for industry. Instruction is based on a Grade I curriculum of 5 years divided into two cycles lasting for 2 and 3 years respectively.

At the end of the second year pupils who do not wish to continue with the second cycle take a third year of specialization.

Qualifications for admission to the first year are the same as in the commercial institutes. Pupils who have completed 2 years of humanities (subject to passing an entrance examination), and pupils who have completed 3 years of humanities, may join a preliminary course for the third year of industrial training which is designed to enable them to catch up in technical sujects so that they can continue with the regular second-cycle studies.

At the end of the third year of specialization, pupils receive the Certificate of Trained Operative (first cycle), in the speciality concerned.

Fifth year graduates with at least 1 year's practical professional experience are granted the Certificate of Trained Operative (second cycle), in the speciality concerned.

In addition to various general cultural subjects (Spanish, social studies, mathematics, a foreign language, general science, physical education and music), the first cycle instruction includes such professional subjects as free-hand drawing, technical drawing, the technology of materials and intensive workshop experience. This practical work takes up approximately half the weekly time-table in the first and second year classes. In the third year of specialization, three-quarters of the time is given over to technology and practical work and the remainder to such subjects as civics, social legislation, and health and safety in industry.

In the second cycle, instruction is divided between a general course and a specialization course. The former includes Spanish, social studies, mathematics, a foreign language, physics, chemistry and physical education and such basic vocational subjects as health and safety in industry and social legislation. The specialization course includes theoretical and practical instruction in workshops and branches of the speciality selected by the pupil. The specialization course takes up about 50 per cent of the weekly time-table in the third year and about 60 per cent in the fourth and fifth years.

As regards appraisal and examinations, the same system applies as in the case of commercial schools.

Fifth year graduates (Grade I) may take the *Bachillerato Industrial*, which entitles them to continue their studies at the State Technical University.

The industrial schools provide instruction in various specialities and train industrial mechanics, motor mechanics, agricultural mechanics, moulders, forestry mechanics, electricians, cabinet-makers, ship-builders, foundrymen, plumbers, weavers, pattern-makers, skippers of fishing-boats, tailors, etc.

Vocational schools for girls. The aim of these schools is to offer fifth- and sixth-year primary school pupils opportunities of acquiring elementary professional skills. The course lasts for 3 years and, on completing it, the girls are qualified to work as specialized operatives. The conditions for admission to these schools are the same as for the vocational schools for boys.

Technical schools for girls. These schools are intended to train girls for technical professions appropriate to their sex, to give them a general physical, intellectual and moral education, and to prepare them for life in the home and society.

They provide a 5-year course of study, forming the first stage of technical education for girls, divided into two cycles—the first of 2 and the second of 3 years.

At the end of the first cycle pupils who do not wish to continue with the second cycle may take a third year of specialization.

To be admitted to the first year of these schools, girls must have satisfactorily completed 6 years of primary schooling and must be at least 13 years of age. The conditions governing admission to other courses are as follows: (a) girls who have completed 2 or 3 years of humanities may join the preliminary course, parallel to the second year, and (b) girls who have completed 4 or 5 years of humanities may join the preliminary course for the fifth year.

The first cycle course comprises general subjects—Spanish, mathematics, social studies, general science, physical education, music, drawing and religious instruction (optional)—and the following professional subjects: technical drawing, techniques of the various occupations and workshop practice. There are also class council activities. In the first year the vocational subjects occupy about 40 per cent of the weekly time-table, in the second year about 50 per cent. During the first cycle and the third year of specialization, the girls learn to make hats, flowers, machine-woven fabrics and toys; they also acquire a knowledge of such special branches as tailoring, the making of children's dresses and underwear, pastry-making, hairdressing, upholstery, etc.

In the second cycle the general subjects include Spanish, social studies, mathematics, music, foreign languages, human biology and hygiene, elements of physics and chemistry, psychology and physical education. The vocational subjects include the care of children, social legislation, the industrial administration of workshops, technical drawing, theoretical and practical instruction in workshops, and technical training in the speciality.

Approximately 50 per cent of the weekly time-table is taken up by the vocational subjects in the third year and 70 per cent in the fourth and fith years.

In the second cycle students can learn such trades as dressmaking, lingerie, hand embroidery, weaving, children's dressmaking, machine embroidery, tailoring, domestic economy, pottery making, etc.

At the end of the fifth year, students receive the diploma of forewoman in the speciality concerned.

On completion of the first grade of technical education, girls can continue their studies at the Higher Technical School for Girls, at *ad hoc* training courses for vocational school teachers, or at pre-university courses arranged by the Technical Pedagogical Institute and leading to the diploma of state teacher in the speciality selected.

Agricultural schools. The purpose of these schools is to train farm workers, qualified farmers and agricultural technicians.

They provide a 7-year course of instruction, divided into three cycles of 2 years, 2 years and 3 years respectively.

For admission to the first year of the first cycle, candidates must have completed 6 years of primary schooling and be in a fit state of health to undertake agricultural work. Pupils who have completed two or three years of general secondary education may join a preliminary course, parallel with the second year of the first cycle.

The syllabus of the first cycle includes class council and the following general subjects: Spanish, social studies, mathematics, natural sciences, music, physical education and drawing. The vocational studies include general agriculture, bee-keeping, poultry raising and rabbit breeding, horticulture and gardening, and practical work in the field and workshop.

Pupils who do not wish to go on to the second cycle can take a third year of specialization, at the end of which they receive a certificate of farm worker in the various branches.

Second cycle studies include class council and the following general subjects: Spanish, social studies, English, mathematics, biological sciences, chemistry and physical education. Occupational subjects include fruit growing and plant diseases, oenology and vine growing, cattle breeding and feeding, dairy farming, cattle diseases, agricultural machinery, crops, forestry, soils and fertilizers, and practical work in the fields and workshop. The specialization course, available at the end of the second cycle for students who do not wish to go on to the third cycle, offers training in such varied activities as arboriculture, oenology, cattle raising, etc., and leads to the diploma of qualified farmer.

The third cycle provides an even more intensive training in the theory and practice of farming. At the end of this cycle students receive the diploma of agricultural technician in various branches.

Teacher training schools

Teachers for urban and rural primary schools are trained in teacher training schools (*escuelas normales*) of secondary education level. The course lasts for 6 years and for admission to these schools, students must have completed the sixth year of primary schooling or the second year of humanities (secondary schooling). All candidates for teacher training schools must pass an entrance examination.

Both urban and rural teacher training schools provide 4 years of general education and 2 of professional training.

The general education is divided into the following sectors: physical education; scientific education (including Spanish grammar, mathematics, physics, biological sciences and hygiene, chemistry, social science and general psychology); artistic education (including Spanish literature, singing and music, drawing and modelling); technical education (including penmanship, spelling, handwork, women's occupations, domestic economy, child welfare); and foreign languages.

The professional training given in the 2 final years is divided into two sectors: ancillary science studies and philosophy (including educational biology, educational psychology, educational sociology, school health and an introduction to philosophy); and pedagogy (including instruction in vocational guidance, the principles of education, the technique of teaching, school organization and administration, and the philosophy and history of education). This is rounded off by specialist study of primary teaching and intensive teaching practice.

In addition, throughout the 6-year course, from two to nine periods a week are set aside for optional or supplementary activities.

Other specialized schools

Part-time schools. In addition to the schools already mentioned there are various institutions for general and technical vocational education at secondary level which operates on a half-day basis with slightly changed curricula. These institutions, intended for adult education may be either state or private. They include evening and night secondary schools, evening commercial classes, evening industrial classes, academies or institutes providing technical education for women, etc.

Special state schools coming under the Ministry of Education. These comprise the following institutions, all of which admit pupils who have completed 6 years of primary schooling: the National School of Graphic Arts, the National School of Tailoring, technical schools and technical courses for girls, attached to girl's secondary schools, the Experimental School for Education in the Arts (6 years of general secondary education combined with special instruction in the plastic arts and music), and the School of Stone Masonry.

Educational establishments coming under other state or semi-public bodies not responsible to the Ministry of Education. These schools include technical agricultural schools run by the Ministry of Agriculture, the Practical School of Agriculture attached to the Agricultural Faculty of the University of Chile, the School of Apprentices of the Central Machine Shop of the State Railways, the Carlos Arias Martines Railway Technical Institute, the Post and Telegraph School, the National Airline's Training Centre, the School of Applied Arts (which comes under the Faculty of Science and Plastic Arts of the University of Chile), the National Conservatorium of Music (which comes under the Faculty of Musical Science and Art of the University of Chile and has a secondary studies' section for arts students with musical gifts), the Bernardo O'Higgins Military College, the Arturo Prat Naval College, and the Capitán Avalos School of Aviation, and other training establishments for the armed forces.

Private vocational secondary schools. There are many full-time private vocational schools, some of which follow the official curricula, while others arrange their own courses.

Out-of-school activities

In the general secondary, vocational and technical schools, there are various student institutions like the class council (*consejo de curso*), the pupil members of which form working parties to look after the needs and interests of the group, under the guidance of the head teacher. Student government bodies, with teachers in an advisory capacity, also exist in many such establishments. In a growing number of secondary educational institutions pupils also have the opportunity of joining clubs and co-operatives, and taking part in study trips and various other school projects and festivities.

All educational establishments organize sports and games for pupils of both sexes and there is a highly developed system of school competitions, local, regional and national, for both sexes. Secondary school students have a national organization called the Secondary School Sports Federation of Chile which is under the supervision of the Ministry of Education.

Increasing numbers of secondary schools are giving their pupils the opportunity of participating in such community-service youth organizations as the Boy Scouts, Red Cross and the Traffic Brigades (*Brigadas del Tránsito*) and in elementary education activities for adults.

Secondary school students have an independent national organization called the Federación de Estudiantes Secundarios.

TRENDS AND PROBLEMS

As can be seen from this outline both general and vocational secondary schools are going through a process of re-orientation and change designed to adapt them to the needs, interests and capacities of the pupils and to social needs. Especially in general secondary education, where for some years a group of experimental schools has been disseminating new ideas and teaching practices, changes are to be seen which represent a marked improvement.

Some of the fields in which these changes are most apparent are those relating to educational policy, curricula, teaching programmes and methods, the appraisal of pupils' work, the organization and administration of *colegios*, new forms of school organization and teacher training.

Secondary educational policy has been broadened and the aims now emphasized are preparation for life in a democracy, the full development of personality and preparation for earning a living.

Flexible curricula have been introduced into the general secondary schools, which now offer differentiated curricula during the second cycle and variable curricula in the first cycle. The purpose of the former is to guide the pupils in the choice of a vocation and to prepare them for higher studies in accordance with their bent. The latter make possible a certain pre-vocational exploration and preparation which help the student to fit into working life immediately or continue his studies at a technical-vocational school.

To meet the new needs arising from the country's economic development, vocational schools now offer a wider and more varied range of subjects, while general cultural training has been enriched by the inclusion of new branches of humanistic studies or the intensification of existing ones.

There is a growing concern that school programmes should be better adapted to the individual characteristics of the student and the requirements of society. New secondary school programmes are being drawn up with this aim in view.

Teaching methods tend to be based on the experience of pupils and on the use of visual media, study visits and excursions, group work, and personal investigation and the solution of problems by the pupil.

Progress has also been made in methods of appraising the work of pupils. Growing use is being made of objective tests and the personal development of the pupil is also appraised.

Better social training of pupils is fostered by the introduction of such general activities as class councils, student government, clubs, co-operatives and other forms of social activity.

Related to these changes is the tendency to organize secondary schools on a more functional basis; this encourages co-operation between teachers and the co-ordination of efforts to improve all aspects of the instructional and educational work of secondary schools. This is leading to changes in the traditional procedures and to the adoption of more democratic principles in the internal administration of secondary schools.

The changes in both general secondary and technical vocational education are clearly tending to bring closer together these two types of training, which formerly were provided by entirely separate and exclusive schools. The *liceos*, which provided an almost exclusively academic general education, now teach vocational subjects, while the technical vocational schools, which formerly provided an almost exclusively technical training, now include cultural subjects that enable them to give a more balanced education. Moreover, attempts are being made to embody this trend towards the integration of general and specialized training in a new type of educational establishment, the consolidated school (*escuela consolidada*), in which different types of curricula are offered in the same institution. Also as part of this trend an effort is being made to raise the general educational qualification for admission to specialized schools to 3 years of general secondary studies.

In much the same connexion, the State University, in view of the constant expansion of secondary education and the need for decentralizing higher education, has started university colleges. These institutions offer 2-year study courses linking up with the third year of the university's vocational schools. Their aims are:

To deepen and broaden the students' general education.

To offer students a basic academic preparation, specialized in some field of culture, which will enable them either to study for a profession or, in the case of young people of outstanding ability and a marked vocation to undertake higher studies and research activities leading to a university degree.

To enable persons who do not wish to carry on to the final degree to prepare for semi-qualified posts, according to the needs of the area.

To carry out university extension work catering for the cultural interests not only of the pupils but also of broad sections of the community.

To provide technical assistance to community institutions that apply for it.

To put these changes into effect various steps have been taken in connexion with the initial and further training of teachers. A special institute of university standard—the *Instituto Pedagógico Técnico*—has been set up to train teachers for technical vocational schools. Two new compulsory subjects, educational and vocational guidance and school organization and administration, have been introduced by the Pedagogical Institute of the University of Chile. More practice is given in teaching and the senior masters in charge of particular subjects have been given greater responsibilities. The same Pedagogical Institute also offers a year's post-graduate course for the training of secondary school educational and vocational advisers which has made it possible to introduce guidance services into a large number of secondary schools.

Finally, the fact has been recognized that the principals of secondary schools need special training for their posts. A special post-graduate course has been started for the initial and further training of such senior staff.

[*Text prepared by Irma Sálas in January 1960 at the request of the Chilean National Commission for Unesco.*]

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STATISTICS

Population (mid-year 1958 estimate): 7,298,000.
Area: 286,397 square miles; 741,767 square kilometres.
Population density: 25 per square mile; 10 per square kilometre.

Summary of school statistics, 1953–57. In 1957, total school enrolment was about 1,310,000 (not including 57,000 adults attending general or vocational courses). As in 1954, the school-going population represented about 18 per cent of the total population. Proportionally, the distribution of the total enrolment was as follows: pre-primary education, 2 per cent; primary education, 80 per cent; secondary education, 15 per cent; higher education, 2 per cent. The proportion of girl pupils was around 50 per cent respectively in pre-primary, primary and secondary education (general, vocational and teacher training). Not including the technical university, the proportion of girl students at the level of higher education was as high as 40 per cent.

Between 1953 and 1957, total school enrolment increased by 20 per cent. Percentage increases by level and type of education are: primary, 20 per cent; general secondary, 43 per cent; secondary vocational, 51 per cent; secondary teacher training, 21 per cent. Most of the increase in vocational school enrolment was due to the private schools, which had 1,875 pupils in 1953 and 12,367 in 1957. (See Table 2.)

Enrolment trends is secondary education, 1930–57. Average enrolment in secondary education tripled between the periods 1932–34 and 1955–57. (See Table 3.) Relative to the population 15–19 years of age, the secondary enrolment ratio more than doubled over the whole period under review. General secondary school enrolment, which accounted for about two-thirds of the total, showed particularly rapid increase in more recent years. The proportion of girls in general secondary education rose from 43 per cent in 1931–32 to 50 per cent or more since 1947, even though for most of the period military schools and police schools were included. On the other hand, the proportion of girls in teacher training schools seems to have declined from the high level in earlier years.

Examination results in secondary education, 1953–57. The number of secondary school certificates granted each year between 1953 and 1957 was as follows: (1953) 6,653; (1954) 6,901; (1955) 7,287; (1956) 6,507; (1957) 7,226. The slight increase (9 per cent) over this period was less than the increase of enrolment during the same period. The proportion of certificates granted to girls was 49 per cent in 1957 as compared with 46 per cent in 1953. The number of teacher training certificates was 1,501 in 1954; 1,254 in 1955; 1,468 in 1956; and 1,295 in 1957. The proportion of girls receiving teacher training certificates dropped from 60 per cent in 1954 to 54 per cent in 1957.

Educational finance, 1957. In the fiscal year beginning in January 1957, total expenditure on education amounted to 46,716 million pesos (see Table 1), being 6,560 pesos per

1. EDUCATIONAL FINANCE, 1957 (in thousand pesos)[1]

A. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**46 716 006**
Recurring expenditure		44 656 998
For administration or general control	2 178 373	
For instruction[3]		
Salaries to teachers, etc.	34 982 782	
Other instructional expenditure	80 565	
Other recurring expenditure	24 176	
State universities	7 391 102	
Subsidies to private education[4]		748 420
Capital expenditure		1 310 588

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**[5]44 656 998**		**100.0**
Central administration		2 083 698		4.7
Instruction		37 445 307		83.8
Pre-primary and primary education and secondary teacher training	20 843 564		46.7	
General secondary education	5 360 151		12.0	
Secondary vocational education	3 323 287		7.4	
Higher education[6]	7 918 305		17.7	
Other recurring expenditure		5 127 993		11.5
For education	14 033		0.03	
For libraries	109 827		0.25	
Subsidies to private education	5 004 133		11.21	

1. Official exchange rate: 100 pesos = 0.14 U.S. dollar.
2. Closed account.
3. Not including the state universities.
4. Subsidies provided by the Ministry of Finance. This amount includes recurring and capital expenditure.
5. Not including the subsidies provided by the Ministry of Finance (see footnote 4).
6. Including the state universities.

inhabitant. This represents a substantial increase since 1954 (See *World Survey of Education: II—Primary Education*), even making allowance for a slight devaluation of the peso in relation to the U.S. dollar. Recurring expenditure, which accounted for 96 per cent of total expenditure in 1957, was distributed by level and type of education as shown in Table 3B.

Source. Chile: Ministry of Education, reply to Unesco questionnaire.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens attached to schools, public	1957	609	...	...	23 967	12 965
	Kindergartens attached to schools, private	1957	181	...	...	5 449	2 862
	Total	**1957**	**790**	**...**	**...**	**29 416**	**15 827**
	„	1956	692	...	...	25 210	13 598
	„	1955	599	...	...	20 989	11 335
	„	1954	537	...	...	18 476	10 222
	„	1953	474	...	...	16 762	9 181
Primary	Primary schools and classes, public	1957	4 098	[1]19 472	[1]13 605	724 887	355 219
	Primary schools and classes, private	1957	2 278	[2]5 506	[2]4 273	323 438	156 850
	Total	**1957**	**6 376**	**[1 2]24 978**	**[1 2]17 878**	**1 048 325**	**512 069**
	„	1956	6 231	[3]24 503	[3]17 584	995 035	487 202
	„	1955	6 386	[3]23 443	[3]16 886	967 041	472 283
	„	1954	6 237	[3]21 552	[3]15 666	922 207	451 233
	„	1953	[4]6 822	...	...	[5]890 331	[5]429 886
Secondary *General*	Secondary schools, public	1957	[6]117	...	...	83 656	43 732
	Secondary schools, private	1957	314	...	...	53 404	26 437
	Total	**1957**	**[6]431**	**...**	**...**	**137 060**	**70 169**
	„	1956	[6]402	...	...	125 469	64 229
	„	1955	[6]389	...	...	115 726	59 445
	„	1954	[6]373	...	...	105 841	54 244
	„	1953	[6]367	...	...	95 726	48 952
Vocational	Technical schools for girls, public	1957	29	521	...	6 738	6 738
	Industrial schools, public	1957	40	985	...	9 988	—
	Vocational schools, public	1957	55	419	346	9 523	8 053
	Commercial schools, public	1957	22	889	...	14 613	6 457
	Agricultural schools, public	1957	9	149	...	589	—
	Technical schools for girls, private	1957	27	...	...	2 317	2 317
	Industrial schools, private	1957	12	...	...	1 721	—
	Commercial schools, private	1957	15	...	...	7 178	3 861
	Agricultural schools, private	1957	18	...	...	1 151	142
	Total	**1957**	**227**	**[7]2 963**	**...**	**53 818**	**27 568**
	„	1956	218	...	...	47 057	24 943
	„	1955	218	...	...	43 776	23 257
	„	1954	207	...	...	41 403	21 699
	„	1953	...	...	...	35 557	19 233
Teacher training	Teacher training schools, public	1957	14	[8]536	[8]248	6 799	3 547
	Teacher training schools, private	1957	2	40	40	317	317
	Total	**1957**	**16**	**[8]576**	**[8]288**	**7 116**	**3 864**
	„	1956	16	[8]575	[8]274	6 732	3 632
	„	1955	16	[8]542	[8]256	6 648	3 719
	„	1954	15	[8]498	[8]236	6 284	3 516
	„	1953	15	[7 8]457	[7 8]194	5 886	2 960
Higher *Teacher training*	Teacher training college, public						
	Total	**1957**	**1**	**[8]...**	**[8]...**	**300**	**145**
	„	1956	1	...	...	...	...
	„	1955	1	[8]...	[8]...	115	30
	„	1954	1	...	...	...	...
	„	1953	1	...	...	...	...

1. Not including teaching staff of the primary classes in consolidated schools (10,145 pupils of whom 5,421 female), and primary schools attached to agricultural schools (305 male pupils).
2. Not including teachers of municipal primary schools (768 pupils of whom 361 female); primary schools attached to *liceos* (58,744 pupils of whom 28,610 female) and primary schools attached to seminaries (1,418 male pupils).
3. Not including teachers of primary classes in public consolidated schools, public primary schools attached to agricultural schools, and primary schools attached to private *liceos* and seminaries.
4. Including pre-primary and special education.
5. Probably including enrolment in special schools.
6. Not including secondary courses of the public consolidated schools.
7. Public schools only.
8. The teaching staff of the public higher teacher training college is included with that of the secondary teacher training schools.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Higher [cont.] *General and technical*[9]	University of Chile, public	1957	1	2 874	...	14 219	...
	Universities, private	1957	5	...	...	...	...
	Total	**1957**	**6**	...	...	...	...
	"	1956	6	...	...	[10]19 239	[10]7 575
	"	1955	5	...	...	[10]19 749	[10]7 782
	"	1954	5	...	...	[10]18 573	[10]7 331
	"	1953	5	...	...	[10]17 328	[10]6 613
Special	Special schools	1957	5	90	51	1 116	506
	Schools for orphans, destitute children, etc.	1957	44	...	...	5 151	1 441
	Schools for the deaf-mute	1957	2	...	...	281	113
	Schools for the blind	1957	2	...	...	129	59
	Total	**1957**	**53**	...	...	**6 677**	**2 119**
	"	1956	51	...	...	6 180	1 873
	"	1955	51	...	...	6 115	1 771
	"	1954	49	...	...	5 879	1 702
	"	1953	51	...	...	5 707	1 634

9. In addition, the technical university provided courses. In 1955, the total number of students enrolled was 26,838.

10. Not including technical university.

3. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational[2]		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	...	...	...	...	1 342	68			
1931	35 092	43	...	...	1 571	73			
1932	36 109	43	20 021	52	1 152	71			
1933	37 505	45	20 555	54	1 048	80	60	482	*12*
1934	40 567	44	21 271	55	1 624	72			
1935	41 893	45	21 738	55	1 749	75			
1936	43 381	45	23 900	56	1 597	72			
1937	44 289	45	26 142	56	1 526	77	71	494	*14*
1938	45 711	44	27 484	57	1 504	76			
1939	43 424	45	28 299	59	1 764	75			
1940	49 389	45	27 578	65	2 175	74			
1941	49 455	48	29 782	64	2 458	69			
1942	54 000	47	33 047	60	2 608	71	91	534	*17*
1943	58 911	47	37 840	56	2 610	69			
1944	59 988	48	43 096	51	2 952	65			
1945	61 519	49	43 462	49	3 067	64			
1946	65 176	49	48 485	48	3 298	63			
1947	68 155	50	48 895	50	3 472	61	119	587	*20*
1948	71 562	51	47 427	53	3 819	62			
1949	73 943	51	47 196	55	3 941	61			
1950	77 187	52	46 993	55	4 186	58			
1951	80 797	52	49 357	54	4 464	56			
1952	86 178	52	48 780	54	4 867	55	145	606	*24*
1953	96 743	51	50 755	59	5 886	50			
1954	107 376	51	54 152	59	6 284	56			
1955	115 726	51	43 776	53	6 648	56			
1956	125 469	51	47 057	53	6 732	54	181	666	*27*
1957	137 060	51	53 818	51	7 116	56			

1. From 1931 to 1954, military schools and police schools are included.
2. Figures referring to schools for adults, to health and social service schools and art schools are included in vocational education, from 1932 to 1954.

CHINA
(Taiwan)

THE EDUCATIONAL SYSTEM

The existing Chinese Government derives its powers from the National Assembly, which held its first session in March 1947, when it passed the Constitution of the Republic of China. The legal basis of the present educational system is to be found in that Constitution, some of the chief relevant articles being:

Article 158. The nation's educational and cultural services shall have as their aim the development among the citizens of a national spirit, democratic ideals, traditional morality, good physique, scientific knowledge, and the ability to earn a living.

Article 159. All citizens shall have an equal opportunity to receive education.

Article 160. All children of school age, namely those from 6 to 12 years, shall receive free primary education. Those from poor families shall be supplied with textbooks at the expense of the Government. All citizens above school age who have not received primary education shall receive supplementary education free of charge and shall likewise be supplied with textbooks at the expense of the Government.

Article 161. The national, provincial, and local governments shall create scholarships to assist students of good scholastic standing and of exemplary conduct who lack the means to continue their school education.

Article 162. All public and private educational and cultural institutions throughout the country shall, in accordance with law, be subject to state supervision.

Article 163. The State shall pay due attention to the balanced development of education in different regions and shall promote social education in order to raise the cultural standard of the people as a whole.

Article 164. Expenditure for educational programmes, scientific studies and cultural services shall, as regards the Central Government, be not less than 15 per cent of the total national budget; in respect of the provinces, not less than 25 per cent of the total provincial budget; and in respect of the municipalities or counties not less than 35 per cent of the total municipal or county budget. Educational and cultural foundations established in accordance with the law shall, together with their property, be protected.

There is also provision (in Article 167) for government aid to approved private educational enterprises both at home and abroad.

Demarcation of powers as between the various levels of government is also defined by the Constitution. Generally speaking, matters that are of a national character fall within the jurisdiction of the Central Government; otherwise, they are delegated to provincial and *hsien* (municipality or county) governments.

The structure of the school system is shown in the diagram on page 361.

THE DEVELOPMENT OF SECONDARY EDUCATION

It was in 1903 that China first adopted a new educational system based on the Western pattern. Three types of schools were established at the secondary level, namely, academic high schools, vocational high schools, and normal (i.e. teacher-training) schools, each offering a 5-year course of study. After the downfall of the Manchu Dynasty in 1911, the Central Government of the new Republic revised the old school system and established secondary schools, both general and vocational, which provided a 4-year curriculum. It was further laid down that over and above the academic high school there should be a 2-year college preparatory course, affiliated with a college or university, which would lay a solid foundation for higher education, and that vocational high schools might retain their fifth year to cater for special needs. In the category of vocational education were included agricultural, industrial, and business and maritime schools.

However, the school system proved too rigid, while a large percentage of the academic high school graduates did not proceed to further studies at colleges or universities. Educational policy was therefore severely criticized, and following upon two national educational conferences, held in 1916 and 1919, drastic changes were made in the whole educational system. The new organization, put into effect in 1922 and still operative, is known as the 6-3-3-plan; it provides a 6-year primary education, a 3-year junior high school, and a 3-year senior high school for pupils of ages 6 to 18. Under this system, the junior high school and the senior high school may be separate or combined. The 4-2 plan (4 years for junior high and 2 years for senior high) or the 2-4 plan (2 years for junior high and 4 years for senior high) instead of the 3-3 plan may be adopted. The reorganization of 1922 introduced provisions whereby the junior academic high school might offer pre-vocational courses in the third year to meet local needs, and the senior academic high school might be of a comprehensive type with a general course plus one or more vocational courses, even including a teacher training course. Furthermore, the general course at senior level was to be differentiated to suit the varying needs and capacities of the pupils. The system was characterized by flexibility rather than uniformity.

Nevertheless, only five years after the establishment of the Nationalist Government at Nanking in 1927 the Ministry of Education abolished the comprehensive type of secondary school, so that the academic high school, the vocational high school and the normal school were again made separate institutions. All subjects in the curriculum of the academic high school were once more made compulsory, with no provision for differentiation or choice.

During the Sino-Japanese war, which broke out in 1937, the only changes in academic high school education were a few modifications in the curriculum. But in the field of vocational secondary education innovations included a

more practical type of course offered by the junior vocational school, the skilled workers' training class providing a period of training of from 1 year to 3 years, the short-term vocational training class with a period of training from 3 months to 1 year, and a 4-year course for training skilled mechanics and electricians, the last year of which was spent in factories.

Since the removal of the Central Government to Taiwan in 1949, secondary education has made rapid progress. Although compulsory school attendance is still limited to the 6 years covering primary (elementary school) education, the number of academic and vocational high schools and enrolments in the schools has steadily increased.

Legal basis

As mentioned in the previous section, the general secondary school, the vocational secondary school, and the normal school have been kept as separate institutions since the abolition of comprehensive high schools in 1932. In the same year the Central Government promulgated three principal laws concerning the different types of secondary education: the Academic High School Education Law, the Vocational High School Education Law, and the Normal School Education Law, each of which lays down certain fundamental stipulations in regard to organization and administration. Under these basic laws there are regulations governing the three types of secondary schools. Such regulations, unlike the basic laws, are within the jurisdiction of the Ministry of Education and do not have to be passed by the Legislative Yuan, the highest legislative organ of the nation.

Administration

As mentioned before, Article 162 of the Constitution lays down that all public and private educational enterprises and cultural institutions shall be subject to state supervision. The Central Government is responsible for a national educational policy to be observed throughout the country. Thus, the pattern of organization and administration of secondary schools is laid down in regulations by the Ministry of Education; the curriculum is prescribed by the Ministry in the form of standard syllabuses; textbooks are subject to the approval of the Ministry whether they are compiled by the National Institute for Compilation and Translation or by private publishing houses. However, within the framework of the basic laws and regulations, provincial and *hsien* governments are empowered to plan programmes of secondary education to meet their own needs.

Control. Higher education is administered by the Central Government; secondary education, by provincial governments under the general direction of the Ministry of Education; primary education, by *hsien* governments under the general direction of the provincial department of education. The central education authority, the Ministry of Education, exercises over-all control partly through the operation of laws and regulations governing the various types of schools and partly through inspection and supervision. Private schools are under the direct control of their boards of governors, but they must respect laws and regulations set up by the central or provincial authorities.

Supervision and inspection. Each of the three levels of education authority—central, provincial and *hsien*—has its own supervisory personnel. The recruitment of such personnel at each level is based on academic qualifications, professional experience and merit. A teacher must have taught at least 10 years with an excellent record before he can be a supervisor. Supervisory practices vary from province to province, but it is quite common to have both general supervision and also supervision on the basis of subjects. The duty of a supervisor is largely to help teachers solve their own problems. The old concept of 'inspection' is dying out.

In this connexion, the Ministry of Education has issued a regulation to the effect that each teachers' college should organize a supervisory committee on secondary education so as to share the responsibility of supervision. This committee serves as a bridge between secondary schools and various departments of the teacher training institution. It differs from the supervisory bureau of the provincial department of education or of the Ministry of Education in that it lays more emphasis on research and extension service.

Finance. Secondary schools are, as a rule, financed by provincial and *hsien* governments. Private secondary schools are few in number. The funds for public secondary schools come from the Government and are appropriated in accordance with the approved annual budget; they cover teachers' salaries, buildings, equipment, administrative expenses, and a reserve for contingencies. As stated in the Constitution, expenditures for educational programmes, scientific studies and cultural services shall be not less than 25 per cent of the total provincial budget, and not less than 35 per cent of the total *hsien* budget. Statistics show that in the academic year 1956/57, the Taiwan provincial government spent 57.87 per cent of its educational budget on secondary education as against 3.44 per cent on primary education, and that in the same academic year the distribution of educational funds from *hsien* governments in Taiwan was 22.11 per cent for secondary education as against 72.17 per cent for primary education. Fees are charged by public secondary schools, except normal schools, for the simple reason that secondary education has not yet been made compulsory. Academic high schools charge more than vocational high schools. However, parents who have more than 3 children can get some assistance from the authorities. Teachers are paid according to a uniform scale, with annual increments, set up by the Central Government. They are given rations in addition to salary and provided with living quarters.

Buildings and equipment. Standards of space, heating, lighting, sanitation and instructional equipment are laid down in Ministry regulations.

School welfare services. Every pupil upon entering school is given a thorough physical check, and his record is kept on file. Physical examinations are regularly held once a school term. Remedial treatment is given by school clinics, which are usually provided with a doctor and a nurse.

TYPES OF SECONDARY EDUCATION

Pupils who have completed the 6-year primary course can sit for the secondary school entrance examination. The types of secondary education open to them are principally the 3-year junior academic high school and the 3-year vocational high school. Opportunities are also offered by the 5-year or 6-year vocational secondary school, and in the rare cases where it still exists, the 4-year emergency teacher training school. Those who have completed the lower cycle of general secondary education or, less usually, the lower cycle of vocational secondary education, can sit for another entrance examination in order to get into the upper cycle of secondary education under various categories, including the teacher training school and the teacher training course for kindergarten teachers. The 5-year technical school offers another chance for further education. Specialized schools include the school for the deaf and blind, and the school for arts and crafts. To help pupils choose the right type of secondary education, a guidance service is provided and consultation with parents is considered as a part of the service. Further education available for secondary school leavers includes short-term vocational training courses offered by Government or private agencies.

The school year begins on 1 August and ends on 31 July of the following year. It is divided into 2 school terms. Each term has about 20 school weeks, and each week has 6 school days. In addition to national holidays, there are the spring, summer and winter vacations, with a total holiday period of about 80 days per year.

General secondary schools. The aims of secondary education are: (a) development of a healthy physique; (b) cultivation of good citizenship; (c) development of national culture; (d) growth of knowledge and cultivation of skills for better living; (e) formation of good working habits; and (f) cultivation of artistic appreciation. Admittance to both junior and senior high schools is based on competitive entrance examinations. The subjects taught in the lower cycle (3 years) of the academic high school are Chinese, English, civics, history, geography, mathematics, chemistry and physics, natural history, physiology and hygiene, music, art, manual subjects (home economics for girls), and physical education. The total number of teaching periods per week is 28 to 30. In the upper cycle (also 3 years) the subjects are Chinese, English, civics, history, geography, mathematics, biology, chemistry, physics, music, art, manual subjects (home economics for girls), physical education, and military training. The total number of teaching periods per week is usually 30 to 32.

In recent years some new curriculum patterns have been tried out. One is the new curriculum for junior high schools, based on the concept of 'life-centred' education. Activities are grouped in such broad fields as social studies, natural science, language, mathematics, recreational and productive work, but social studies is taken as the centre toward which work in all the other fields is related so as to make learning activities more meaningful to the pupils. Furthermore, subject matter is selected in such a way as to help solve problems encountered in everyday life.

Another new pattern of curriculum is being tried out for the 6-year academic high school divided into 2 cycles, requiring 4 years for the first cycle and 2 years for the second. Pupils who have completed the first cycle will be automatically promoted to the second cycle without taking another entrance examination. The curriculum for the first cycle is more general and that for the second cycle is differentiated into arts and science sections. Roughly speaking, pupils in the arts section take more courses in language and social studies, while those in the science section have a heavier load in mathematics and natural science.

The lecture method and recitation method are still commonly used in classroom teaching. However, the experiment in life-centred education has made some healthy changes. With the system adopted in the organization of subject matter (described above) go the resource units and teaching units based on a central theme or problem and developed co-operatively in planning, execution, and evaluation by pupils under the leadership of the classroom teacher. In addition to the general methods

GLOSSARY

chien-yi shih-fan hsueh-hsiao: emergency teacher training school for teachers in the lower cycle of the primary school.

chien-yi shih-fan ko: emergency teacher training course for teachers in the lower cycle of the primary school.

chih-yeh hsueh-hsiao: vocational secondary school.

chung-hsueh: general secondary school comprising a lower cycle (*tsu-chieh*) and upper cycle (*kao-chieh*).

chung-sin kuo-min hsueh-hsiao (central citizens' school): primary school with a lower cycle (*tsu-chieh*) of 4 years and an upper cycle (*kao-chieh*) of 2 years.

hsiao-hsueh: a name for the primary school either subordinate to a teacher training school or established by a private body.

kao-chieh: upper cycle (see *chung-hsueh* and *hsiao-hsueh*).

kao-chieh chih-yeh hsueh-hsiao: upper vocational secondary school.

kuo-min hsueh-hsiao (citizens' school): primary school with a 4-year course.

shih-fan hsueh-hsiao: teacher training school.

teh-bieh shih-fan ko: emergency teacher training course for teachers in the upper cycle of the primary school.

tsu-chieh: lower cycle (see *chung-hsueh* and *hsiao-hsueh*).

tsu-chieh chih-yeh hsueh-hsiao: lower vocational secondary school.

tsuan-ko hsueh-hsiao: 5-year or 6-year technical school admitting junior high school graduates as entrants and offering a 5- or 6-year continuous course with the last 2 or 3 years at a junior college level.

yo-chih shih-fan ko: teacher training course for kindergarten teachers.

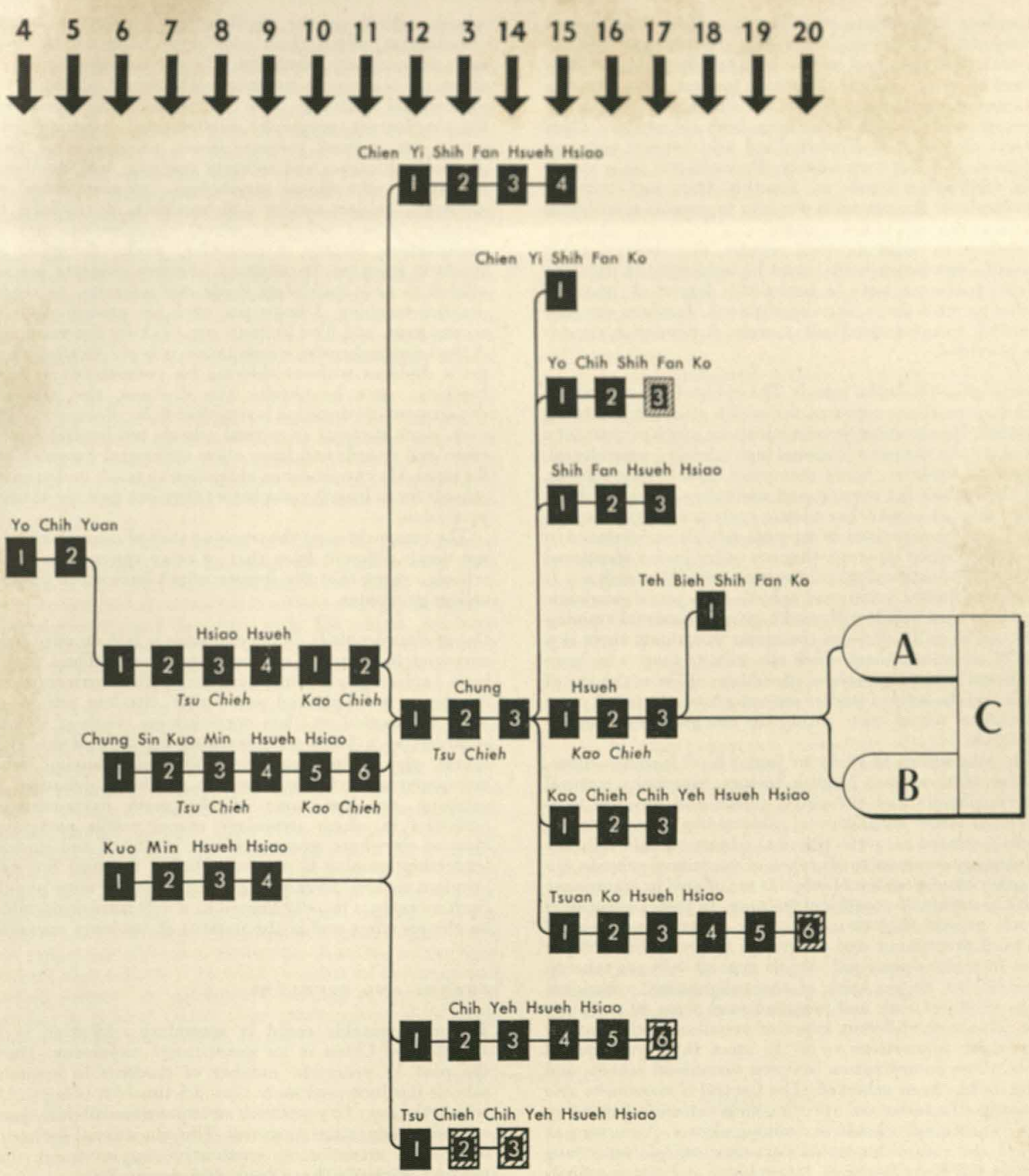
yo-chih yuan (kindergarten): pre-primary school.

HIGHER EDUCATION

A. *Ta-hsueh:* universities; 4-year courses except faculty of medicine (6 years) and institute of education (5 years).

B. *Tsuan-ko hsueh-hsiao:* junior colleges; 3-years courses except in medicine and teacher training (each 4 years).

C. *Yen-chio-yuan:* research institutes at post-university level.


4 5 6 7 8 9 10 11 12 3 14 15 16 17 18 19 20
Chien Yi Shih Fan Hsueh Hsiao
1 2 3 4
Chien Yi Shih Fan Ko
1
Yo Chih Shih Fan Ko
1 2 3
Shih Fan Hsueh Hsiao
1 2 3
Yo Chih Yuan
1 2
Teh Bieh Shih Fan Ko
1
Hsiao Hsueh
1 2 3 4 1 2
Tsu Chieh
Kao Chieh
Chung
Hsueh
1 2 3 1 2 3
Tsu Chieh
Kao Chieh
A
B
C
Chung Sin Kuo Min Hsueh Hsiao
1 2 3 4 5 6
Tsu Chieh
Kao Chieh
Kao Chieh Chih Yeh Hsueh Hsiao
1 2 3
Kuo Min Hsueh Hsiao
1 2 3 4
Tsuan Ko Hsueh Hsiao
1 2 3 4 5 6
Chih Yeh Hsueh Hsiao
1 2 3 4 5 6
Tsu Chieh Chih Yeh Hsueh Hsiao
1 2 3

of teaching appropriate to different subject fields, group discussions, interviews, surveys, exhibitions, demonstrations, field trips and audio-visual teaching aids are fully utilized so as to make the teaching process more dynamic and more closely related to real life situations.

In measuring results of teaching, both old and new types of tests are adopted. Standardized achievement tests are also used, but not very widely. Promotion is on a yearly basis, depending much on monthly tests and terminal examinations. Report cards are sent to parents monthly as well as at the end of a semester.

Teachers in academic high schools, like those in other types of secondary schools, must be university or teachers' college graduates with a bachelor's degree. A qualified teacher's certificate is likewise required. Teachers are paid according to a standard salary scale. A pension system is also provided.

Vocational and technical schools. These schools are specialized according to the occupation for which students are being prepared. The secondary level institutions which prepare for a career are the various vocational high schools—agricultural, industrial, business, home economics, and fishery schools, and the schools for nursing and midwifery. Each of them, except the last-named, has a lower cycle and an upper cycle, which may be organized as separate schools or combined in one school. When separate, they are called junior vocational and senior vocational schools respectively. The tendency is to convert junior vocational schools into junior academic schools so that pupils will not be given vocational training until age 15 or 16. Besides the senior vocational there is a type of technical school,which also admits those who have completed junior high school education; as far as the age of pupils and the level of studies are concerned, the first 3 years of technical school come within the category of secondary education.

The programme of study at junior level includes civics, Chinese, mathematics, English, history, geography, natural history, physics and chemistry, music and physical education. At senior level, general subjects like civics, Chinese, English, related subjects, physical education, and military training are common to all types of vocational schools. On the other hand, vocational subjects are offered in accordance with the nature of vocational training. In junior vocational schools general subjects account for about 40 per cent of the total programme and vocational subjects about 60 per cent. In senior vocational schools general subjects take up about 20 to 30 per cent of the programme, vocational subjects 30 per cent, and practical work from 40 to 50 per cent. However, different types of vocational schools may vary these proportions so as to meet their own special needs. Close co-ordination between vocational schools and factories has been achieved. The Central Government also encourages factories and other business enterprises to set up either vocational schools or training classes. A movement toward the establishment of part-time schools for young workers has been launched. Attendance at evening schools is greatly increasing; the teaching programme comprises both practical and cultural subjects.

Teacher training schools. Training teachers for elementary schools has long been the responsibility of the 'normal' schools, which, on the results of a competitive entrance examination, admit those who have completed the lower cycle of secondary education. The normal school generally offers a 3-year course covering both general education and professional training. The curriculum includes civics, Chinese, history, geography, mathematics, natural science, music, art, manual subjects (home economics for girls), physical education and military training, introduction to education, educational psychology, measurements and statistics, subject-matter and methods of teaching elementary school subjects, school organization and administration, history of education, adult education, and teaching practice. In addition, elective subjects are also offered to meet individual needs and interests. As regards practice teaching, 2 hours per week are presented for the second year, and 8 to 10 hours per week for the third year. A final comprehensive examination is held. No student can get a diploma without showing his competence in actual teaching; once he obtains this diploma, the provincial department of education is responsible for placement. However, since students in normal schools receive free tuition, room and board, and have other incidental expenses paid for them, they are under an obligation to teach in elementary schools for at least 3 years before they can quit the teaching profession.

The composition of the teaching staff of normal schools is not much different from that of other types of secondary schools except that the former would have more teachers' college graduates.

Out-of-class activities. Much emphasis is laid on out-of-class activities in all types of secondary schools. Their purpose is to explore pupils' interests, enrich the curriculum, and develop a well-balanced personality. Student self-government is founded on class organizations, each of which is regarded as a basic self-governing body. Academic clubs, sports, glee clubs, dramatic clubs, folk dancing, school newspaper and yearbook, public speaking, debating and camping are but some of the main extra-curricular activities in which secondary school pupils participate. Here as elsewhere, group guidance is offered and students' leadership training is stressed. During the past few years 'student centres' have been getting more and more popular. Such a centre is usually housed in a well-furnished building on the premises and is the nucleus of students' social life.

TRENDS AND PROBLEMS

The most notable trend in secondary education in the Republic of China is its quantitative expansion. During the past 12 years the number of students in secondary schools has increased more than 3.5 times; it is hoped that within the next 10 years such an expansion will make junior secondary education universal. The educational authorities pay equal attention to qualitative improvement. Four guiding principles have been laid down. First, provincial secondary schools shall expand primarily in the direction of senior grades and local schools in that of junior grades. Second, in order to avoid concentration of secondary schools in cities, preference shall be given to the establishment of new schools in rural areas. Third, priority shall be given to

the expansion of vocational schools. Fourth, efforts shall be made to improve the existing secondary schools.

Closely related to the expansion of secondary education is the community school movement, ensuring better co-ordination between the school and the community, and between school and life. With the assistance of the International Co-operation Administration (ICA) Mission to China, in the academic year 1953–54 two county high schools were designated as pilot schools. Since then, the number of schools undertaking this kind of education has increased to 17 secondary schools and 25 primary schools. Since the fundamental principles of community school education are warmly supported by the general public, some counties are now voluntarily planning to implement this educational programme on a larger scale. Moreover, Taiwan Normal University and two normal schools have been instructed to set up courses on community school education.

Another trend in secondary education is the promotion and improvement of science education. The Ministry of Education has already worked out a long-term project in collaboration with the ICA mission. Although the main emphasis in carrying out this project is on institutions of higher learning, a portion of the available funds goes to secondary schools.

Since Taiwan was restored to China in 1945, general secondary schools have increased at a greater rate than vocational schools. Hence, measures are being taken to promote vocational education in order to safeguard against unemployment and to cope with the rapid economic development of the nation. Not only are the establishment of new vocational schools and the expansion of the number of classes in existing vocational schools considered a priority, but much effort is also made in promoting craftsmanship training. The provincial department of education has already set up this kind of training centre in 4 municipal and county vocational schools and 15 provincial vocational schools. For instance, one of the provincial industrial vocational schools offers four different courses, namely, electric appliances, mechanical drawing, motorcycle repair and radio appliance repair. As a further example one of the business vocational schools offers Chinese and English typewriting, graphical representation, paper-flower making, salesmanship, and waiter training.

There has been considerable improvement in agricultural and industrial education. Since the objective of the agricultural high schools is to train students to be competent modern farmers, comprehensive training in knowledge of farming in general rather than specialization in a single subject is being emphasized. In the revised curriculum, the original vocational subjects in junior agricultural schools are now simplified into agriculture, farm mechanics, and farm practice. At senior level, agricultural schools are no longer divided into several departments. General training carries much weight. Subjects like agronomy, horticulture, animal husbandry, forestry, processing of farm products, farm mechanics, and agricultural meteorology are taught to all pupils. Where facilities permit, two or three elective courses will be added in the last year to meet local needs. Other improvements which have been made are in farm practice, methods of teaching, extension education, in-school rural youth organization (4H clubs), co-operation of schools with farmers and local agricultural organizations, experimental farm food processing plants and, above all, teacher training, for which a department of agricultural education has been established at Taiwan Provincial College of Agriculture.

As regards industrial schools, a comprehensive survey was conducted in 1953 by Taiwan Normal University in collaboration with the provincial department of education with the assistance of a Pennsylvania State University team. As a result of this survey, the curriculum has been reconstructed. The basic idea that has been followed in improving industrial education is the adoption of unit-trade courses in order to train skilled workers for industry. There is a curriculum laboratory at Taiwan Normal University to develop the course of study for such training, based on an analysis of the trade to be taught. The content of the course is then worked out and arranged in the order in which it is best taught, utilizing as many 'live' projects as possible. Unit-trade courses for 10 occupations have been set up. These include courses for training machinists, electricians, radio repair men, automechanics, carpenters, pattern makers, foundry men, plumbers, printers, and sheet metal workers.

As in other countries, secondary education in China presents many problems. The increase in the money available for education is not able to cope with the rapid growth of the school population; secondly, because of the rapid expansion of secondary schools, more and more teachers are needed, particularly in vocational schools. In order to help overcome the latter difficulty, measures have been taken to have a well-planned teacher training programme, to improve the welfare of teachers, and to strengthen supervision and in-service training.

[*Text prepared by Dr. Y. T. Shen, formerly Director of Secondary Education, Ministry of Education, and transmitted by the Chinese National Commission for Unesco in August 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 9,851,000.
Area: 13,885 square miles; 35,961 square kilometres.
Population density: 709 per square mile; 274 per square kilometre.

Summary of school statistics, 1953–57. In the school year 1957/58 about 1,838,000 pupils were enrolled in schools and institutions from pre-primary to university level. There were in addition nearly 198,000 students enrolled in adult education classes. In all, over 21 per cent of the total population was receiving some form of education. Excluding adult education, nearly 84 per cent of all pupils were in pre-primary and primary schools; about 11 per cent in general secondary and teacher training courses; 4 per cent in vocational secondary schools, and over 1 per cent were enrolled in university courses including teacher training at higher education level. The proportion of girls enrolled in 1957/58 was over 46 per cent in primary schools compared with 43 per cent in 1953/54. In general secondary schools, girls formed 34 per cent of total enrolment in 1957/58 against 32 per cent in 1953/54. The increase in total enrolment in primary schools was 38 per cent and in general secondary schools 85 per cent over the period under review. In 1957/58 the average pupil teacher ratios in primary and general secondary schools were 46 and 23 respectively; these ratios were the same as in 1953/54, but in view of the very considerable increase in enrolment, especially in secondary schools during the 5-year period this represents a considerable achievement. The number of general secondary school teachers increased by nearly 80 per cent between 1953/54 and 1957/58. (See Table 1.)

Enrolment trends in secondary education, 1930–57. Enrolment in secondary schools has increased very rapidly since 1930 as shown in Table 2. The average total enrolment in secondary general, vocational and teacher training institutions has increased by over 10 per cent per year since 1940 and the ratio of secondary enrolment to the age group 15 to 19 years old has risen steadily from 4 in 1930–34 to 26 in 1955–57.

Examination results in secondary education, 1953–57. The number of successful candidates for the General High Schools Certificate increased by 87 per cent over this period; and for teaching diplomas, by 58 per cent. Without exception, the number of diplomas granted by industrial, commercial and agricultural schools rose steadily during the five years under review. In all, nearly 68,000 students —about one third of them women—qualified for the various secondary level diplomas in 1957/58, compared with a total of 37,000 successful candidates for the same examinations in 1953/54. (See Table 4.)

Educational finance, 1958/59. Total expenditure on education in 1958/59 (fiscal year commencing July) amounted to 1,085 million new Taiwan yuan, representing about 110 yuan per inhabitant. The breakdown of expenditure by level and type of education is given in Table 3.

Sources. Republic of China: Ministry of Education, reply to Unesco questionnaire; information transmitted by the Chinese National Commission for Unesco.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens of provincial primary schools, public	1957/58	8	[1] ...	[1] ...	1 489	677
	Kindergartens of primary schools, public	1957/58	318	644	620	31 453	13 355
	Kindergartens, private	1957/58	157	889	819	24 046	10 582
	Total	**1957/58**	**483**	**[1] 1 533**	**[1] 1 439**	**56 988**	**24 614**
	„	1956/57	451	[1] 1 476	[1] 1 374	54 239	23 734
	„	1955/56	413	[1] 1 163	[1] 1 081	46 390	20 238
	„	1954/55	364	991	943	41 137	17 943
	„	1953/54	363	[1] 745	[1] 711	37 729	16 378
Primary	Provincial primary schools, public	1957/58	9	[1] 484	[1] 284	14 082	6 462
	Primary schools, public	1957/58	1 588	31 474	11 168	1 466 475	677 944
	Total	**1957/58**	**1 597**	**[2] 31 958**	**[2] 11 452**	**1 480 557**	**684 406**
	„	1956/57	1 537	[2] 29 502	[2] 10 223	1 344 432	615 298
	„	1955/56	1 446	[2] 27 061	[2] 9 391	1 244 029	561 078
	„	1954/55	1 350	[2] 24 762	[2] 8 309	1 133 438	504 144
	„	1953/54	1 300	[2] 23 040	[2] 7 537	1 060 324	459 938

1. Teachers in kindergartens of provincial primary schools are included with those of provincial primary schools.

2. Including teachers of kindergartens attached to provincial primary schools and those teaching in public complementary classes for adults.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Secondary							
General	Senior high schools, public	1957/58	88	7 550	1 495	35 595	10 297
	Junior high schools, public	1957/58	72			141 062	48 193
	Senior high schools, private	1957/58	29	886	153	8 397	2 621
	Junior high schools, private	1957/58	8			11 725	4 814
	Total	**1957/58**	**197**	**8 436**	**1 648**	**196 779**	**65 925**
	"	1956/57	169	7 362	1 407	170 940	55 215
	"	1955/56	146	6 298	1 227	146 361	46 933
	"	1954/55	137	5 505	1 068	125 203	40 403
	"	1953/54	133	4 692	909	106 306	33 882
Vocational	Agricultural schools, public	1957/58	43	1 475	110	23 624	1 375
	Industrial schools, public	1957/58	12	602	47	9 475	61
	Commercial schools, public	1957/58	17	957	188	18 426	7 002
	Nursing and midwives schools, public	1957/58	4	53	41	690	690
	Domestic science schools for girls, public	1957/58	8	269	116	5 182	5 182
	Other vocational schools, public	1957/58	4	155	13	1 882	94
	Industrial schools, private	1957/58	8	251	11	3 662	104
	Commercial schools, private	1957/58	7	224	29	6 708	1 852
	Other vocational schools, private	1957/58	2	13	2	174	47
	Total	**1957/58**	**104**	**3 999**	**557**	**69 823**	**16 407**
	"	1956/57	95	3 827	525	65 903	14 497
	"	1955/56	94	3 426	451	60 397	12 789
	"	1954/55	91	2 989	327	52 830	10 255
	"	1953/54	81	2 588	287	28 092	7 502
Teacher training	Provincial normal schools, public						
	Total	**1957/58**	**10**	**499**	**149**	**7 272**	**3 319**
	"	1956/57	9	484	144	6 983	3 179
	"	1955/56	9	476	142	6 782	2 978
	"	1954/55	9	464	153	6 539	2 789
	"	1953/54	8	434	116	6 014	2 486
Higher							
Teacher training	Provincial normal university, public						
	Total	**1957/58**	**1**	**351**	**75**	**2 840**	**1 112**
	"	1956/57	1	300	52	2 333	877
	"	1955/56	1	233	32	1 983	713
	"	1954/55	1	212	29	1 426	508
	"	1953/54	1	186	27	1 350	448
General and technical	Universities, public	1957/58	4	1 008	142	10 972	1 832
	Colleges, public	1957/58	2	331	21	4 146	591
	Junior colleges, public	1957/58	4	264	38	2 505	201
	University, private	1957/58	1	59	9	597	159
	Colleges, private	1957/58	3	94	5	2 732	382
	Junior colleges, private	1957/58	2	109	23	1 827	458
	Total	**1957/58**	**16**	**1 865**	**238**	**22 779**	**3 623**
	"	1956/57	16	1 610	205	20 273	3 019
	"	1955/56	14	1 417	180	16 191	2 047
	"	1954/55	13	1 247	146	12 244	1 627
	"	1953/54	8	1 019	115	10 593	1 306
Special	Provincial schools for blind and dumb children						
	Total	**1957/58**	**2**	**111**	**40**	**926**	**300**
	"	1956/57	2	94	27	821	278
	"	1955/56	2	79	27	761	265
	"	1954/55	2	74	25	673	234
	"	1953/54	2	61	18	602	204
Adult	Complementary schools and classes						
	Total	**1957/58**	**4 200**	[3]**1 673**	...	**197 802**	**59 240**
	"	1956/57	3 887	[3]1 674	...	194 492	97 327
	"	1955/56	4 440	[3]1 497	...	218 329	106 676
	"	1954/55	4 654	[3]1 402	...	231 904	119 081
	"	1953/54	4 143	[3]1 382	...	224 038	102 534

3. Teachers of public complementary classes are included with those of regular primary schools.

2. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	10 507	...	4 323	...	1 190	...			
1931	10 732	...	4 679	...	1 180	...			
1932	11 004	...	5 046	...	1 223	...	17	472	4
1933	11 283	...	5 154	...	1 238	...			
1934	11 672	...	5 241	...	1 370	...			
1935	12 241	...	5 552	...	1 379	...			
1936	13 027	...	6 338	...	1 369	...			
1937	14 101	...	8 003	...	1 412	...	25	537	5
1938	15 715	...	10 477	...	1 546	...			
1939	18 684	...	13 207	...	1 748	...			
1940	20 466	...	16 240	...	2 002	...			
1941	22 407	...	19 247	...	2 579	...			
1942	24 724	...	23 220	...	2 579	...	52	608	9
1943	27 656	...	28 993	...	2 642	...			
1944	29 545	...	32 718	...	2 888	...			
1945	41 075	38	24 444	12	3 049	26			
1946	40 725	41	23 289	12	2 995	26			
1947	53 474	35	27 652	9	3 566	26	88	661	13
1948	70 387	34	31 739	9	4 097	30			
1949	76 380	33	33 155	12	5 083	34			
1950	79 948	32	34 437	12	5 651	37			
1951	85 673	31	36 616	14	6 241	39			
1952	92 946	32	40 092	15	6 350	40	146	853	17
1953	106 306	32	45 601	18	6 014	41			
1954	125 203	32	52 830	19	6 539	43			
1955	146 361	32	60 397	21	6 782	44			
1956	170 940	32	65 903	22	6 983	46	244	931	26
1957	196 779	34	69 823	24	7 272	46			

3. EDUCATIONAL FINANCE, 1958/59 (in thousand new Taiwan yuan)[1]

Expenditure by purpose	Receipts by source			Amount	Per cent
	Central Government	Provincial governments	Local authorities		
Total expenditure[2]	**128 223**	**325 361**	**631 371**	**1 084 955**	**100.0**
Administration	2 598	2 162	—	4 760	0.4
Primary education	—	7 638	447 612	455 250	42.0
Secondary education	—	179 796	145 962	325 758	30.0
General		93 208	145 962	296 584	27.3
Vocational		57 414			
Teacher training		29 174	—	29 174	2.7
General education (for primary and secondary levels)	4 344	—	—	4 344	0.4
Higher education	46 044	61 736	—	107 780	9.9
Social education (adult education)	4 823	13 331	5 805	23 959	2 2
Other expenditure	70 414	60 698	31 992	163 104	15.0
International cultural relations	9 922	—	—	9 922	0.9
Scholarships, etc.	4 456	—	—	4 456	0.4
Leadership training	11 080	—	—	11 080	1.0
Activities relating to instruction	44 956	—	—	44 956	4.1
Other not specified	—	60 698	31 992	92 690	8.6

1. Official exchange rate: 1 new Taiwan yuan = 0.0275 U.S. dollar.

2. Budget estimate.

4. EXAMINATION RESULTS IN SECONDARY EDUCATION 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
General High Schools Certificate	24 633	8 121	30 222	10 291	35 341	11 835	39 615	13 053	45 999	15 957
Industrial Diploma . . .	2 424	—	2 927	—	2 862	—	3 051	3	3 625	44
Commercial Diploma . . .	3 439	915	4 257	1 230	4 493	1 469	5 304	1 770	6 221	2 166
Agricultural Diploma . .	4 110	63	4 703	111	5 945	257	6 910	300	6 946	386
Home Economics Diploma .	497	497	839	839	1 202	1 202	1 469	1 469	1 585	1 585
Other examinations[1] . . .	406	82	566	147	612	186	686	220	743	239
Teachers' Diploma . . .	1 688	743	2 290	960	2 381	1 076	2 155	1 019	2 663	1 145

1. Nursing and midwifery diplomas, etc.

CHINA
(Mainland)

THE EDUCATIONAL SYSTEM

The present educational system dates back to 1935, when the Chinese Red Army marched into Northern Shensi and established a base in North-West China, with a new political and educational pattern for that region. When the Chinese Communist Party came to power in 1949, the reforms were extended to the rest of the country. In September 1949 a People's Political Consultative Conference was called, which adopted a 'common programme' laying down the general policy for national affairs, including education. This common programme was adopted as part of the national constitution at the First National People's Congress in 1954.

Article 94 of the Constitution stipulates: 'Citizens of the People's Republic of China have the right to education. To guarantee the enjoyment of this right the State shall establish and gradually extend the various types of school and other cultural and educational institutions. The State will pay special attention to the physical and mental development of young people.'

The Constitution provides that women shall have equal rights with men, and safeguards the rights of national minorities.

A basic definition of educational policy was first given in the 1949 common programme. This specifies that education in People's China is to be national, scientific and popular in character. The aim is to raise the cultural level of the people, particularly of workers and peasants, by equipping them intellectually, morally, ideologically and technically to become constructive citizens of the new Socialist State.

In 1951 the State Council issued a decree entitled 'Decisions concerning the reform of the educational system' which provided the framework for the component parts of the educational system.

In 1953 the Government launched the first 5-year plan (1953–57) for development of the national economy. Within the over-all provisions for progress towards economic and social goals, the plan set targets for achievement in each branch of the school system. The principle of integrated planning as a basis of educational policy has continued with the second 5-year plan (1958–62).

In September 1958 the Central Committee of the Chinese Communist Party and the State Council issued a directive on the revolution in education which establishes the tasks before educators during the second 5-year plan and in the years ahead. The immediate goals are to wipe out illiteracy, chiefly among young and middle-aged workers and peasants, and to make primary education universal. At the same time, secondary education is to be developed, particularly in rural areas, and progress in

specialized secondary and higher education accelerated, so that lower secondary school education may progressively be universalized during the third 5-year plan. The document stresses the need for a close link between teaching and productive work.

The Central Ministry of Education under the State Council is the highest authority for the control of pre-primary, primary, secondary and adult education, teacher training and special education, while the Ministry of Higher Education controls all the institutions of higher learning and the intermediate technical schools. The Ministry of Education issues directives in respect of the administration and organization of schools, curricula, textbooks and methodology, and exercises general supervision over primary, secondary and adult education. In all the provinces and municipalities there are educational bureaux and educational and cultural offices in the special districts and counties. These bureaux and offices are under the leadership of people's committees at their corresponding levels, as well as under the educational administrative bodies at higher levels.

The Ministry of Education takes counsel with education authorities and educationists through centrally organized conferences. These conferences may be general or specific, dealing with the whole of education or with one particular problem. Since 1951 a number of such conferences have been organized, many of them resulting in government directives. Often the directives are issued on a provisional basis, tried out and studied for a few years and when necessary amended. Following the 1958 directive on the revolution in education, an important national conference of groups and workers in the fields of education, culture, health and physical culture is being convened in June 1960.

The central and local budgets for education are included in the national budget. For 1959, expenditures on educational, social and cultural programmes made up 11 per cent of the total state budget. The budget is fixed centrally but is administered at various levels under the responsibility of the corresponding administrative units. Schools under the direct supervision of the Central Ministry of Education come under the central budget, schools at provincial or municipal level under the local budget. There is no direct connexion between the central and the local budgets. When the Ministry of Education requires additional funds to meet its needs, it applies to the State Council for additional appropriations, whereas provincial and municipal educational bureaux submit requests for additional funds to the provincial or municipal People's Committee. If the provincial or municipal budget is unable to meet these requests, the People's Committee applies for aid from the State Council.

Schools established and maintained by voluntary contributions are not included in the national budget, but there is a state subsidy fund which will help any private or communal school in difficulties. The subsidy amounts to between 20 and 50 per cent of the budget of the school.

The structure of the school system is still in the process of reorganization. Nominally the 6-3-3-4 arrangement developed before 1949 remains. However, the 6-year primary school, in reality a double-track system with a 4-year rural course and a complete 6-year urban school, is giving way to a single continuous course of 5 years. At the secondary level, experiments are in progress to arrive at a unitary school of general education which will probably last 10 years. Similarly, courses in higher education have been shortened wherever possible.

It is characteristic of the present school system that a wide range of part-time (or half-day) schools and evening schools have been set up with curricula that are equivalent to those of the full-time institutions.

THE DEVELOPMENT OF SECONDARY EDUCATION

Until 1949 secondary education was organized in middle schools with two cycles of study, 3 + 3, and a clear distinction was made between the academic type, the teacher training schools and the vocational schools.

During the period from 1949 to the end of the first 5-year plan priority was given to the extension of primary schooling and the organization of literacy work and formal schooling for young adults. Secondary education made steady progress during this period, particularly through the expansion of establishments for training primary school teachers and of accelerated courses for young workers and peasants. For the latter purpose, two types of institution were evolved. The short-term schools provided a 2 to 3-year primary course for young people with no previous education. Those passing this course, or with a primary school background, were eligible for the short-term middle school which had a 3- to 4-year course. The other type of institution was the spare-time or evening course, where the same curriculum was covered more slowly.

Since 1956 greater stress has been laid on the expansion of secondary education and on the reform of its content. The directives of September 1958 and the objectives of the second 5-year plan show that this expansion is designed to lead later to making secondary education available to all. Particular attention is being given to providing secondary education in rural areas by adding classes to existing primary schools, by setting up new secondary schools and by the institution of a new type of school, the secondary agricultural school.

Secondary education, like other branches, is affected also by the directive to strengthen the link between schooling and productive labour. Beside the general secondary school there is a growing range of specialized or vocational secondary schools which prepare young people for various trades and occupations. Secondary schools are encouraged to set up workshops or farms for productive purposes; it is reported that during 1958 some 1,860 specialized secondary schools created 21,500 entreprises of this type, and 18,865 general secondary schools created over 122,000 industrial and factory enterprises. A reciprocal form of link occurs when factories establish branches or workshops in schools where qualified workers supervise the apprenticeship training of the students. In addition to the time provided for productive work in school time-tables, the lower secondary grades (7 to 9) devote 4 hours per week and the upper grades (10 to 12) 6 hours per week to such activities.

In regard to the organization and content of schooling, the trend since 1958 has been to undertake experiments on a comparatively large scale which could contribute to reforms.

The relation of schooling to productive labour is one of the problems studied experimentally. In the organization of secondary education, six provinces are experimenting with an integrated 5-year curriculum. Two other provinces are trying out schemes for a continuous course of 10 years to cover general primary and secondary education, and in a third province the total period is reduced to 9 years. In these experiments, the stress is laid on improved teaching methods and materials and on the organization of all-round collaboration among teachers under the leadership of the Party committees. The tool subjects of language and mathematics are being given special attention, since improvements here will have a wide effect on curriculum construction.

It is not expected that these experiments will lead to immediate reform. The preliminary conception of the new educational system is a full-time primary and secondary education with the time reduced to about 10 years and the standard raised to approximate that of the first year of the present universities. Such a school system would be available to all and would not compete, as the present 12-year system does, with the national needs for man power. However, the Government sees the reform taking 10 or 20 years, and being introduced step by step and by stages and groups.

TYPES OF SECONDARY EDUCATION

On completing primary school, the pupil has before him the general secondary (or middle) school, and a wide range of vocational secondary schools, some of which parallel the lower cycle of general education while others follow it. In addition, both general and specialized secondary education may be obtained through accelerated and evening courses. Entrance to secondary schools is by way of competitive examination. In 1954/55, before the recent drive to expand secondary education, there were reported to be 4 to 5 candidates for each place available.

General secondary schools

The middle schools comprise lower and upper cycles of 3 years each. Some idea of the movement of students may be obtained from the following figures. Between 1949 and 1957, some 4,360,000 students completed the junior middle course; of these 2,950,000 entered the senior course, while 1,410,000 went to work in industry and agriculture. During the same period, 720,000 students completed the senior middle school, and the great majority of them continued with higher education.

The curriculum followed in 1958/59 is shown in the following table. Examinations are held at the end of each cycle. A written examination, uniform throughout the country, is given to university entrance candidates at more than 100 different centres.

Secondary school teachers are trained at institutes of education and are expected to have completed a university degree. However, the combined effects of the expansion of

TIME-TABLE IN MIDDLE SCHOOLS
(in hours per week)

Subject	Junior middle school			Senior middle school		
	1	2	3	1	2	3
Chinese language and literature	7	6	6	5	5	5
Mathematics	6	6	5	6	6	6
History	3	2	2	2	2	2
Socialist education	2	2	2	2	2	2
Geography	2	2	2	—	3	—
Biology	3	3	2	3	—	—
Physics	—	3	2	2	3	4
Chemistry	—	—	3	2	2	3
Productive work	2	2	2	2	2	2
Foreign language	—	—	—	5	4	4
Physical education	2	2	2	2	2	2
Music	1	1	1	—	—	—
Drawing	1	1	1	—	—	—
Total	29	30	30	31	31	30

schools and the need for university graduates (especially in mathematics and sciences) in other sectors of the economy have resulted in a great shortage of qualified teachers. Since 1954, the Ministry of Education has had to instruct local governments to introduce short-term training courses of 2 years at post-secondary level for senior middle school teachers and of 1 year for junior middle teachers. There is also a widespread system of in-service training, through evening and correspondence courses, to enable teachers to acquire the necessary qualifications.

Vocational and technical schools

In this sector of secondary education students are assisted in a number of ways, by free tuition and textbooks, board and lodging.

The largest single group of vocational schools are the normal schools for training primary school teachers with a course at upper middle level.

Vocational and trade schools prepare students for particular occupations in industry and agriculture, and have various courses at junior and senior middle school level. The spare-time secondary schools are chiefly designed for training in the industrial trades of the locality. An innovation in 1958 was the agricultural secondary school—a rural half-time school with a 3-year course which by the end of 1959 had an enrolment of over 2 million (compared with 7 million enrolled in junior middle schools). The agricultural secondary school follows some middle school syllabuses (in Chinese, mathematics, socialist education, physics and chemistry) but devotes special attention to technical courses in agriculture. The schools are maintained by the popular communes and represent the principal means by which secondary education is being expanded in rural areas.

[*Text prepared by the Unesco Secretariat in May 1960 from official sources listed in the bibliography.*]

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STATISTICS

Population (mid-year 1958 estimate): 669,000,000.
Area: 3,768,736 square miles; 9,761,012 square kilometres.
Population density: 178 per square mile; 69 per square kilometre.

Summary of school statistics, 1953–55. In 1955/56, total pupil enrolment exceeded 60 million, and was about 10 per cent of the total population. Of these pupils, 1 per cent were enrolled in kindergartens, 87 per cent in primary schools, more than 6 per cent in secondary schools, 1 per cent in vocational and teacher training schools together, and 4 per cent in institutions of higher education (including special courses and research). The teaching staff in pre-primary, primary and secondary education consisted of 1,8 million teachers. Pupil-teacher ratio was 33 in primary schools, 26 in secondary schools, and 9 in universities. Between 1953 and 1955, total enrolment increased by 3 per cent in primary schools, 33 per cent in secondary schools, and more than doubled in universities. (See Table 2.)

Enrolment trends in secondary education, 1949–55. Between 1950 and 1955, enrolment in general secondary schools increased three times, and in vocational schools slightly more than three times. In teacher training, maximum enrolment was reported for 1953, there being a substantial reduction between 1953 and 1955. Table 1 shows the secondary enrolment ratio increasing more than threefold between 1950 and 1955; for the latter year total secondary school enrolment represented 8 per cent of the estimated population 15–19 years old.

Sources. Joint Committee of International Teachers Federation, *Annual bulletin*, 1958; German Democratic Republic, *Vierteljahrshefte für Statistik, N° 2*, Berlin, 1957; USSR, Academy of Pedagogical Sciences, *Sovetskaja Pedagogika*, Moscow, February 1957.

1. TRENDS IN SECONDARY EDUCATION, 1949–55

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1949	[1] 1 038 964	...	[1] ...	...	151 750	...	1 191	49 834	*2.4*
1950	1 309 354	...	97 823	...	159 363	...			
1951	1 581 344	...	162 940	...	219 787	...			
1952	2 511 292	...	290 446	...	344 128	...	2 910	52 452	*5.5*
1953	2 959 092	...	299 994	...	369 178	26			
1954	*3 638 000	...	*300 000	...	*308 000	...			
1955	3 900 000	...	318 000	...	218 991	...	4 437	55 320	*8*

1. General and vocational education together.

2. SUMMARY OF SCHOOL STATISTICS, 1953–55

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens						
	Total	**1955/56**	**7 129**	**22 361**	...	**561 594**	...
	„	1954/55	...	...	...	...	...
	„	1953/54	...	...	...	424 965	...
Primary	Primary schools						
	Total	**1955/56**	**504 077**	**1 593 613**	...	**53 126 401**	...
	„	1954/55	...	...	...	[1]51 217 668	...
	„	1953/54	...	...	...	51 504 312	...
Secondary							
General	Secondary schools	1955/56	5 120	149 167	...	*3 900 000	...
	Secondary schools for industrial and agricultural workers	1955/56	65	2 752	...	36 485	...
	Total	**1955/56**	**5 185**	**151 919**	...	**3 936 485**	...
	„	1954/55	...	...	...	*3 638 000	...
	„	1953/54	...	...	...	2 959 092	...
Vocational	Technical schools						
	Total	**1955/56**	**512**	***24 000**	...	***318 000**	...
	„	1954/55	...	...	...	*300 000	...
	„	1953/54	...	...	...	299 994	...
Teacher training	Teacher training schools						
	Total	**1955/56**	**515**	**11 229**	...	**218 991**	...
	„	1954/55	...	...	...	*308 000	...
	„	1953/54	791	...	...	369 178	95 266
Higher							
Teacher training	Teacher training colleges						
	Total	**1955/56**	**40**	**8 392**	...	**61 212**	...
	„	1954/55	...	...	...	*53 100	...
	„	1953/54	31	...	...	39 958	...
General and technical	Universities[2]	1955/56	194	42 066	...	*393 000	...
	Institutes for national minorities	1955/56	6	329	...	5 651	...
	Special courses and research	1955/56	...	...	...	2 092 475	...
	Total	**1955/56**	**[3]200**	**[3]42 395**	...	**2 491 126**	...
	„	1954/55	...	...	...	[3]*204 600	...
	„	1953/54	[3]150	...	...	[3]176 803	...
Special	Schools for the blind, deaf and dumb, etc.						
	Total	**1955/56**	**57**	**433**	...	**5 312**	...
	„	1954/55	...	...	...	...	...
	„	1953/54	...	...	...	...	...

1. Reduction in the number of primary school pupils was accounted for by the suspension of school work in certain areas affected by the 1954 flood.
2. Not including people's universities.
3. Not including special courses and research.

COLOMBIA

THE EDUCATIONAL SYSTEM

Article 41 of the Constitution of 16 February 1945 guarantees freedom of education. 'The State, however, shall exercise general supervision of institutions of learning, both public and private, in order to ensure that the social aims of culture and the best intellectual, moral and physical development of the students are achieved.' Article 41 also provides that primary education shall be free in the state schools, and compulsory 'up to the grade determined by law'.

Colombia has several different ethnic groups, and the

cultural level of the inhabitants varies considerably from one geographical region to another; but the fundamental, unbreakable bond uniting the country is the Spanish language, spoken throughout the territory of the Republic. A few rare exceptions are mission territories where the indigenous population is taught in its own dialect but at the same time easily assimilates Spanish. The common language, together with the Catholic faith to which practically all Colombians adhere, is a cohesive force which has, until now, made a unified national educational system possible.

The Minister of Education is a member of the Cabinet and is responsible for administering the school system. He is assisted by a Higher Council for Education and by an office of educational planning. His immediate collaborators are a secretary-general, an under-secretary for educational and cultural affairs and an under-secretary for administration. The directors of the following divisions are subordinate to the offices of the under-secretaries: (a) primary education and teacher training; (b) secondary education (*bachillerato*); (c) technical education; (d) rural education; (e) women's education; (f) cultural extension and fine arts; (g) libraries and archives, with their sections and subordinate bodies.

The central authorities work in close co-operation with the regional educational authorities; a secretary of education appointed by the Minister resides in the capital of each department, district (*intendencia*) or administrative division (*comisaría*) and is assisted by a staff of inspectors. Cities of over 100,000 inhabitants have similarly organized offices of education. The other cities and the rural districts have local inspectors who work under the authorities of the local sections. Parish priests are accustomed to acting as local inspectors of education in a few municipalities.

Private bodies (the Church, business, industry, etc.) are a very important factor in Colombian education, providing about 85 per cent of the schools. Since the Government, on account of its limited financial resources, is unable to carry out the constitutional provisions regarding education, it gives various forms of assistance to private bodies whose collaboration is essential in raising the cultural level in Colombia.

The structure of the school system is shown in the diagram on page 373.

THE DEVELOPMENT OF SECONDARY EDUCATION

'Secondary education' in Colombia refers to any type of education based on successful completion of primary studies. It is divided into the following branches: general (*bachillerato*), industrial, commercial, farming, complementary, teacher training, rural home economics, nursing, fine arts, religious and unspecified.

Historical and legal basis

An important development in Colombian education was the approval by Congress, in 1903, of Act No. 39, on the organization of public education. This law, which is still in force despite later provisions, introduced far-reaching reforms, and laid down that instruction should be adapted to the peculiar conditions of the country and to the needs of modern life. Effect was given to this Act by Decree No. 401 of 3 June 1904, which in its 181 articles, contained regulations covering every branch of education.

The Minister of Public Education summed up the provisions of the Act as follows:

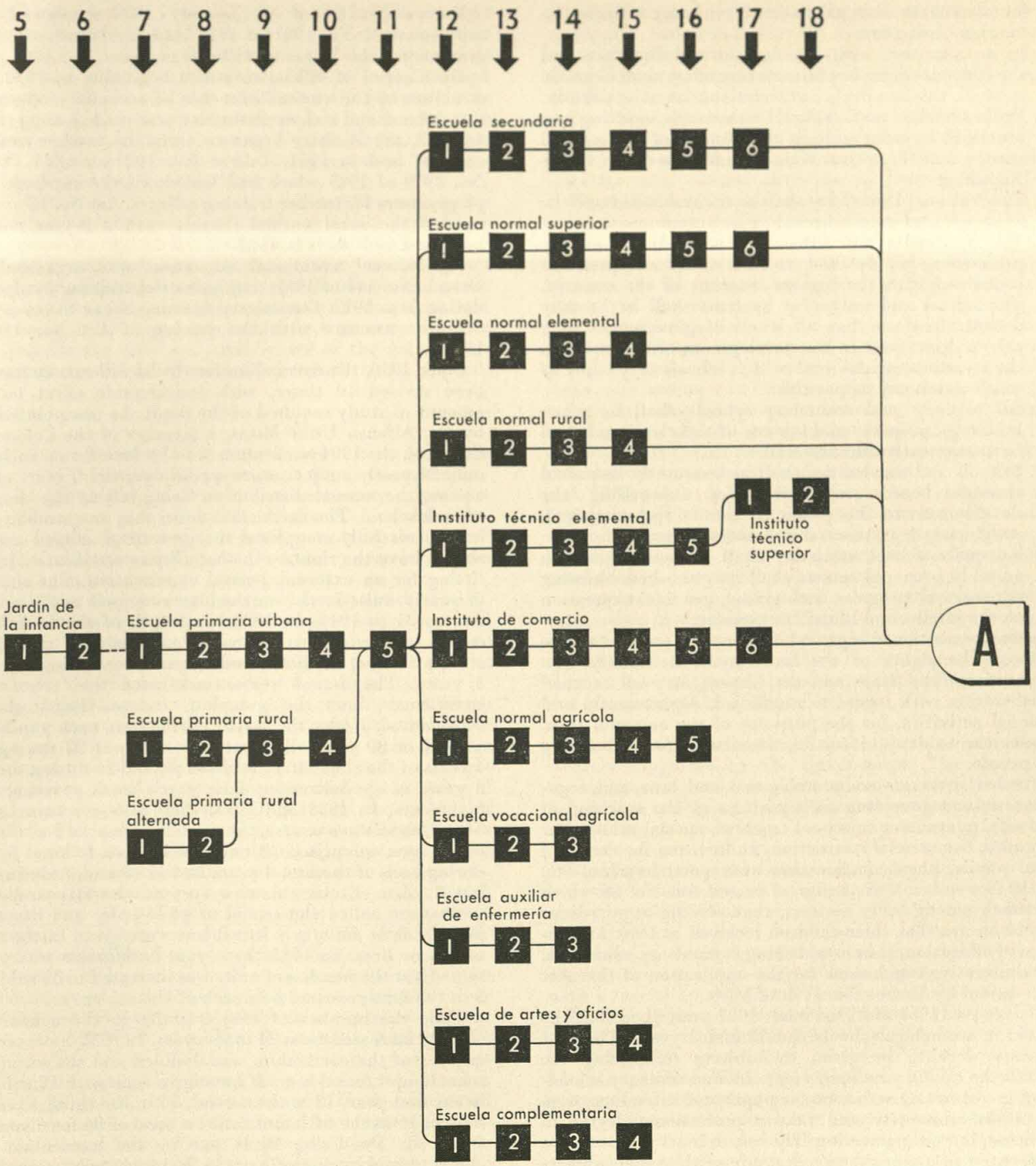
'1. Education shall be free at every grade.
'2. Primary education must be simplified so that it may become more widely spread; it must prepare children for citizenship by awakening and stimulating their love of their country; it must also prepare them for agriculture, manufacturing industries and trade and must ensure that, through religious and physical instruction, they will develop into healthy, vigorous and upright men and women.
'3. The teacher training schools must train practically-minded teachers rather than scholars.
'4. Secondary education shall be mainly technical and shall, through the study of living languages and the elements of the physical sciences and mathematics, prepare pupils for professional careers in industry.
'5. Classical secondary education, comprising literary and philosophical subjects, shall give adequate preparation for the liberal professions.
'6. Industrial instruction shall be given the widest possible development; schools of arts and crafts and workshop-schools to train skilled craftsmen shall be

GLOSSARY

escuela auxiliar de enfermería: vocational training school for nursing assistants.
escuela complementaria: vocational secondary school with varied programme of general and vocational subjects.
escuela de artes y oficios: vocational training school of arts and trades.
escuela normal agrícola: specialized teacher training school for teachers in agricultural schools.
escuela normal elemental: teacher training school for teachers in urban primary schools.
escuela normal rural: teacher training school for teachers in rural primary schools.
escuela normal superior: teacher training school for teachers in secondary schools.
escuela primaria rural alternada: incomplete double-session primary school (classes for boys in the mornings, girls in the afternoon) in rural areas.
escuela primaria rural: rural primary school (separate schools for boys and girls).
escuela primaria urbana: urban primary school.
escuela secundaria: general secondary school with course leading to the *bachillerato* or baccalaureate examination.
escuela vocacional agrícola: vocational training school of agriculture.
instituto de comercio: vocational secondary school of commerce.
instituto técnico elemental: vocational secondary school of industrial arts.
instituto técnico superior: vocational school for advanced technical training.
jardín de la infancia (kindergarten): pre-primary school.

HIGHER EDUCATION

A. *Enseñanza superior y universitaria:* university and other institutions of higher education.


5 6 7 8 9 10 11 12 13 14 15 16 17 18
Escuela secundaria
1 2 3 4 5 6
Escuela normal superior
1 2 3 4 5 6
Escuela normal elemental
1 2 3 4
Escuela normal rural
1 2 3 4
Instituto técnico elemental
1 2 3 4 5
1 2
Instituto técnico superior
Jardín de la infancia
1 2
Escuela primaria urbana
1 2 3 4 5
Instituto de comercio
1 2 3 4 5 6
A
Escuela primaria rural
1 2 3 4
Escuela primaria rural alternada
1 2
Escuela normal agrícola
1 2 3 4 5
Escuela vocacional agrícola
1 2 3
Escuela auxiliar de enfermería
1 2 3
Escuela de artes y oficios
1 2 3 4
Escuela complementaria
1 2 3 4

founded in the main urban centres in order to foster the manufacturing arts.

'7. In co-operation with the Agricultural Institute and the National School of Mines every effort shall be made to work the country's natural resources scientifically.

'8. Professional education shall be thorough, exacting and practical, in order to limit the number of doctors and ensure that those thus trained shall be a credit to the Republic.

'9. The National University shall be re-established and the departmental universities shall be autonomous.

'10. The academies and other learned bodies shall, by preference, be devoted to the study of questions connected with the highest interests of the country.

'11. The school and university systems shall be broadly decentralized so that all levels of government may take a direct part in the development of education in their various regions, and so that schools may enjoy as much autonomy as possible.

'12. All primary and secondary schools shall be given buildings, property and income of their own and shall be competently administered.

'13. Schools and universities shall be constantly inspected through boards responsible for supervising the development of this public service at the municipal, provincial, departmental and national levels.

'14. Adequate school statistics shall be issued; and a suitably prepared review shall be published, showing educational progress and giving genuine expression to the intellectual life of the country.'

The above-mentioned organic law created a proper balance between the rights of the individual, the family, the corporations, the State and the Church, as well as good collaboration with regard to municipal, departmental and national activities, for the purposes of the common task, at once many-sided and fruitful, of instructing and educating the people.

Further decrees were promulgated and laws and regulations issued governing such matters as the teaching of fine arts, guarantees to school teachers, special schools for juveniles, commercial instruction, an institute for deaf and blind pupils, physical education and sport, hygiene, etc. On 10 November 1927, Congress passed Act No. 56 which provided, among other matters, that parents or guardians should ensure that their children received at least a minimum of education, thus establishing compulsory education. Administrative regulations for the application of this Act were issued by Decree No. 1790 of 1930.

Decree No. 1951 of 2 December 1927 prescribed that the course in secondary schools should last 7 years. The first 4 years were to be given to subjects comprising the *bachillerato común y ordinario* (general and ordinary school-leaving certificate) sufficient for pupils not intending to go on to the university and take a professional degree in medicine, law or engineering. The remaining 3 years were to be devoted to a more thorough study of the same subjects of the *bachillerato* course for pupils specializing in courses more nearly related to the professional career they had chosen. Only the first 4 years of secondary education were required for admission to certain higher educational institutions such as agricultural, commercial and other schools.

Decree No. 57 of 13 January 1928 confirmed and supplemented No. 1951 of 1927 and laid down the programme for the 7-year *bachillerato* course.

By a series of official measures beginning in 1930, the structure of the various branches of secondary education was defined and a clear distinction was made among them. In 1933, the Ministry began to unify the teacher training courses; and in 1951, Decree No. 192 amended Decree No. 2979 of 1945 which had laid down the curricula and programmes for teacher training colleges. Act No. 12 of 1934 created the rural normal schools with a 3-year course, increased to 4 years in 1953.

Agricultural vocational education was organized by Decree No. 543 of 1941, and industrial training by decrees dating from 1917. Commercial training began to receive its definite structure with the passing of Act No. 143 in 1948.

Since 1930, the curriculum for the *bachillerato* course has been revised 10 times, with considerable effect on the amount of study required of the pupil. As was pointed out by Dr. Alfonso Uribe Misas, a member of the Colombian Congress, the 1904 curriculum for the *bachillerato* included only 24 yearly subject units spread over the 6 years of the course, the annual distribution being left to the decision of each school. The decree laid down that any student who had successfully completed the prescribed subject courses should have the right to the *bachillerato* certificate without sitting for an external general examination. The number of yearly units in the curriculum increased to 28 in 1910 and to 31 in 1919. In 1929 the length of the *bachillerato* course was extended to 7 years and included specialized studies in law, medicine and engineering during the last 3 years. The first 4 years constituted the 'elementary *bachillerato*' and the complete course the 'technical *bachillerato*'. Under the 7-year curriculum, each pupil took a total of 39 units distributed as follows: 23 during the 4 years of the elementary *bachillerato* and 16 during the last 3 years of specialization, each year's work covering 5 or 6 subjects. In 1933 and 1934, there was a return to the 6-year *bachillerato* course, the so-called classical *bachillerato*, which now comprised 33 units divided as follows: 5 or 6 during each of the first 4 years and 11 (5 and 6) during the last 2 years. Under this new system, the fifth and sixth years were called the school of philosophy and literature (*escuela de la filosofía y letras*) but were given in the same *colegio* or *liceo*. In 1935 the 6-year *bachillerato* was maintained but the number of units was increased to 35 subjects, 5 in the first year and 6 in each of the others.

Thus the number of subject units in the course had already increased from 24 to 35 a year. In 1936, however, the content of the curriculum was doubled and the secondary school pupil found himself having to cope with 12 subjects in the first year, 13 in the second, 14 in the third, 15 in the fourth, 16 in the fifth and sixth: a total of 86 for 6 years of study. As Dr. Uribe Misas put it, the curriculum was characterized by *pansofía* or the desire to study everything, by an incredible sub-division and fragmentation of subjects, and by 'the infernal labyrinth of the cyclic method'. As regards syllabuses there was considerable lack of uniformity, and the criteria were not the same for public or official schools as for private educational institutions.

The number of subject units fell to 75 in 1937 and to 59

in 1940 but was 66 in 1949 and 1950 and 63 in 1951. In 1952 there was a slight relief. Pupils took 7 subjects in their first year and 8 in each of the 5 succeeding years, a total of 47 for the 6 years. Finally, Decree No. 2550 of 1951 and Resolution No. 73 of 1953, which are still in force, were promulgated, and the number of subjects again rose to 13 in the first year, 11 in the second, 12 in the third, 10 in the fourth, 9 in the fifth and 13 in the sixth, or a total, throughout the 6-year course, of 68 units.

In March 1955, Legislative Decree No. 925 established a curriculum for the so-called *bachillerato básico* (equivalent to a school-leaving certificate), that is, the first 4 years of secondary education, in which certain changes were introduced affecting the subjects and the number of hours given to them. The new plan was not put into force, and at present it is being re-examined, together with the syllabus for the fifth and sixth years of the *bachillerato*. Consequently the 1951 curriculum is still being applied.

Administration

Secondary education is organized and directed by the Ministry of Education acting through the divisions responsible for the particular branches of secondary education. The Ministry is assisted by the Higher Council for Education, whose duties include participating in the organization of education throughout the country, particularly as regards curricula and study programmes.

Textbooks may be freely selected by heads of schools, and educational authorities neither impose nor recommend them. In this matter, inspectors confine themselves to giving opinions on the textbooks which in the course of their visits they find in the hands of the pupils.

The Colombian Constitution gives the State supreme authority as regards the inspection and supervision of education. With respect to administrative matters, this supervision is generally carried out by the competent authorities of the Ministry of Finance and of the Office of the Comptroller General, through financial inspectors and auditors. The auditors must give their authorization for every type of expenditure under the budgets of official educational institutions. The treasurers and heads of the schools are responsible before the law for the utilization of all funds entrusted to them. This supervision is exercised throughout the territory of the Republic, with the co-operation of local and municipal authorities.

Private or independent bodies which maintain any type of secondary education for their own account and at their own risk are subject to supervision in accordance with the provisions of the Colombian legislation. Among such organizations is the Servicio Nacional de Aprendizaje (SENA) (the national apprenticeship service), which trains staff specially for business enterprises with funds contributed by such enterprises and with technical assistance from ILO and the United States Point IV programme.

Public educational authorities have always been able to maintain the best possible atmosphere of understanding and mutual support in their dealings with private institutions. Support at the national, departmental and municipal levels has generally taken the form of grants of funds and scholarships to educational establishments or the provision of premises and equipment.

Supervision and inspection. In all technical matters connected with education the Government exercises its supreme authority of inspection and supervision by means of national, departmental and local inspectors for all levels and branches of teaching.

The inspectorate was established in 1870, but was then confined to the departmental and municipal administrative levels. The increase in educational establishments and the need for state control gave rise to Decree No. 2114 of 1 December 1931 which established the National Inspectorate, whose duties were regulated by Decree No. 620 of 24 March 1936.

The inspection service constitutes the main connexion between the educational authorities and schools scattered across the Republic and is responsible for guiding and supervising instruction. In the performance of their duties the national and departmental inspectors give teachers practical advice for the successful performance of their tasks, and attempt to find remedies for the various difficulties impeding the proper functioning of the schools by enlisting the help of the competent heads of services, local authorities and other persons and bodies whose action could promote the interests of public education.

A 1938 decree divided secondary school inspectors into categories specializing in school organization, social studies, natural science, mathematics and languages. There are also inspectors of technical education, teacher training, rural education and physical training.

Attached to many secondary schools there is a parents' association (Asociación de Padres de Familia), which co-operates more or less effectively in educational matters with school heads. These associations do not generally concern themselves with financial or other school affairs which are not of a purely educational character.

Finance. Public educational establishments are almost entirely supported by the Government. The budgets of the national schools are determined by the Ministry of Education, and those of departmental and municipal public schools are prescribed by the competent local authorities.

In accordance with the national plebiscite of 1 December 1957, 10 per cent of the Colombian national budget must be set aside for education. The appropriation thus amounts to about 160,000,000 Colombian pesos, of which approximately 42,500,000 are assigned to national secondary education. In addition, each department and municipality in the country devotes a percentage of its own budget to education, with a special appropriation for secondary schooling.

In most public secondary institutions, the pupils pay enrolment or registration fees varying between 10 and 30 Colombian pesos, but otherwise public secondary education is free. Since most pupils in public institutions belong to the less prosperous social classes, the Government as a rule distributes a number of scholarships, worth 80 pesos each, which are awarded under a competitive system.

Secondary teachers' salaries are paid by the educational authorities in accordance with the Teachers' Establishment List laid down in Act No. 43 of 1945. The list divides teachers into four categories, the salaries for which have been revised periodically; Decree No. 10 of 1958 fixed them as follows: first category, 800 Colombian pesos per month; second 650; third 550; fourth 450; unclassified 450.

If a teacher is not resident in a boarding school, he receives a board allowance of 75 pesos. No teacher is normally required to work for more than 22 or 23 hours per week, and any hours in excess of this figure are paid at the rate of 10 pesos per hour if he belongs to the first or second category, and 6 pesos per hour if he belongs to the third, fourth or unclassified category.

All teachers are required to belong to the National Social Security Fund (Caja Nacional de Previsión) to which they pay a membership fee in one lump sum equivalent to a third of their monthly salary and thereafter 3 per cent of their salary every month. The National Social Security Fund gives assistance in case of termination and retirement, as well as medical assistance, subject to certain limitations.

Funds for building, maintenance and repair of school premises are derived from special allocations in the annual education budget. In 1959, this allocation was 2,025,000 Colombian pesos, distributed among the secondary institutions according to their needs. The Government makes special appropriations for building new schools. Likewise, every secondary school's budget has a special allocation for the purchase and maintenance of working equipment for study rooms, laboratories, library and teaching materials.

Buildings and equipment. In Resolution No. 30 of 1936, the Ministry of Public Health, in conjunction with the School Architecture Section, prescribed rules governing all school construction. Space, covered and open areas, heating and ventilation system, lighting, sanitary facilities and other requirements were all fully specified. The resolution also mentioned school furniture and equipment and the arrangement of laboratories and study rooms. These rules have gradually been applied and will be enforced in the new buildings to be put up; moreover, the premises unsuitable for teaching in which many schools now function will be renovated to comply with these principles.

School welfare services. All schools provide medical and dental services, but in cases of serious illness the family is responsible for obtaining medical attention. As mentioned above, the teaching staff is cared for by the National Social Security Fund, but certain restrictions are also placed on this service. An occasional institution has, at the initiative of its director, been furnished with a cafeteria for needy pupils, but there is no general system of school meals. It is intended to provide school psychological services as soon as funds allow.

TYPES OF SECONDARY EDUCATION

Secondary education, in the broad sense, may be considered as a continuation of primary school, an educational cycle with relatively independent purposes and at the same time a preparation for higher studies. In Colombia the term is understood to mean: 'the educational level, which presupposes the development, knowledge, habits and abilities that an adequate primary education should procure; which provides for young people between the ages of 12 and 19; and which is intended to give the pupil a general cultural background and to prepare him for the immediate exercise of an occupation useful to himself and to society or else for the efficient pursuit of higher studies'.

There is no systematic official or private organization in Colombia which helps to orientate pupils towards a particular branch of secondary education upon the conclusion of their primary schooling. Nor do parents receive guidance in this respect. Thus chance, whim, sporadic advice and many other obviously heterogeneous factors induce pupils to undertake secondary education, with the natural result that many mistakes are committed.

A very few types of complementary education are offered to pupils who have finished primary school, but none of this is systematic or subject to any general regulations.

By reason of the peculiar extension of the national territory all types of climate are to be found, including two different summer seasons. It has therefore been necessary to divide the country into two school sectors, involving difficulties for pupils who transfer from the one to the other: (a) the south-west sector, comprising three departments and one territory, has a school year beginning on the second Monday of October and ending towards 22 July of the following year; (b) in the central eastern sector, comprising the rest of the country, the school year begins on the second Monday in February and ends towards 22 November.

Both sectors have intermediate holidays, viz.: 8 days for Holy Week; in the central eastern sector, a period from 20 July to 7 August, and in the south-western sector, from 20 December to 7 January. Class is held from Monday to Friday, both morning and afternoon and Saturday morning, with an average of 7 periods a day.

The school year is divided into two semesters. There are partial examinations at the end of the first term and final examinations at the end of the second. Pupils who pass in all subjects complete their school year and move up to the next grade without further requirements; those who fail in one or two subjects are held back and must take a later examination to qualify in these subjects before being promoted; while those who fail in three or more subjects must repeat the grade.

The general secondary (bachillerato) *course*

For entrance to institutions of this type (*colegios*, *liceos*, *institutos*, etc.), the fifth year primary education certificate is required. The *bachillerato* course consists of 6 years at the end of which the pupil receives the diploma of *bachiller*.

The following table gives the compulsory minimum programme of study for all public and private *bachillerato* institutions, as laid down by Decree No. 0075 of 1951.

Owing mainly to the lack of well organized vocational guidance services, about 61.9 per cent of those who complete primary school go on to the *bachillerato* course.

The aim of the course is to inculcate, through the study of the scientific disciplines and the humanities, cultural qualities and knowledge which will express themselves in intellectual and reasoning capacity, in the practice of sound methods of investigation, in habits of analysis, synthesis and appraisal and in commendable personal attitudes of a social, moral and religious order. This general purpose involves two separate objectives: (a) to give pupils a

TIME-TABLE FOR 'BACHILLERATO' COURSE
(in periods per week)

	Secondary school grade					
	1	2	3	4	5	6
Compulsory minimum content						
Religion	3	3	3	2	2	1
Arithmetic	5	5	—	—	—	—
Book-keeping	—	—	2	—	—	—
Spanish and composition	4	5	—	—	—	—
Orthography	2	3	—	—	—	—
Literary appreciation—composition	—	—	3	—	—	—
Spanish language and authors	—	—	—	—	3	—
Colombian and Hispano-American literature	—	—	—	—	—	2
General literature	—	—	—	3	—	—
Latin	—	—	—	—	3	3
English	2	3	4	4	—	—
French	—	—	—	3	3	4
History of Colombia and America	4	—	—	—	—	3
General history	—	—	3	3	—	—
Geography of Colombia and America	4	—	—	—	—	2
General geography	—	3	3	—	—	—
General science	—	2	—	—	—	—
Botany and zoology	—	—	3	—	—	—
Anatomy, physiology, hygiene	—	—	—	3	—	—
Physics	—	—	—	—	3	4
Chemistry	—	—	—	—	4	3
Geometry and trigonometry	—	—	—	—	3	—
Philosophy	—	—	—	3	4	3
Physical education	2	2	2	1	1	1
Civics	1	1	1	—	—	—
History of Bolivar's ideas	—	—	—	—	—	1
Total	27	27	24	22	26	27
Additional class work						
(a) For *bachillerato* courses free time for more intensive study	11	11	11	10	10	10
Algebra	—	—	3	3	—	—
Geometry	—	—	—	4	—	—
(b) For other secondary courses (commerce, arts and crafts, teacher training, home economics, agriculture, at discretion of school)	(11)	(11)	(14)	(17)	(10)	(10)
Total compulsory and optional	38	38	38	39	36	37
Subjects to be distributed over the total course by the school						
Drawing	—	—	—	—	—	—
Writing	—	—	—	—	—	—
Music and singing	—	—	—	—	—	—
Urbanidad (social relations)	—	—	—	—	—	—

general education which, upon the termination of their secondary studies and irrespective of any career they may follow, will fit them to face whatever problems life may confront them with, including those calling for special technical knowledge; (b) to fit pupils with the knowledge, working methods and ability needed to engage in any university studies they may undertake.

Commercial education

The practical purpose of commercial education is to prepare skilled personnel for commercial activities in public and private undertakings.

The Commercial Education Section of the Ministry of Education was established in 1949; before that year these studies were under the guidance and control of the Department of Secondary Education. The urgently needed reorganization of commercial studies was carried out under Decree No. 686 of 1952 which was put into effect partly in 1933; it is now completely in force and has been willingly accepted by all schools.

The new programmes and standards developed in this country were studied at the Maryland Seminar in the United States of America and considered by the foreign experts in the commission to represent an excellent and novel system. The difficulties confronting Colombia in respect of commercial education had been common to all Latin America, and the solutions put forward may be of more than local interest.

Commercial education should have the following aims: to train individuals who are suited to commercial activities and private and public administration; to train business men who will be capable of exercising an effective influence on the country's economic development; to give the individual a general knowledge which will enable him to solve his own business difficulties and judge them in the light of economic conditions; to study, guide and develop interests and aptitudes with a view to the technical training of persons professionally engaged in any kind of commercial and administrative activity; to contribute to training for good citizenship.

In accordance with these aims, under the regulations in force since 1953 and now fully applied every effort is made to train efficient staffs for commerce, banking, industry, administration and other economic and financial operations.

Types of commercial education. The following forms may be distinguished:

1. General education with courses in typewriting, mechanical shorthand, secretarial work and commercial accountancy, courses for assistants and individual training.
2. Advanced education in commercial expert's and commercial technicians' courses.
3. University education for those who have passed the commercial technicians' course and gone through the 1-year course of specialized training (in banking, industry, official and fiscal accountancy and accountancy for co-operatives) or for holders of the secondary school leaving certificate who have taken a preparatory commercial orientation course and then, like the technicians, take the 2-year course for the *Licenciatura en Ciencias Económicas* (a first degree in economics) or the course comprising 3 years of advanced study for the *Contaduria Juramentada* (chartered accountant).

Courses for commercial experts and technicians may be taken subject to completion of the primary education or after several years of secondary studies.

'Compensatory' courses are those given in commercial schools based on regular secondary studies under the following conditions: (a) at the end of the second or third

year of the *bachillerato* course in an approved secondary school, a pupil may be enrolled in a commercial school and take an expert's course with the appropriate curriculum; (b) a pupil who has completed the fourth year of the *bachillerato* course, may take the commercial technician's course, with its corresponding curriculum as laid down in the above-mentioned decree.

If the pupils hold the certificate of *bachiller* they may take the higher commercial course which qualifies for admission to university studies.

The awarding of diplomas by unauthorized establishments has been prohibited and compliance with this rule strictly enforced. This decision was necessary to obviate the exploitation, fraud and abuses arising from the award to students of pompous diplomas which did not correspond to the studies carried out and which were conferred by some schools without official authorization. Commercial education correspondence courses were also made subject to regulation in order to prevent similar abuses and give the courses a more responsible character.

Specific standards have been established which must be complied with by new schools in order to obtain an operating licence and receive official approval. School heads and teachers must produce a good conduct record and comply with certain conditions of professional fitness. The system of contracts for courses has been abolished; in every case they must be charged and paid for monthly.

The Commercial Education Section of the Ministry is responsible for this work of regulation, guidance and supervision and is subordinate to the Industrial and Commercial Education Division which has a chief officer and only three inspectors, a very small number of officials in comparison with the immense and difficult task of supervising the more than 320 schools of this type.

Industrial education

This branch of secondary education covers all establishments which train pupils for a manual occupation or trade.

Act No. 143 of 1948 established categories for industrial schools and laid down the economic, social, religious, artistic and educational objectives of industrial schooling. It may, however, be seen that this legislation does not consider the possibility of establishing a new technical orientation or of solving the country's imperative needs. It has therefore been necessary to consider a complete reform of this branch of secondary education. Decree No. 0019 of 1957 enables holders of the diploma of *técnico* to enter the technical engineering faculties and this requirement takes the place of the classical *bachillerato*. Moreover, general educational legislation also covers industrial teaching.

Technical and industrial education is provided in the following types of establishments:

Escuelas artesanales (craft schools). They give a 2-year training course for artisans and are situated in less populated and underdeveloped areas.

Escuelas de artes y oficios (schools of arts and crafts). Their course, of 3 or 4 years' duration, is intended to give a medium degree of skill for workmen. They are situated in areas which are beginning to develop economically and are linked to the future industrial expansion of such regions.

Institutos técnicos industriales elementales (vocational schools for elementary technical and industrial training). Their 5-year course trains *expertos* in the various technical specialized branches required in industrial cities and areas. On completing the course pupils may after a period of practical work in industry, become principal foremen or supervisors. This type of school admits pupils who have completed the *bachillerato* course.

Institutos técnicos superiores (vocational schools for advanced technical training). Their 7-year course prepares pupils who have reached the preceding grade for their diploma as *técnicos*. These schools are situated in industrialized cities or areas. On completing the course pupils may become personal assistants to engineers and maintain a link with supervisors and foremen in factories and works.

In all, 28 schools of these types exist at present.

Such institutions, apart from subjects of general education, teach the following special industrial subjects: mechanics, aviation mechanics, automobile mechanics, motor engineering, electricity, radio technology, foundry work, industrial design, forging and welding, metalwork, civil construction, cabinet-making, topography, ceramics, carpentry, ironwork, tailoring and shoemaking.

About 4,000 pupils are enrolled in these schools, and some 350 pupils leave every year on completion of the courses in the various levels and branches.

Agricultural education

The purpose of agricultural education is to supplement primary schooling and enable young persons to make the best possible use of natural resources through work in rural areas.

Under Decree No. 2067 of 1954 a division of rural education was organized at the Ministry to deal with this branch of schooling. It is given in:

Escuelas vocacionales agrícolas (agricultural vocational schools), with a 1-year pre-vocational course and a vocational course of 2 years. Entrants are required to have completed primary education. The country now has 45 such schools with a total of 1,400 pupils and 215 teachers.

Escuelas anexas a normales agrícolas (schools annexed to agricultural teacher training schools), boarding schools for sons of settlers and for agriculture students.

Escuelas hogar para campesinas (rural home economy schools). Primary school must have been completed. The course lasts 3 years and leads to a certificate.

Cursos para campesinos adultos (courses for adults in rural areas). They are a stage of the agricultural vocational education programme intended for young persons and adults of rural areas who are engaged in agriculture. This is one of the most important sections of the programme as it helps the small farmer to find remedies for the difficulties encountered by him in his work as a farmer and stockbreeder and in his social life. There are now 63 of these courses, taught by 63 teachers, with a total of 4,000 pupils.

Teachers engaged in agricultural education are trained in the institutions described below. In the 44 rural normal

schools in 1959, there were 288 teachers and 1,400 students, of whom 19 per cent graduated.

Nursing schools

The division of the Ministry responsible for this type of education is at present concerned only with nursing schools of secondary level. For the *escuelas auxiliares de enfermería* (vocational training school for nursing assistants) completion of primary school is required. The course lasts 3 years and leads to the rural nursing assistant's diploma.

Artistic education

This education is intended to give training for all forms of the fine arts. It includes schools of music, schools of drawing and painting, sculpture, singing, choral societies and dancing schools.

Religious education

This covers education at secondary level in seminaries, novitiates and religious training institutions, which prepare young persons for the priesthood or for monastic life. In 1957, there were 57 such establishments, with 476 teachers and 4,866 pupils.

Unspecified secondary education

This term includes all establishments for specialized secondary instruction which do not have set curricula or a specified number of years of study and do not fall into any of the preceding groups. A total of 69 institutions with 489 teachers were attended by 15,188 pupils in 1957.

Teacher training schools

The teacher training branch includes all such institutions, for teachers of every level. The institutions at secondary level and those training secondary teachers are as follows:

The *escuelas normales para rurales* (rural teacher training schools) prepare schoolmasters for rural primary schools. Admission is subject to completion of primary education. The course lasts 4 years and leads to a diploma of *maestro para escuela rural.*

The *escuelas normales elementales* (training schools for primary teachers) also require the primary school-leaving certificate. They have a 4-year course and grant a diploma of *idoneidad pedagógica* (fitness for teaching).

The *escuelas normales superiores* (training schools for secondary teachers) require completion of a 5-year primary course. The courses last 6 years and lead to a diploma of *normalista superior.*

The *escuelas normales agrícolas* (training schools for teachers in agricultural schools) prepare teachers for the *escuelas normales rurales.* The entrance requirement is a primary school-leaving certificate. The course lasts 5 years and leads to a diploma of *institutor agrícola.*

The *institutos politécnicos superiores* (higher polytechnical schools) prepare teachers for the *institutos politécnicos complementarios* (vocational polytechnical institutes). The entrance requirement is a diploma of *experto.* The course lasts 2 years and leads to the diploma of *profesor* in the special subject specified.

The *escuelas normales industriales* (training schools for teachers in industrial schools) require the diploma of *experto.* The course lasts 1 or 2 years and leads to the diploma of *profesor industrial.*

The *universidades pedagógicas* (teacher training colleges) prepare teachers in general cultural fields for secondary institutions. These *universidades* are divided into specialized faculties. Admission is subject to possession of the *bachillerato* or the diploma of *normalista superior.* The course lasts 4 years and leads to the degrees of *licenciado* and *doctor.*

The *cursos de hogar* (home economy courses) prepare young women for the management of their homes and prepare teachers for manual and home economy activities in primary and secondary schools, in order to be enrolled, pupils must have passed the second stage of the *bachillerato* course and possess basic technical knowledge of the special subject they have chosen. The curriculum lasts 2 years and leads to a *certificado de idoneidad* (aptitude certificate).

The *escuelas de visitadoras de hogares campesinos* (schools for women rural visiting welfare workers) have the following requirements for admission: the pupil must be of a rural family, she must have completed the first year of the *bachillerato* course, and be at least 18 years of age. The course lasts 3 years, followed by 2 years of practical work. The diploma of *visitadora social de hogares campesinos* is conferred.

The *escuelas de cerámica* (ceramics schools) prepare teachers to direct pottery-making in primary and secondary schools and train staff in organizing this work in factories, workshops and studios. Pupils must have completed the third year of the *bachillerato.* The course, lasting 3 years, leads to the diploma of *técnico en cerámica.*

The *escuelas superiores de orientación rural femenina* (higher schools for rural, women's guidance officers) give specialized training for rural education. For admission, they require the diploma of *normalista* and 2 years of teaching experience. The course lasts 2 years and leads to the diploma of *técnica en educación rural.*

The *Escuela Nacional de Educación Física* (National Physical Education School) is intended to train physical education teachers and grants the following diplomas: professor of physical education for those who have had basic preparation leading to the diploma of *maestro superior* or to the *bachillerato* and have completed the 3 years' specialized course; gymnasium instructor, for those who have received basic training consisting of 4 years of the *bachillerato* course, the diploma of *maestro rural* or of *idoneidad pedagógica* and have completed the 2-year specialized course.

Decree No. 0192 of 1951, promulgated a study plan for teacher training institutions and various provisions dealing with teacher training. To the general subjects already required in other branches of secondary education were added subjects proper to the teaching profession, such as, pedagogy, general and special didactics, general and applied child and adolescent psychology, history of education, school organization and legislation, school teaching practice and the preparation of teaching materials.

Out-of-class activities

Many secondary school pupils are members of organizations such as the Boy Scouts, military bands and school orchestras, school theatre, scientific and academic associations, the Red Cross, etc. Sports are encouraged in all schools, especially basketball, football, tennis, baseball, swimming, etc. These activities form part of the special physical education programmes but also take on a greater extension.

TRENDS AND PROBLEMS

The Colombian educational structure, like that of many other countries, suffers from various defects, some of which are quite serious and must be rectified as soon as possible. For this reason, and in order to bring education up to the standard required by the country, the Ministry established an Office of Educational Planning with specific tasks assigned to it; in particular it was asked to make a general survey of Colombian education up to 1957 and propose a complete plan for education to be put into effect from 1958 onwards. As a substantial measure for the reform of education, Decree No. 1419 issued in 1958 conferred the character of 'pilot schools' on certain national institutions in the various branches of secondary education for the following purposes: to experiment with new curricula and methods and techniques; to communicate the results to other institutions belonging to the same level or type; to demonstrate systems of educational organization for the benefit of the teaching body; to organize brief courses and seminars for teachers of a particular subject in order to study methodological principles; to study draft curricula and programmes in the course of the first year of pilot school work, for the different branches of secondary education; to establish school and vocational guidance services under school psychologists; to consider all financial and pedagogic measures taken by the commissions responsible for guiding and supervising these schools. The following privileges have been granted to the pilot schools: priority in regard to the appointment of teaching staff selected for their personal, scientific and pedagogic capacity; an adequate supply of suitable general equipment and teaching materials, as well as a library for both pupils and teachers; priority in the allocation of funds for buildings, improvement and repairs. The 1959 budget assigned about 300,000 Colombian pesos to this type of school.

The general organization of the official pilot schools, the selection of their teaching and administrative staff, as well as the guidance and constant aid and supervision extended to them, are the responsibility of commissions, comprising the head of the competent division, national inspectors appointed by him, experts of the Ministry of Education's Planning Office and representatives of the heads of pilot schools.

The Ministry of Education may issue a resolution, granting the status of pilot school for a period of 3 years to any private institutions meeting the requirements laid down by the commissions appointed to study the request.

The Ministry of Education's Planning Office is responsible for the systematic appraisal of the results of the reforms or measures applied in such schools.

Since 1958 the *bachillerato* pilot schools (those for the technical, teacher training and agricultural branches have not yet been organized) have been trying out a new curriculum in which an attempt is made to reduce the number of subjects to a minimum; the pilot schools are thus given scope to experiment with the new study programmes and do more intensive work in the basic subjects.

The courses are divided into two cycles: (a) A fundamental cycle, lasting 4 years, for all types of secondary education and comprising the following subjects—religion, social sciences, natural sciences, mathematics, maternal language, English, physical education and various activities. The intellectual courses take 22 hours a week, physical education 2 hours and artistic and cultural activities 6 hours. During this cycle, the pupils will receive vocational guidance preparing them for the second cycle. No diploma of any kind is given at the end of the first period. (b) A second cycle, lasting 2 years (fifth and sixth classes) is directly devoted to the specific studies of each branch of secondary education and prepares the pupil for higher and university education. The subjects given in the second cycle are religion, philosophy, social sciences, physics and mathematics, chemistry, mother tongue, French, Latin and physical education. The pupils take 8 or 9 subjects per course, with 23 hours a week devoted to intellectual work, 1 to physical education and 6 to additional study in which they choose either science or literature for their *bachillerato* diploma.

In the second cycle, and particularly in the *bachillerato* course, pupils will receive vocational guidance preparing them for the proper choice of a career. The services will be given greater extension when the institutes of psychological studies and vocational guidance established by Decree No. 3457 of 1954 are organized and put into operation.

PROPOSED TIME-TABLE FOR PILOT SCHOOLS
(in periods per week)

	First cycle (year)				Second	
	1st	2nd	3rd	4th	5th	6th
Religion	3	3	3	2	2	1
Philosophy	—	—	—	—	4	4
Mathematics	5	5	5	5	5	3
Natural sciences	2	3	3	4	3	3
Social sciences	4	4	4	4	—	4
Spanish	5	5	5	4	3	2
English	3	3	3	3	—	—
French	—	—	—	—	3	3
Latin	—	—	—	—	3	3
Physical education	2	2	2	2	1	1
Activities	6	5	5	6	6	6

The pilot schools will continue to have this character until the end of 1961. The curricula and programmes with which they will have experimented, once the results are appraised, will be applied to all secondary educational institutions throughout the country.

As regards primary education, it is the government's

intention gradually to extend compulsory attendance to a sixth year. The new curriculum and programmes are being tried out; since the beginning of 1958, they have reached the experimental stage at 100 selected pilot schools scattered throughout the national territory.

In this manner, the Ministry is hoping to bring about a total reform of education at its first two levels; this will necessarily lead to the reform of higher and university education in the not too distant future.

[*Text prepared by Dr. Federico Arbelaez Lema, Secondary Education Expert at the Office of Educational Planning, and approved by the Colombian National Commission for Unesco in June 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 13,522,000.
Area: 439,520 square miles; 1,138,355 square kilometres.
Population density: 31 per square mile; 12 per square kilometre.

Summary of school statistics, 1953–57. In the school year 1957/58, more than one and a half million pupils were enrolled in schools of all levels, from kindergarten to university. This figure does not include adults attending courses in evening schools, nor those receiving instruction by radio. The total enrolment in 1957/58 represented about 12 per cent of the population, as compared with 10 per cent in 1954/55 (see *World Survey of Education: II—Primary Education*). Of the 1,615,000 pupils, 89 per cent were attending kindergartens, primary schools and special schools; about 10 per cent were in secondary schools (general, vocational or teacher training); and less than 2 per cent in institutions of higher education.

The proportion of girls was about 49 per cent at the first level of education; 41 per cent at the second level; and 42 per cent at the third level. In the same edition of the *World Survey of Education*, the proportion of girls in higher education (not including teacher training institutions) was given as 16 per cent. The present high proportion of girls in higher education is due entirely to the inclusion of girls enrolled in teacher training colleges, who were previously not separated from teacher training at the secondary level.

In 1957/58 the total teaching staff numbered over 56,000, which represents an increase of about 43 per cent over 1953/54, while the total enrolment increased about 35 per cent during the same period. About 61 per cent of the teachers in 1957 were women. (See Table 1.)

Enrolment trends in secondary education, 1935–57. Between 1935 and 1957 total enrolment in general secondary schools increased more than three and a half times while enrolment in vocational schools more than doubled. Teacher training schools, combining those at secondary and higher levels, has shown a six-fold increase in enrolment between 1938 and 1957. The apparent irregularities in the figures for certain years, for example between 1945 and 1949, may be due to incomplete reporting rather than actual decline in enrolment. Nevertheless, the relatively less rapid development of vocational education as compared with general secondary education or teacher training may be shown by the fact that average enrolment in vocational schools, being about 39 per cent of total secondary enrolment for the period 1940–44, decreased to 29 per cent for the period 1955–57, while the proportion of general secondary enrolment increased from 54 to 62 per cent, and of teacher training from 7 to 9 per cent. (See Table 2.)

Examination results in secondary education. Available information for 1957 shows 5,175 pupils who passed the secondary school leaving examination (*bachillerato*); this number represents 4.8 per cent of all pupils enrolled in the general secondary schools for that year. There were 1,506 girls who passed the same examination, being 4.2 per cent of the total number of girls enrolled. The number of pupils enrolled in the last year of secondary school for the years 1953–56 represented between 5 and 7 per cent of the total enrolment in those schools.

Educational finance, 1957. In the fiscal year beginning January 1957, total expenditure for education amounted to 231 million pesos. The Central Government shared in this expenditure to the extent of 38 per cent, the provincial governments 49 per cent, and the local authorities 13 per cent (see Table 3). Total recurring expenditure, which constituted 92 per cent of the total expenditure, was distributed by level and type of education as shown in Table 3C.

Source. Colombia: Ministry of National Education, Statistics Section, reply to Unesco questionnaire.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1957/58	25	59	54	1 736	910
	Kindergartens, private	1957/58	896	2 280	1 936	45 662	23 578
	Total	**1957/58**	**921**	**2 339**	**1 990**	**47 398**	**24 488**
	„	1956/57	904	2 196	1 866	45 234	24 241
	„	1955/56	767	1 674	1 471	37 084	19 261
	„	1954/55	512	1 079	856	22 464	11 940
	„	1953/54	532	1 186	1 033	22 550	12 025
Primary	Urban primary schools, public	1957/58	[1]14 477	14 477	10 380	622 934	311 087
	Rural primary schools, public	1957/58	[1]12 346	12 346	11 120	545 334	259 498
	Urban primary schools, private	1957/58	[1]8 323	8 323	5 768	208 169	109 776
	Rural primary schools, private	1957/58	[1]181	181	109	4 753	2 084
	Total	**1957/58**	**[1]35 327**	**35 327**	**27 377**	**1 381 190**	**682 445**
	„	1956/57	[1]33 874	33 514	25 875	1 311 535	644 426
	„	1955/56	[1]32 197	32 197	25 161	1 236 084	607 544
	„	1954/55	[1]28 939	28 939	22 586	1 127 350	556 251
	„	1953/54	[1]25 208	25 208	19 400	1 054 696	515 365
Secondary							
General	Secondary schools, public	1957/58	184	2 618	541	37 963	6 874
	Secondary schools, private	1957/58	603	6 169	2 267	69 664	29 286
	Total	**1957/58**	**787**	**8 787**	**2 808**	**107 627**	**36 160**
	„	1956/57	738	8 088	2 488	93 349	30 456
	„	1955/56	649	7 036	2 327	77 447	27 569
	„	1954/55	664	6 636	2 157	69 947	25 230
	„	1953/54	585	6 416	2 290	65 618	25 590
Vocational	Industrial schools, public	1957/58	59	810	152	7 877	1 976
	Commercial schools, public	1957/58	46	512	259	5 343	3 481
	Agricultural schools, public	1957/58	43	201	5	2 060	140
	Nursing schools, public	1957/58	6	42	21	213	213
	Fine arts schools, public	1957/58	21	248	76	4 339	1 921
	Industrial schools, private	1957/58	16	119	28	1 401	665
	Commercial schools, private	1957/58	299	2 268	1 144	22 153	16 066
	Fine arts schools, private	1957/58	7	21	9	504	376
	Escuelas complementarias, public and private	1957/58	60	230	163	2 647	...
	Total	**1957/58**	**557**	**4 451**	**1 857**	**46 537**	...
	„	1956/57	525	4 118	1 806	42 669	25 017
	„	1955/56	444	3 666	1 613	39 675	21 835
	„ [2]	1954/55	408	3 163	1 316	33 340	17 093
	„ [2]	1953/54	390	3 040	1 345	31 694	18 342
Teacher training	Rural teacher training schools, public	1957/58	40	354	212	2 829	2 235
	Rural teacher training schools, private	1957/58	15	149	99	1 167	1 079
	Total	**1957/58**	**55**	**503**	**311**	**3 996**	**3 314**
	„ [3]	1956/57	123	1 773	995	14 259	10 884
	„ [3]	1955/56	122	1 528	868	11 802	9 028
	„ [3]	1954/55	104	1 307	721	9 869	7 331
	„ [3]	1953/54	93	1 065	634	8 611	6 325

1. Number of classes.
2. In the previous edition, religious schools were included.
3. Including higher teacher training.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Higher							
Teacher training	Teacher training colleges, public	1957/58	45	884	447	8 447	5 497
	Teacher training colleges, private	1957/58	50	489	326	3 949	3 772
	Total	**1957/58**	**95**	**1 373**	**773**	**12 396**	**9 269**
	„	1956/57	[4] ...	[4] ...	[4] ...	[4] ...	[4] ...
	„	1955/56	[4] ...	[4] ...	[4] ...	[4] ...	[4] ...
	„	1954/55	[4] ...	[4] ...	[4] ...	[4] ...	[4] ...
	„	1953/54	[4] ...	[4] ...	[4] ...	[4] ...	[4] ...
General and technical	Universities and colleges, public	1957/58	[5]78	2 012	166	9 139	1 417
	Universities and colleges, private	1957/58	[5]50	1 247	82	6 002	747
	Total	**1957/58**	**[5]128**	**3 259**	**248**	**15 141**	**2 164**
	„	1956/57	[5]133	3 158	255	14 673	2 666
	„	1955/56	[5]112	2 645	153	13 284	2 205
	„	1954/55	[5]106	2 449	155	11 996	1 869
	„	1953/54	[5]99	2 236	112	11 619	1 451
Special	Schools for abnormal children, public	1957/58	5	25	16	580	273
	Schools for abnormal children, private	1957/58	2	39	23	426	262
	Total	**1957/58**	**7**	**64**	**39**	**1 006**	**535**
	„	1956/57	13	68	42	1 343	764
	„	1955/56	...	*58	*38	1 022	586
	„	1954/55	4	49	35	820	409
	„	1953/54	6	28	15	726	445
Adult[6]	Night schools, public	1957/58	251	343	130	11 845	3 090
	Night schools, private	1957/58	13	40	11	1 044	194
	Total	**1957/58**	**264**	**383**	**141**	**12 889**	**3 284**
	„	1956/57	321	534	183	17 186	4 983
	„	1955/56	323	529	158	16 563	4 410
	„	1954/55	289	438	119	15 590	3 285
	„	1953/54	276	402	115	14 579	3 448

4. Included in secondary teacher training.
5. Number of faculties.
6. Not including *escuelas radiofónicas* (schools giving educational courses by radio).

2. TRENDS IN SECONDARY EDUCATION, 1935–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training [1]				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1935	29 147	40	20 830	47	...	...	[2]54	879	[2]6
1936	31 655	41	20 204	50	...	...			
1937	32 585	43	20 247	54	...	...			
1938	33 730	42	22 260	52	2 633	62			
1939	34 599	40	25 966	52	3 699	69			
1940	33 714	37	25 419	52	4 245	67	69	970	7
1941	34 558	34	24 669	52	4 877	70			
1942	36 171	37	27 973	57	4 800	71			
1943	40 361	36	27 685	52	4 990	73			
1944	40 362	37	27 881	55	5 133	75			
1945	35 807	32	24 663	54	5 075	69	68	1 072	6
1946	45 678	36	24 121	56	6 432	73			
1947	47 161	36	22 490	55	6 026	74			
1948	42 293	39	16 095	56	4 411	84			
1949	48 249	37	7 355	60	2 195	83			
1950	55 884	39	18 547	49	6 099	70	99	1 185	8
1951	64 358	40	25 216	56	7 380	66			
1952	65 157	39	27 333	58	7 829	74			
1953	65 618	39	31 757	58	7 013	71			
1954	69 947	36	33 340	51	7 871	71			
1955	77 447	36	39 675	55	11 802	76	150	1 307	11
1956	93 349	33	42 669	59	14 259	76			
1957	107 627	34	46 537	*58	16 392	77			

1. Including higher teacher training.
2. General and vocational only.

3. EDUCATIONAL FINANCE, 1957 (in pesos)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts	**230 799 538**
Central government	86 689 544
Provincial governments	113 932 003
Local authorities	30 177 991

B. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure		**230 799 538**
Recurring expenditure		211 969 412
For central administration	8 196 769	
Salaries to teachers and other instructional expenditure	177 286 094	
Other recurring expenditure[2]	26 486 549	
Capital expenditure[3]		18 830 126
Educational facilities	16 355 867	
For cultural development	2 474 259	

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**211 969 412**		**100.0**
Central administration		8 196 769		3.9
Instruction		177 286 094		83.6
Pre-primary education	257 185		0.1	
Primary education	92 277 691		43.5	
Secondary education	41 662 042		19.6	
General	19 087 711		9.0	
Vocational	13 189 572		6.2	
Teacher training	9 384 759		4.4	
Higher education	34 722 925		16.4	
Special education	329 620		0.2	
Adult education	8 036 631		3.8	
Other recurring expenditure		26 486 549		12.5
Subsidies and scholarships	8 372 439		4.0	
Cultural development	16 150 555		7.6	
Other, not specified	1 963 555		0.9	

1. Official exchange rate: 1 peso = 0.513 U.S. dollar.
2. Includes subsidies, scholarships and cultural development.
3. Includes expenditure by the Ministry of Public Works.

COSTA RICA

THE EDUCATIONAL SYSTEM

Part VII of the 1949 Constitution, relating to education and culture, contains the following Articles:

Article 77. Public education shall be organized as an integral process correlated in its various phases, from the pre-primary to the university stage.

Article 78. Primary education shall be compulsory and, together with pre-primary and secondary education, shall be free of charge, the cost being borne by the State.

The State shall facilitate the pursuit of higher studies in the case of persons of inadequate financial means. The Ministry of Education shall award the requisite scholarships and grants through such organs as the law shall prescribe.

Article 79. Freedom of teaching shall be guaranteed. Nevertheless, all educational centres shall be subject to supervision by the State.

Article 80. Private initiative in education shall be encouraged by the State in such manner as the law shall prescribe.

Article 81. Public education shall be under the general direction of a Higher Council, constituted in accordance with the law, under the chairmanship of the Minister of Education.

Article 82. The State shall provide food and clothing for indigent pupils in accordance with the law.

Article 83. The State shall sponsor and organize adult education designed to eradicate illiteracy and provide cultural opportunities for those desirous of improving their intellectual, social and economic situation.

Article 84. The University of Costa Rica is an institution of higher education; it shall be independent in the performance of its tasks and shall have full legal capacity to acquire rights and contract obligations, as well as to determine its own form of organization and management.

Article 85. The State shall endow the University of Costa Rica with its own resources, providing it with the necessary revenue and contributing to its maintenance with a sum equal to at least 10 per cent of the annual budget of the Ministry of Education, to be paid in monthly instalments.

Article 86. The State shall train teachers at special institutions and at the University of Costa Rica.

Article 89. The cultural aims of the Republic shall include the protection of its natural beauties, the preservation and development of the nation's historical and artistic heritage, and the support of private initiative for scientific and artistic progress.

Article 67 of Part V of the Constitution reads as follows: 'The State shall ensure the technical and cultural training of the workers'.

Article 121, sub-paragraph (19), Part IX of the Constitution, defines the powers and duties of the Legislative Assembly, and prescribes that the Assembly shall: 'Establish institutions for the teaching and advancement of the arts and sciences and supply them with the necessary income for their maintenance, and, shall in particular, promote the general extension of primary education'. The structure of the Costa Rica school system is shown in the diagram on p. 387.

THE DEVELOPMENT OF SECONDARY EDUCATION

Before 1886 the Costa Rican school system consisted of two institutions which were clearly defined by the laws and which were deeply rooted in the national traditions: the primary school and the Universidad de Santo Tómas de Costa Rica. When a pupil had completed his primary studies he could continue his education at the university, which had two fundamental aims: to provide preparatory courses for adolescents, and university courses proper for those studying for the various professions. At that time, there was no specially organized system of secondary education, with its own study plans and curricula, designed to continue the educational process begun at the primary schools.

When Mauro Fernández became Minister of Education in 1886 he proposed a plan for building a school system which would consist of three successive levels or stages corresponding to the three phases in the development of the young, namely primary education, secondary education and university or vocational education. Each of these stages was to achieve a specific purpose, and the system as a whole, providing the children and the youth of the country with a complete training from kindergarten to university, was to be of such a character as to promote the full development of the human personality.

The result of his efforts was a Public Education Bill, which was promulgated as an Act of the Congress of the Republic in 1886. This law not only laid down the principles by which the Costa Rican school system was to be governed but also the administrative structure of the school system as a whole, from the humblest village school to the *liceos* (secondary schools). The great merit of the Public Education Act of 1886 was to give the Costa Rican schools an orderly and coherent system and to introduce uniformity into its structure, aims and administration. The structure of secondary education (formerly known as *segunda enseñanza*, but now called *enseñanza media*) was of fundamental importance to Costa Rica, a country consisting of predominantly agricultural communities. The *liceo* was divided into cycles (*ciclos*) and sections (*secciones*) and offered the youth of the country a variety of opportunities. There was a classical section which trained pupils who revealed an aptitude and inclination for the liberal professions and intended to continue their studies at the university, a technical section, a commercial section, and a teacher training section. The *liceo*, in the form just described, corresponded to the country's needs at that time.

In 1887, the Government of the Republic opened the first institution of secondary education to be established in accordance with these principles—the Liceo de Costa Rica. Two others were opened the following year—a girls' school in the capital, the Colegio Superior de Señoritas, and the Instituto de Alajuela in the town of Alajuela. The Colegio de San Luis Gonzaga had been open since 1869 in the town of Cartago. Thus, for many years, two secondary schools existed in the capital and two in the provinces.

The Liceo de Costa Rica, as an educational and social institution, played an important part in the spiritual and civic training of young people, and the reform introduced by Mauro Fernández can be regarded as one of the most important events in the history of Costa Rican democracy. Nevertheless, with the continual growth of the community and the transformation of the economic and social situation there arose a lack of balance and proper adjustment between the theories on which education had been based and the style and methods of teaching on the one hand, and the needs and interests of the country's youth and of the nation on the other.

During recent years, while all other aspects of the national life have progressed at a rapid rate, secondary education has remained stationary and its shortcomings have become increasingly evident from year to year. For some considerable time now, teachers and numerous members of the general public have emphasized the need to make radical changes in its foundations and structure. Successive governments have endeavoured to make a detailed analysis of the causes of the problem, but there has been a lack of technical bodies sufficiently qualified to carry out objective scientific research into the Costa Rican school system as a whole.

From 1948 on, radical changes were made on the occasion

of the promulgation of the 1949 Constitution, which replaced that of 1871. The Constituent Assembly wished to profit by such an important legislative occasion in order to lay down certain standards of a very general nature, with a view to promoting the reform of education, particularly secondary education.

The text included in the 1871 Constitution shows that the prevailing idea at that time was to ensure public primary education for all Costa Rican citizens. Article 77 of the 1949 Constitution, already referred to, goes much further as it emphasizes, in the light of contemporary educational ideas, three aspects of the highest importance: the nature of the educational process, the division of school education into stages, and the urgent need to correlate these stages.

The constitutional principle that education is a process renders it necessary to reform the school system in Costa Rica.

Article 77 of the Constitution called for new legislation to replace the old statutory measures which went back to the Act of 1886. On 14 September 1957, the Legislative Assembly approved the Fundamental Law on Education, the outcome of a long and detailed report prepared by the Higher Council of Education. This Law contains the following Articles relating to secondary education:

Article 14. Secondary education shall comprise all institutions and means designed to meet the general and vocational educational needs of young persons; its aims shall be as follows:

(a) To contribute to the formation of the personality in an environment favourable to the physical, intellectual and moral development of the pupils.
(b) To inculcate in pupils a conception of the world and of life in accordance with the ideals of universal culture and Christian principles.
(c) To develop the powers of reflection so as to enable the pupil to analyse moral, aesthetic and social values, to arrive at a rational solution of the various problems and promote the advancement of culture.
(d) To prepare pupils for civic life and the responsible exercise of freedom, by providing them with an adequate knowledge of the national institutions, as well as of the country's social and economic needs.
(e) To guide adolescents in acquiring general culture, including the knowledge and values which are necessary to enable them to find their way among and understand the problems raised by their social environment.
(f) To develop the abilities and aptitudes of adolescents in order to help them to orientate their studies towards a particular profession or vocational activity.

Article 15. Studies at the secondary level shall last at least 5 years and shall be organized in accordance with a co-ordinated programme comprising: (a) a core course of general culture; and (b) variable and supplementary courses of an exploratory nature, designed mainly to discover aptitudes and to develop interests.

Article 16. With a view to the better co-ordination of study plans and the distribution of subjects, secondary education shall consist of two cycles: (a) A basic general cycle, intended to develop the pupil's personality; during this stage, preference shall be given to general education together with a number of additional subjects and activities designed to discover the pupil's aptitudes and interests. (b) A second cycle, which will continue the general studies begun during the first stage and intensify, in accordance with variable plans, the development of the pupil's needs and interests. The duration of each cycle shall be fixed by the Higher Council of Education, with due regard to the nature and aims of each stage.

Article 17. Technical education shall be provided for those desirous of following secondary vocational courses which are open only to those who have completed their primary education or a part of their secondary education. The duration of such courses and the corresponding study plans shall be fixed by the Higher Council of Education according to the country's needs and the nature of the various trades and professions.

In addition to the technical education mentioned in the preceding paragraph, special apprenticeship courses shall be organized, subject to the approval of the Higher Council of Education.

Article 18. The study plan shall comprise three types of courses and activities: (a) general courses; (b) vocational courses; (c) activities of social, moral and aesthetic value.

Administration

All educational establishments are subordinate to the Ministry of Education. Secondary schools enjoy a considerable measure of independence; the headmasters co-operate closely with the administrative council (municipal or state) established for each school by a government decree.

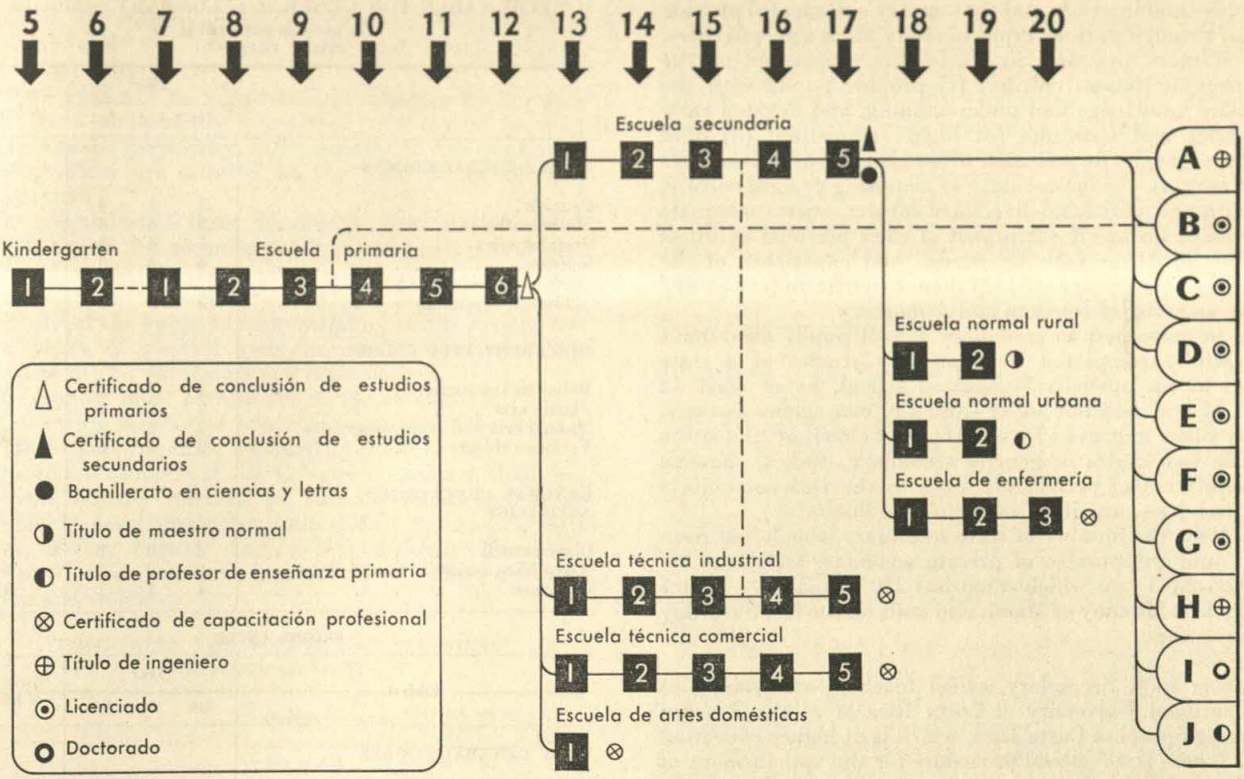
There are also private secondary schools, which unless officially recognized are not authorized to confer the certificate of *bachiller* (school leaving certificate).

The supervision of secondary education is ensured by two inspectors of secondary schools and teacher training schools and an inspector of private secondary schools, all of whom are appointed by the Ministry of Education. The headmasters ensure liaison between the inspectors and teachers.

During the last 10 years, the efforts to reform secondary education have been considerably intensified. The successive governments have signed agreements with certain international organizations with a view to obtaining the services of groups of experts for the purpose of aiding Costa Rican educators to study the country's educational needs and to solve the most urgent problems. Money and trained staff are the only things needed in order to initiate the reform of secondary education.

TYPES OF SECONDARY EDUCATION

The aims of the first cycle of secondary education are: (a) to provide Costa Rican youth with a basic general culture designed to develop their personalities; (b) to promote the discovery and development of the pupil's aptitudes and interests and to satisfy his needs; (c) to promote the training and development of good habits (useful norms of individual and social conduct) and the development of critical thought and the powers of reflection; (d) to provide 'pre-vocational' training which takes



GLOSSARY

escuela de artes domésticas: vocational training school of cooking, dressmaking and homecraft.
escuela de enfermería: vocational training of nursing school; ordinary 3 year course leads to qualification as trained nurse, with a further 6 months' specialization for qualification as midwife.
escuela normal rural: teacher training college for teachers in rural schools.
escuela normal urbana: urban teacher training college.
escuela primaria: primary school.
escuela secundaria: general secondary school.
escuela técnica comercial: vocational secondary school of commerce.
escuela técnica industrial: vocational secondary school preparing for entry into industrial occupations.
kindergarten: pre-primary school.

HIGHER EDUCATION

A. *Agronomía:* agronomy.
B. *Bellas artes y música:* fine arts and music.
C. *Ciencias:* science (physics, chemistry and biology).
D. *Ciencias económicas:* economic and social sciences.
E. *Derecho:* law.
F. *Farmacia:* pharmacy.
G. *Filosofía y letras:* philosophy and letters.
H. *Ingeniería:* engineering (civil).
I. *Odontología:* dentistry.
J. *Pedagogía:* education.

EXAMINATIONS

bachillerato en ciencias y letras (baccalaureate of science and letters): university entrance examination.
certificado de capacitación profesional certificate of vocational competence.
certificado de conclusión de estudios primarios: primary leaving certificate.
certificado de conclusión de estudios secundarios: secondary leaving certificate.
doctorado: doctorate.
licenciado (licentiate): university degree approximately equivalent to bachelor's degree in English-speaking countries.
título de ingeniero: qualification as engineer.
título de maestro normal: qualification as primary teacher without *bachillerato en ciencias y letras* (*q.v.*) or university degree, but having completed course at training college.
título de profesor de enseñanza primaria: qualification as primary teacher with teacher training based on *bachillerato en ciencias y letras*, or university degree.

account of individual differences and facilitates access to other types of secondary education; (e) to develop a civic spirit and an understanding of the fundamental values which constitute the foundation of the cultural, moral and practical life of the Costa Rican community and of the world in general.

As regards the second cycle, the various types of secondary education must be conceived and organized in such a way that they are linked with the first stage and, through flexible study plans, facilitate the transition from one type to another. They are designed to (a) ensure the vocational training of the young, with due regard to their

aptitudes and interests and the country's needs; (b) provide pupils, through various types of study plans and activities, with a more practical and scientific knowledge of the branches of human culture; (c) provide pupils with the requisite knowledge and understanding, and develop their capacities and aptitudes for higher education; (d) offer pupils, through the inclusion of a common core of subjects (*plan común*), the opportunity of acquiring general culture, and, through additional diversified subject courses, adequate experience for the development of their personal abilities; (e) provide them with knowledge and experience of the life of the country so as to help them to a true understanding of the meaning of freedom and democracy.

To be admitted to secondary school pupils must have successfully completed their primary studies at a state school or an officially recognized school, be at least 12 years of age, and not suffer from any contagious diseases. Study plans approved by the Higher Council of Education for the two cycles of general secondary studies, showing the allotment of periods per week to the various subjects and activities, are given in the next column.

In 1960, the number of state secondary schools had risen to 31 and the number of private secondary schools to 29.

The school year which comprises 210 school days, begins on the first Monday of March and ends on the last Saturday of November.

Teaching staff. Secondary school teachers are trained at the National University of Costa Rica or at the Teacher Training School of Costa Rica, which is at higher education level. There is no special procedure for the appointment of teachers. Under the existing laws, students who obtain the *licencia* (diploma) of the Faculty of Letters are, *ipso facto*, state teachers and officials. At a large number of secondary establishments, the teachers are chosen among primary school teachers.

Vocational and technical schools

The Ministry of Education has a Vocational Education Section, attached to the Inspectorate-General of Secondary Education; it is responsible for the technical and administrative direction of vocational secondary schools. This section co-operates with the Higher Council of Education in the organization of the study plans and curricula. It is under the direction of a chief official and is advised by a National Board of Vocational Education, consisting of representatives of the various organizations and institutions—state, independent, private—concerned with this type of education.

Until the end of 1956, vocational education had been provided exclusively at independent or private institutions, which offered excellent opportunities to young persons desirous of acquiring technical skill in the various trades; some of these schools received financial support from the Government. Nevertheless, the Ministry of Education considered it advisable to establish a national system of vocational secondary schools and drew up a plan for the establishment of schools of this type in various parts of the country. In 1959 the following were conducted as a part of the national school system subordinate to the Ministry of Education: the Colegio Vocacional Monseñor

TIME-TABLE FOR GENERAL SECONDARY SCHOOLS
(in periods per week)

FIRST CYCLE

Subject	Year			Total no. of hours
	1st	2nd	3rd	
BASIC GENERAL COURSE				
Spanish	5	4	4	13
Mathematics	5	4	4	13
Social studies	5	4	4	13
Science	4	4	3	11
Foreign language (English or French—optional)	3	3	3	9
DIFFERENTIATED COURSE				
Religious instruction	1	1	1	3
Plastic arts	2	2	2	6
Manual arts and home economics	2	2	2	6
Various subjects	2	5	6	13
GENERAL EDUCATIONAL ACTIVITIES				
Class council	2	2	2	6
Assemblies, committees and clubs	2	2	2	6
Guidance	1	1	1	3

SECOND CYCLE

Subject	Year			Total no. of hours
	4th	5th	6th	
BASIC GENERAL COURSE				
Spanish	4	3	2	9
Social studies	4	3	2	9
Biology and chemistry	4	3	2	9
Mathematics and physics	4	3	2	9
History of Costa Rica	—	2	4	6
Psychology	—	2	4	6
English or French	3 (4)	3 (4)	3 (4)	9 (12)
Music	2	2	1	5
Physical culture and hygiene	2	2	2	6
DIFFERENTIATED COURSE				
Plastic arts	2	2	1	5
Manual arts and home economics	2	2	—	4
Religious and moral instruction	1	1	1	3
Letters				
Literature	4	4	8	16
Spanish	3	3	4	10
Social sciences				
History of civilization	4	4	8	16
General and human geography	3	3	4	10
Mathematics and physics				
Mathematics	4	4	8	16
Physics	3	3	4	10
Biology and chemistry				
Biology (natural sciences)	4	4	8	16
Chemistry	3	3	4	10
GENERAL EDUCATIONAL ACTIVITIES				
Class council	2	2	1	5
Assemblies, committees and clubs	1	1	1	3
Guidance	1	1	1	3

Sanabria, at Desamparados; the Colegio Vocacional, at Heredia; and the Colegio Vocacional Carlos Manuel Vicente, at Golfito.

To be admitted to vocational secondary schools pupils must have successfully completed the 6-year primary course and be physically and mentally fit for vocational training. They are selected on the basis of an entrance examination.

The course lasts 5 years. During the first year, the basic general course for secondary schools is taught, and provision is made for exploring vocational interests and aptitudes. From the second to the fifth year, pupils continue the study of the subjects corresponding to the second and third years of general secondary education, and also specialize in the vocational activities chosen.

The courses must correspond to the community's needs and so every vocational education plan must be flexible enough so that it can be adapted to those needs.

The courses taught at the Colegio Vocacional Monseñor Sanabria, already referred to, may be mentioned as an example: general mechanics, automobile mechanics, electricity, radio, casting and model making, plumbing, carpentry and cabinet-making, metal-plate working, forging and welding.

TIME-TABLE FOR VOCATIONAL SCHOOLS
(in periods per week)

	First cycle (year)			Second cycle (year)		Total
	1st	2nd	3rd	4th	5th	
Basic general course						
Spanish	5	4	4	—	—	13
Mathematics	5	4	4	—	—	13
Social studies	5	4	4	—	—	13
General science	4	4	3	—	—	11
Foreign language	3	3	3	—	—	9
Civics (social laws)	—	—	—	2	2	4
Physical culture	2	2	2	2	2	10
Religious instruction (optional)	2	2	2	1	1	8
Vocational subjects						
Vocational exploration	12	—	—	—	—	12
Technical drawing	2	2	2	4	4	14
Speciality	—	15	16	30	30	91
Total	40	40	40	39	39	198

The private vocational schools conducted in the country are of three different types: technical schools, commercial schools and dressmaking schools.

The Colegio Vocacional de Artes y Oficios (Arts and Crafts School) at Cartago, for instance, is open to primary school pupils. Its study plan includes courses in general culture, co-ordinated with activities at the following workshops: general mechanics (forging, fitting and turning); cabinet-making; typography; tailoring; automobile mechanics and preparatory courses in electricity. During the first year pupils work in the various workshops in turn, and during the second year they specialize in a trade. On completing their studies, they receive a skilled worker's certificate.

Teacher training schools

In addition to the Teacher Training School of Costa Rica, which has been training teachers since 1914, two new state centres have been established, one at Guanacaste (Decree No. 369 of 8 February 1949) and the other at San Ramón (Decree No. 1 of 24 March 1952). These two centres are rural teacher training schools.

Since 1957, persons applying for admission to these schools, which provide a 2-year course of training, must hold the diploma of *Bachiller en Ciencia y Letras*, that is they must have completed the 5-year course in secondary studies.

For the holders of this certificate already engaged in teaching, two special courses were instituted one in the province of Heredia, and the other at Cartago, both being organized by the Teacher Training School of Costa Rica. The course at Heredia is an evening school, while that at Cartago is an extra-mural course. The latter is given during three summer periods, each lasting 8 weeks, and on 72 Saturdays, comprising two separate courses.

The Instituto de Formación Profesional del Magisterio (Teacher Training Institute) was established by Law No. 1963 of October 1955. Its fundamental task is to improve the training of uncertificated teachers, i.e. persons who are employed in teaching in schools but have not been trained at the Escuela Normal (Teacher Training School) or at the former Faculty of Pedagogy. Its study plan covers 6 years, divided into two 3-year stages. During the first stage, the pupil receives a basic general training and the second stage is reserved for teacher training.

In addition to the above-mentioned institutions, there is the School of Education, which depends on the university and which is also devoted to the task of training more and better teachers.

[*Text based on official publications and on a report prepared in April 1960 by Abelardo Bonilla Baldares, Minister of Public Education.*]

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STATISTICS

Population (mid-year 1958 estimate): 1,076,000.
Area: 19,653 square miles; 50,900 square kilometres.
Population density: 55 per square mile; 21 per square kilometre.

Summary of school statistics 1953–57. Total enrolment in all educational institutions from primary schools to university colleges was nearly 204,000 in 1957, representing about 20 per cent of the population. There were, in addition, over 1,500 people attending adult education courses. Of total school enrolment, about 85 per cent were in primary and pre-primary schools, 10 per cent in general secondary schools, over 3 per cent in secondary technical schools, 1 per cent in all teacher training courses and 1 per cent in the university. Girls made up just under half the enrolment in primary and general secondary schools, nearly three-quarters of the enrolment in all teacher training schools, and 40 per cent at the university. The teaching staff at all institutions, including adult education, numbered 8,931 in 1957, of whom 78 per cent were women. The pupil-teacher ratio in primary schools was 23, compared with 25 in 1953. In general secondary schools the ratio was 18 in 1957. Compared with 1953, enrolment had increased by 27 per cent in primary and by 65 per cent in general secondary schools. Enrolment in teacher training courses at the secondary level increased by over 150 per cent between 1955 and 1957 and trebled at higher teacher training colleges between 1953 and 1957. At the University of Costa Rica, enrolment increased by 32 per cent over the period under review. (See Table 2.)

Enrolment trends in general secondary education 1940–57. Between 1940 and 1957, average enrolment in general secondary schools increased almost six-fold. The ratio obtained by relating the enrolment in these schools to the estimated population aged 15–19 years rose from 4 in the 5 years 1940–44 to 17 in the period 1955–57. (See Table 3.)

Examination results in secondary education 1953–57. The number of students awarded the diploma of *Bachiller en Letras y Ciencias* at the end of their general secondary studies increased by 29 per cent (from 786 to 1,016) between 1953–54 and 1957/58. Over half the successful students were girls in both years.

Educational finance, 1957. Expenditure on education by the Central Government amounted to 80,394,230 colons in 1957, representing approximately 78 colons per inhabitant. Of this total, some 9 per cent was for capital expenditure. (See Table 1.)

Source. Costa Rica: Ministry of Public Education, reply to Unesco questionnaire, reports.

1. EDUCATIONAL FINANCE, 1957 (in colons)[1]

A. EXPENDITURE BY PURPOSE

	Amount
Total expenditure[2]	**80 394 230**
Recurring expenditure	73 457 349
For central administration	3 645 832
For salaries to teachers, etc.	53 809 784
Other recurring expenditure	16 001 733
Capital expenditure	6 936 881

1. Official exchange rate: 1 colon = 0.18 U.S. dollar (approx.).
2. Expenditure by the Central Government.

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**73 457 349**		**100.0**
Central administration		3 645 832		5.0
Instruction		53 809 784		73.2
Pre-primary and primary education	46 173 883		62.8	
Secondary education	6 242 249		8.5	
General	5 847 664		8.0	
Vocational	394 585		0.5	
Higher education (teacher training)	1 068 257		1.5	
Special education	325 395		0.4	
Other recurring expenditure		16 001 733		21.8
Caretakers' salaries in primary schools	1 456 906		2.0	
Subsidies to secondary schools	1 977 959		2.7	
Subsidies to cultural and educational institutions	3 464 363		4.7	
University of Costa Rica	6 614 400		9.0	
Miscellaneous	2 488 105		3.4	

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1957	69	106	106	3 837	...
	Kindergartens, private	1957	16	24	24	475	...
	Total	**1957**	**85**	**130**	**130**	**4 312**	**...**
	„	1956	81	127	127	4 256	...
	„ [1]	1955	62	118	118	3 485	...
	„	1954	70	113	113	3 288	...
	„	1953	67	106	106	3 203	...
Primary	Primary schools, public	1957	1 381	6 793	5 417	160 226	76 974
	Primary schools, private	1957	80	403	310	7 896	...
	Total	**1957**	**1 461**	**7 196**	**5 727**	**168 122**	**...**
	„	1956	1 404	6 380	...	154 873	75 443
	„	1955	1 365	5 786	4 906	153 898	75 197
	„	1954	1 309	5 550	4 701	140 052	68 385
	„	1953	1 261	5 305	4 493	131 907	...
Secondary							
General	Secondary schools, public	1957	26	743	359	14 085	6 849
	Secondary schools, private	1957	21	336	160	5 349	2 570
	Total	**1957**	**47**	**1 079**	**519**	**19 434**	**9 419**
	„	1956	49	1 055	508	16 612	8 208
	„	1955	50	...	...	15 166	7 350
	„	1954	47	...	...	13 800	6 852
	„	1953	46	...	...	11 791	5 835
Vocational	Technical schools, public	1957	3	17	...	374	231
	Commercial schools, private	1957	13	111	47	5 618	3 150
	Technical schools, private	1957	15	128	...	1 039	361
	Total	**1957**	**31**	**256**	**70**	**7 031**	**3 742**
	„	1956	13	...	...	2 999	1 148
	„	1955	...	...	...	...	...
	„	1954	...	...	...	...	...
	„	1953	...	...	...	...	...
Teacher training	Teacher training institute [2], public						
	Total	**1957**	**1**	**73**	**37**	**1 333**	**928**
	„	1956	1	51	17	1 052	779
	„	1955	1	25	13	525	378
	„	1954	—	—	—	—	—
	„	1953	—	—	—	—	—
Higher							
Teacher training	Teacher training colleges, public						
	Total [3]	**1957**	**3**	**75**	**36**	**668**	**502**
	„ [3]	1956	3	66	30	475	382
	„ [3]	1955	3	53	22	290	243
	„	1954	3	60	22	266	133
	„	1953	3	40	19	204	163
General and technical	University, public						
	Total [4]	**1957**	**1**	**284**	**38**	**2 474**	**845**
	„ [4]	1956	1	253	30	2 179	808
	„	1955	1	...	...	2 247	823
	„	1954	1	...	...	2 029	...
	„	1953	1	...	...	1 878	...
Special	School for handicapped children						
	Total	**1957**	**1**	**28**	**19**	**305**	**123**
	„	1956	1	27	19	304	126
	„	1955	1	24	16	263	94
	„	1954	1	22	15	243	87
	„	1953	1	20	13	240	86
Adult	Literacy courses	1957	14	14	5	258	...
	Schools for adults	1957	3	21	...	552	...
	Domestic science courses	1957	55	55	55	759	759
	Total	**1957**	**72**	**90**	**...**	**1 569**	**...**
	„	1956	60	79	...	828	...
	„	1955	...	...	...	...	...
	„	1954	...	...	...	...	...
	„	1953	...	...	...	...	...

1. Public schools only.
2. In-service training by correspondence with an 8-week course at the end of each school year.
3. Not including data on the pedagogical school of the university where there were 242 (F. 232) students enrolled in 1957/58, 239 (F. 230) in 1956/57, and 257 (F. ...) in 1955/56.
4. Including data on the attached pedagogical school.

3. TRENDS IN GENERAL SECONDARY EDUCATION, 1940–57

School year	Number of students enrolled by type of education		Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	Total	Per cent female			
1940	2 307	...			
1941	2 750	...			
1942	2 949	...	3	68	*4*
1943	3 207	...			
1944	3 434	...			
1945	3 945	...			
1946	4 267	...			
1947	4 464	...	5	77	*6*
1948	4 856	...			
1949	5 069	...			
1950	6 293	...			
1951	6 977	...			
1952	8 259	...	9	90	*11*
1953	11 791	49			
1954	13 800	50			
1955	15 166	49			
1956	16 612	49	17	101	*17*
1957	19 434	49			

CUBA

EDUCATIONAL POLICY OF THE REVOLUTIONARY GOVERNMENT

Antecedents

At the outset of the Republic, secondary education was organized in a form satisfactory for the period. Subsequently it failed to develop in response to national needs and the progress of educational theory. Despite occasional efforts to plan and reconstruct secondary schooling a large number of defects were evident when the revolutionary Government was established on 1 January 1959. These may be summarized as follows:

1. Irrational distribution of funds for education, by which some establishments were over-endowed and others so poorly that they could not function properly.
2. Proliferation of the *centros oficializados*, that is, private secondary schools recognized as official by the Government.
3. Lack of proper articulation of secondary education, both vertically with primary and higher education and horizontally between the different types of school.
4. Lack of definition of the specific objectives of general and vocational secondary education.
5. Absence of educational and vocational guidance for the young.
6. Lack of an organized system of secondary school inspection for the guidance, certification and assessment of teachers.
7. Inadequate system for assessing and promoting students.
8. Poor textbooks and lack of teaching materials and supplies.
9. Insufficient health and psychological services for the students.
10. Unsatisfactory civic education, since this tended to be treated as a subject to be taught, rather than as an aspect of the educational process.
11. Faulty conception of the teacher-student relationship and an out-of-date approach to questions of discipline.
12. Insufficient preparation of teachers.

Present policy

The Ministry of Education has mapped out its policy along two main lines:

1. Restoration of the principle of correct procedure in technical and administrative matters and consolidation

of public integrity, as re-established by the Revolutionary Government. In pursuing this objective, Law No. 13 of 22 December 1951 was taken as the starting point. Any action since that date in infringement of the law's prescriptions was declared null and void; in addition, a series of ministerial resolutions were issued to restore correct procedure.

2. Execution of a practical four-point programme: (a) extension and improvement of existing educational services; (b) decentralization of the technical and administrative functions of the Ministry of Education; (c) technical reorganization of the Ministry and its services; (d) complete planning of education, with short, average and long-term curricula in keeping with required priorities.

In accordance with this educational policy, the most important measures adopted in connexion with secondary education are as follows.

Ministerial Resolution No. 7700 of February 1959 governs admission through technical aptitude tests, to the teaching profession in general and vocational secondary schools.

Ministerial Resolution No. 7701 of February 1959 and annexed provisions, nullify the many violations of the law governing admission to the teaching profession through technical aptitude tests (Law No. 13 of December 1951) and require compliance with the provisions concerning the minimum number of working hours for teachers (12 hours a week) and the ratio of 1 teacher to 50 pupils.

Laws Nos. 76 and 367 of June 1959, together with their regulations, bring the secondary schools in every province under the immediate management, guidance and supervision of new Provincial Departments of Education, each with its own director and two assistant directors and a body of inspectors and specialists in educational guidance and psychology. This new system is also the first stage in establishing a link-up between the primary and secondary school levels in Cuba.

Law 203 of March 1959, establishes security of tenure for state, provincial and municipal officials and those of autonomous bodies and brings financial benefits on termination into line with the Civil Service Law.

Law No. 290 of April 1959 regulates the procedure for selecting the heads and assistant heads of secondary schools from a short list of three candidates.

Decree No. 1411 of May 1959 governs the procedure for promotions and appointments of secondary school teachers to fill vacancies occurring in such schools, in conformity with Law No. 13 of 1951.

Resolution No. 12026 of March 1959 appoints a commission for the revision of textbooks used in secondary and vocational education, in order to ensure that the latter meet the State's main requirements, such as: appreciation of the country's geographical, historical, civic and aesthetic characteristics; knowledge of major national problems which it is important to impart to children and young people; development of the right trends in education; and above all, inculcation of a civic sense.

Resolution No. 7988 of March 1959 appoints a commission to study the problem of schools operated by foundations, the idea being to determine, through careful appraisal of demographic, academic and sociological factors in general, whether there is any justification for having various types of secondary schools or founding new ones in Cuba.

Resolution No. 16055 of June 1959 sets up commissions to review the objectives and methods of the courses given in general and vocational secondary schools, their minimum content and the textbooks used.

Resolution No. 16877 of June 1959 appoints a commission to study, on the basis of the needs of the various regions and communities, the best way of distributing the technical schools which the Revolutionary Government proposes to establish and the speciality to be assigned to each, according to the particular features of the territory which it is to serve.

Law No. 445 of July 1959 enforces the creation of Provincial Departments of Education, provides for increases in allocations for workshop equipment, library services and general teaching materials, and abolishes the practice of having two budgets (the regular and extraordinary budgets)—a source of corruption through excessive increases in individual posts or public services.

Resolution No. 580 of August 1959 concerns technical aptitude tests for the selection of candidates for vacant posts, or those due to fall vacant, in the administrative services of the Ministry of Education and its Departments, the idea being to ensure that appointments to administrative posts in the Ministry are made in accordance with strict scientific criteria and that the Ministry achieves the highest possible standards of efficiency.

Law No. 559 of September 1959 (law on the adjustment and modernization of the educational system, pending the general reform of education) provides, for the first time in Cuba, for the following measures:

1. Establishment of a Teachers' Council (*Consejo Técnico de Profesores*) for each school, composed of the senior teachers of the various subjects and presided over by the head of the school; the council's duties are to appraise the educational work done in the institution and examine all aspects of its operation systematically.
2. Formation of Student Councils (*Consejos Estudiantiles de Curso*) comprising groups of students and teachers who are responsible for planning and carrying out programmes of civic, social and cultural education related to the problems of the school, the local community and the nation, and taking account of current social, political and economic changes in Cuba.
3. Introduction of a system of semester courses: the academic year is to be divided into two courses of four and a half months, the purpose being to limit the number of subjects studied during each course so that pupils are not overburdened with a quantity of subjects which must be taken for a whole year.
4. Introduction of a new system for judging pupils' progress, based on examinations at regular intervals, class work and a final test of ability to apply knowledge; the object is to purge the educational system of learning for examination purposes.
5. Creation of a body of technical inspectors of secondary and vocational schools to supervise secondary school teachers, give them educational and scientific guidance and estimate the value of their work in their own particular subject or subjects.
6. Establishment by the official state universities of training colleges for secondary school teachers (*escuelas superiores*

del profesorado secundario), who are required to complete a course at these colleges in order to qualify as teachers at the secondary school level.

7. Creation of national registers by subject, for transfers and promotions of secondary school teachers and admission to the secondary school teaching profession.
8. Establishment by the official state universities of pilot secondary schools, annexed to the training colleges for secondary school teachers.
9. Introduction of security of tenure for teachers, subject to revision every five years, with a scale of merits and demerits, in order to prevent incompetent teachers from being appointed for life.

Following this law, Resolution No. 1210 of September 1959 lays down rules for the compilation of the Official Register of Teachers.

Resolution No. 754 of September 1959, announces technical aptitude tests for the selection of candidates to fill vacant teaching posts in secondary and teacher training schools, and replaces the old system of competitive examinations held sporadically (written exercise lasting 4 to 6 hours, oral examination on the curriculum, etc.) by an appraisal of merits based on the candidates's studies and professional experience and on three new types of exercise: a practice class, a written paper of not more than 500 words on aspects of national problems and a 20- to 30-minute interview on the interrelationship between society, culture and the school.

Decree No. 2080 of October 1959 assigns quotas for admission to secondary school teacher training colleges with limited enrolments, as a means of controlling and planning admissions and promotions in accordance with the country's needs.

Resolution No. 4160 of October 1959 announces the establishment of 31 posts of technical inspectors, to be filled through competitive technical aptitude tests, as prescribed under existing legislation.

Resolution No. 15345 of June 1959, with its attendant provisions, appoints a Technical Commission of the Ministry of Education to make surveys and studies with a view to planning and carrying out a general reform of education.

The Commission has submitted a report on its studies and surveys of the country's educational situation, together with corresponding statistical estimates serving as a basis for the 'Educational Message to the People of Cuba' announced by the Minister of Education.

The Technical Commission has also submitted proposals concerning the basis and general pattern of the complete reform of education, and a general plan for the technical reorganization of the Ministry of Education, including the office or board of educational planning.

The membership of this commission has since been broadened to include specialists from the civil service and the teaching profession, the purpose being to define the basis and general outline of the transitional curricula as well as new requirements under the plan for educational reform.

Resolution No. 567 of September 1959 suspends the beginning of studies in public upper primary schools, in order that they may be reorganized and converted into 'basic secondary schools', in accordance with the recommendations of various national and international seminars of educators and government representatives. This resolution announces that a public conference (*información pública y forum*) will be convened prior to the introduction of general educational reform by the draft Organic Law on the national educational system of Cuba (November-December 1959).

[*Text prepared by the Directorate-General of Higher and Secondary Education and the General Superintendence of Secondary Education, Cuba, in November 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 6,466,000.
Area: 44,218 square miles; 114,524 square kilometres.
Population density: 146 per square mile; 56 per square kilometre.

Summary of school statistics, 1953–1956. Total enrolment in educational institutions at all levels was 892,678 students in 1956/57, representing about 14 per cent of the population. There were in addition some 28,000 adults enrolled in night schools. Of the school-going population, nearly 91 per cent were enrolled in pre-primary and primary schools, 4 per cent in general secondary, 2 per cent in vocational and 1 per cent in secondary teacher training schools. The remaining 2 per cent of those enrolled were attending university and higher teacher training courses. Girls made up over 50 per cent of enrolment at pre-primary and primary schools, 42 per cent at general secondary schools, 92 per cent at secondary teacher training courses

and over 50 per cent at the universities. Excluding part-time teachers, numbering over 7,350 in 1956/57, the teaching staff in primary schools was 21,066 of whom 85 per cent were women.

The full-time teaching staff at all levels of education from primary schools to universities was nearly 27,200 in 1956/57, an increase of 16 per cent over 1953/54.

The average pupil-teacher ratio in primary schools (excluding part-time staff) was 35 in 1956/57 against 39 in 1953/54; in general secondary schools the average ratio was slightly higher at 18 than at the beginning of the period under review. Compared with 1953/54, enrolment increased at all major levels of education with the exception of pre-primary schools and university colleges. The increase in enrolment in primary schools was 3 per cent, in general secondary schools 19 per cent, in secondary vocational schools 29 per cent, in teacher training schools 14 per cent. At university level, however, enrolment fell by 17 per cent compared with 1953/54 and by 30 per cent compared with the preceding year, 1955/56. (See Table 2.)

Examination results in secondary education, 1953–56. As shown in Table 3, diplomas are awarded in all aspects of secondary education, from general secondary schools to teacher training courses. The number of certificates awarded in 1956/57 was 6,565 of which 54 per cent to women candidates. The corresponding number of diplomas granted in 1953/54 was 5,863. Diplomas awarded by commercial schools nearly doubled over the period under review, teaching diplomas increased by 14 per cent and technical and trade schools certificates by 24 per cent. There was, however, a decline in the number of students awarded the general secondary schools diploma and the diploma of home economics schools in 1956/57 compared with 1953/54.

Educational finance, 1957/58. Total expenditure on education for the year 1957/58 was 78,552,951 pesos representing approximately 12 pesos per inhabitant. Of the total spent, about 5 per cent was for capital expenditure; the distribution of recurring expenditure by level and type of education is given in Table 1B.

Source. Cuba: Ministry of Education, Department of Census and Statistics, reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1957/58 (in pesos)[1]

A. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**78 552 951**
Recurring expenditure		74 713 324
For central administration	3 920 498	
For instruction[3]		
Salaries to teachers, etc.	61 349 197	
Other instructional expenditure	2 440 878	
Other recurring expenditure	3 062 439	
Higher education (universities)	3 940 312	
Capital expenditure		3 839 627

1. Official exchange rate: 1 peso = 1 U.S. dollar.
2. Budget estimate.
3. Not including higher education.

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**74 713 324**		**100.0**
Central administration		3 920 498		5.2
Instruction		67 730 387		90.7
Pre-primary education	2 020 080		2.7	
Primary education	46 842 192		62.7	
Secondary education	14 927 803		20.0	
General	11 199 607		15.0	
Vocational	2 671 374		3.6	
Teacher training	1 056 822		1.4	
Higher education (universities)	3 940 312		5.3	
Other recurring expenditure, not specified		3 062 439		4.1

2. SUMMARY OF SCHOOL STATISTICS, 1953–56

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-school	Kindergartens, public	1956/57	1 765	1 765	1 765	60 914	31 144
	Kindergartens, private	1956/57	184	184	184	3 322	1 825
	Total	**1956/57**	**1 949**	**1 949**	**1 949**	**64 236**	**32 969**
	,,	1955/56	1 980	1 980	1 980	64 305	32 589
	,,	1954/55	1 950	1 950	1 950	61 825	31 716
	,,	1953/54	1 839	1 839	1 839	65 481	33 358
Primary	Elementary schools, public	1956/57	6 655	13 910	12 257	554 018	280 102
	Higher primary schools, public	1956/57	189	1 136	933	26 389	16 587
	Special primary centres, public	1956/57	335	1 180	1 031	52 892	34 963
	Primary schools, private[1]	1956/57	867	4 840	3 774	113 581	57 924
	Total	**1956/57**	**8 046**	**[2]21 066**	**[2]17 995**	**746 880**	**389 576**
	,,	1955/56	7 905	[2]20 119	[2]17 132	728 087	382 873
	,,	1954/55	7 737	[2]19 679	[2]16 452	678 315	348 546
	,,	1953/54	7 700	[2]18 821	[2]15 741	726 521	375 552
Secondary *General*	Secondary schools, public	1956/57	21	1 244	721	22 323	9 829
	Secondary schools, private	1956/57	150	785	339	13 423	5 098
	Total	**1956/57**	**171**	**2 029**	**1 060**	**35 746**	**14 927**
	,,	1955/56	166	1 963	1 118	46 914	19 420
	,,	1954/55	166	1 909	1 041	27 691	11 046
	,,	1953/54	154	1 769	949	30 076	13 049
Vocational	Technical industrial schools, public	1956/57	3	217	54	853	201
	Aeronautical technical school, public	1956/57	1	13	—	180	—
	Other technical schools, public	1956/57	6	377	179	1 294	708
	Arts and crafts schools, public	1956/57	12	546	162	3 882	742
	Commercial schools, public	1956/57	19	743	276	13 496	6 457
	Total	**1956/57**	**41**	**1 896**	**671**	**19 705**	**8 108**
	,,	1955/56	40	1 860	701	21 063	7 681
	,,	1954/55	37	1 674	652	19 205	7 558
	,,	1953/54	32	1 460	504	15 272	5 716
Teacher training	Teacher training schools, public	1956/57	12	616	421	7 772	7 089
	Schools for kindergarten teachers, public	1956/57	7	252	252	1 088	1 088
	Total	**1956/57**	**19**	**868**	**673**	**8 860**	**8 177**
	,,	1955/56	19	842	647	7 966	7 367
	,,	1954/55	18	799	619	8 193	7 570
	,,	1953/54	18	742	573	7 782	7 176
Higher *General and technical*	Universities, public[3]	1956/57	6	1 069	274	14 470	7 956
	Universities, private	1956/57	2	263	71	2 513	653
	Total	**1956/57**	**8**	**1 332**	**345**	**16 983**	**8 609**
	,,	1955/56	7	975	180	24 273	10 934
	,,	1954/55	7	975	180	22 648	9 989
	,,	1953/54	4	708	86	20 423	8 764
Special	Schools for speech and audio-defective children	1956/57	2	14	14	84	44
	School for the blind	1956/57	1	...	...	80	38
	School for the mentally retarded	1956/57	1	24	20	104	44
	Total	**1956/57**	**4**	**...**	**...**	**268**	**126**
	,,	1955/56	4	62	45	267	144
	,,	1954/55	4	62	45	309	182
	,,	1953/54	4	59	42	282	168
Adult	Night schools						
	Total	**1956/57**	**304**	**1 343**	**899**	**27 965**	**11 957**
	,,	1955/56	314	1 398	934	29 381	12 631
	,,	1954/55	325	1 345	890	29 626	12 792
	,,	1953/54	325	1 315	865	28 618	11 949

1. Including elementary, higher primary and special primary schools.
2. Not including part-time teachers, numbering 7,355 (F. 5,970) in 1956/57.
3. Including higher teacher training.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–56

Type of diploma or certificate granted	School year							
	1953/54		1954/55		1955/56		1956/57	
	Total	Female	Total	Female	Total	Female	Total	Female
General secondary schools diploma	2 717	1 143	2 733	1 031	2 519	1 119	2 625	1 109
Technical and industrial schools diploma	346	86	333	94	360	100	397	121
Trade and crafts schools diploma	125	21	276	44	275	44	185	31
Commercial schools diploma	647	212	918	377	1 095	531	1 240	537
Diploma of home economics schools	613	613	486	486	421	421	333	333
Fine arts schools diplomas	55	41	84	60	72	45	68	36
Others[1]	22	8	29	10	100	29	161	35
Teacher training diploma	1 046	937	1 027	928	1 347	1 097	1 279	1 114
Teacher training diploma for kindergarten	292	292	282	282	336	336	253	253
Physical education diploma	...	...	19	16	6	3	24	18

1. Schools of journalism, for technical inspectors, for aeronautical engineers and technicians.

CZECHOSLOVAKIA

THE EDUCATIONAL SYSTEM

The Constitution of the Czechoslovak Republic, adopted on 9 May 1948, contains the following provisions relating to teaching and education:

'1. Every citizen shall be entitled to education.

'2. The State shall ensure that every person shall receive an education and training commensurate with his aptitudes, bearing in mind the needs of the community.' (Article 12.)

'1. All schools shall be state schools.

'2. Basic school instruction shall be uniform, compulsory and free.' (Article 13.)

'1. Education and teaching shall be in conformity with the findings of scientific research and shall not be at variance with the system of people's democracy as a form of government.

'2. Supreme authority and supervisory powers over education and teaching shall be vested in the State.' (Article 14.)

In Czechoslovakia, teaching is given in Czech or Slovak, or in the languages of the national minorities living in the Republic (Polish, Ukrainian, Hungarian).

All citizens have equal access to education and to all professions and occupations.

All schools are state schools; the establishment of denominational schools is forbidden. Religious instruction is provided throughout the period of compulsory education, but only to children whose parents have made a request to that effect.

Education is under the exclusive control of the Ministry of Public Education and Culture, except in the case of a few technical schools coming under the direction of the Ministries of Public Health and of Agriculture and Forestry. With a view to simplifying public administration, all matters connected with education in the regions and districts have been decentralized and placed under the education and culture sections of the district or regional national committees.

The diagram on page 399 shows the structure of education in Czechoslovakia.

THE DEVELOPMENT OF SECONDARY EDUCATION

When it was established in 1918, the Czechoslovak Republic inherited the school system of the former Austro-Hungarian Empire. Primary schools were open to children between 6 and 11 years of age and upper primary schools to children between 11 and 14. The period of compulsory education

began with the school year following the child's sixth birthday and lasted 8 years. In the absence of an upper primary school in his commune, the child spent this 8-year period at the primary school.

In addition to these fundamental types of schools there were secondary schools which admitted pupils chosen from among primary school pupils who had reached the age of 10. Thus, children admitted to a secondary school did not attend the upper primary school. The task of the secondary schools was to give pupils advanced general instruction and to prepare them for further studies at a school of higher education. For pupils who had completed their period of compulsory education, there were primary teacher training schools, vocational schools providing the necessary instruction for employment in industry, commerce or agriculture, and trade schools.

The fundamental characteristic of the educational system which has just been outlined was that schools could be either public schools administratively subordinate to the central authorities, provinces, districts or communes, or private schools dependent on associations, churches or religious bodies. If a private school satisfied the prescribed conditions, it enjoyed the same rights as the public schools.

During the period between the two world wars, the organization of public education in Czechoslovakia did not undergo any radical change; its characteristic feature was the differentiation introduced into the curricula as soon as pupils reached 11 years of age. Legally, all children had access to secondary education but, in fact, it was usually only children of well-to-do families who could attend a secondary school or an institution of higher education. On the other hand, children of the poorer families attended as a rule only the 8-year primary school during the period of compulsory education, or transferred to the upper primary school (grades 5 to 8) after reaching the age of 11. These studies gave pupils access only to what were regarded as the inferior occupations (e.g. the manual trades). As the State granted only a limited number of scholarships, very few children of needy parents were able to attend higher educational establishments.

On the liberation of the country after World War II, radical changes were made in the organization of public education by the Law of 21 April 1948 which introduced a uniform school in Bohemia, Moravia and Slovakia. This law extended the period of compulsory education from 8 to 9 years (i.e. until children reached the age of 15) and set forth the principles on which education in Czechoslovakia was thenceforth to be organized. It laid down that all children, without distinction as to their origin, social class or religious faith, should receive school education and instruction as follows: between the ages of 6 and 11, at the primary schools (national schools), and between the ages of 11 and 15, at the secondary schools. It was only for pupils over 15 years of age that instruction was differentiated, according as it was given at the compulsory vocational schools (usually providing a 3-year course) or at the selective schools, i.e. vocational schools (generally a 2- or 3-year course), higher vocational schools and 'gymnasiums' (upper secondary schools) (4-year course). Special schools were provided for children suffering from physical, moral or mental deficiency, difficulties of speech, or diseases requiring hospital treatment or special care.

In 1951, the education of adolescents was reorganized for vocational purposes. In the most important branches of the national economy, vocational centres for apprentices were established, their object being to train, within a 2- or 3-year period, a sufficient number of youths over 15 years of age. During their apprenticeship, the pupils of these vocational centres were maintained by the State and received their education and training free of charge.

Owing to the rapid development of the socialist form of society, it proved necessary, in 1953, to reorganize the school system once again, with a view to democratizing education still further, thus ensuring complete secondary instruction for all children. This reorganization was enacted by Law No. 31 of 1953 (School Law), which

GLOSSARY

* Entrants must have completed the 3-year general secondary course.

** Course for skilled workers who have had 3 years' practical experience; leads to qualification as supervisor or foreman, but does not prepare for secondary school leaving certificate.

*** Course for lower grades of employees.

hospodářské školy: vocational secondary and vocational training schools for careers in various branches of the administration of the national economic system.

hudební školy: vocational secondary schools of music.

lesnické školy: vocational secondary and vocational training schools of forestry.

mateřská škola (nursery school): pre-primary school.

mateřská škola pro M.V.Z.P.: pre-primary school for handicapped children.

odborné školy: specialized (i.e. technical and vocational) schools.

odborné učiliště učnovské školy: specialized (technical) schools for apprentices.

osvětové školy (cultural schools): vocational secondary schools training staff for libraries and other cultural institutions.

pedagogické školy: teacher training schools for teachers in nursery schools.

průmyslové školy: vocational secondary schools for industrial occupations.

školy pro mládez vyžad. zulášt. péče: special schools for handicapped children.

sociálně právní školy (social law schools): vocational secondary schools for social welfare workers.

střední školy pro procující: secondary schools for workers.

studium pro pracující na odborných školach: course of general studies for workers attending vocational and technical schools.

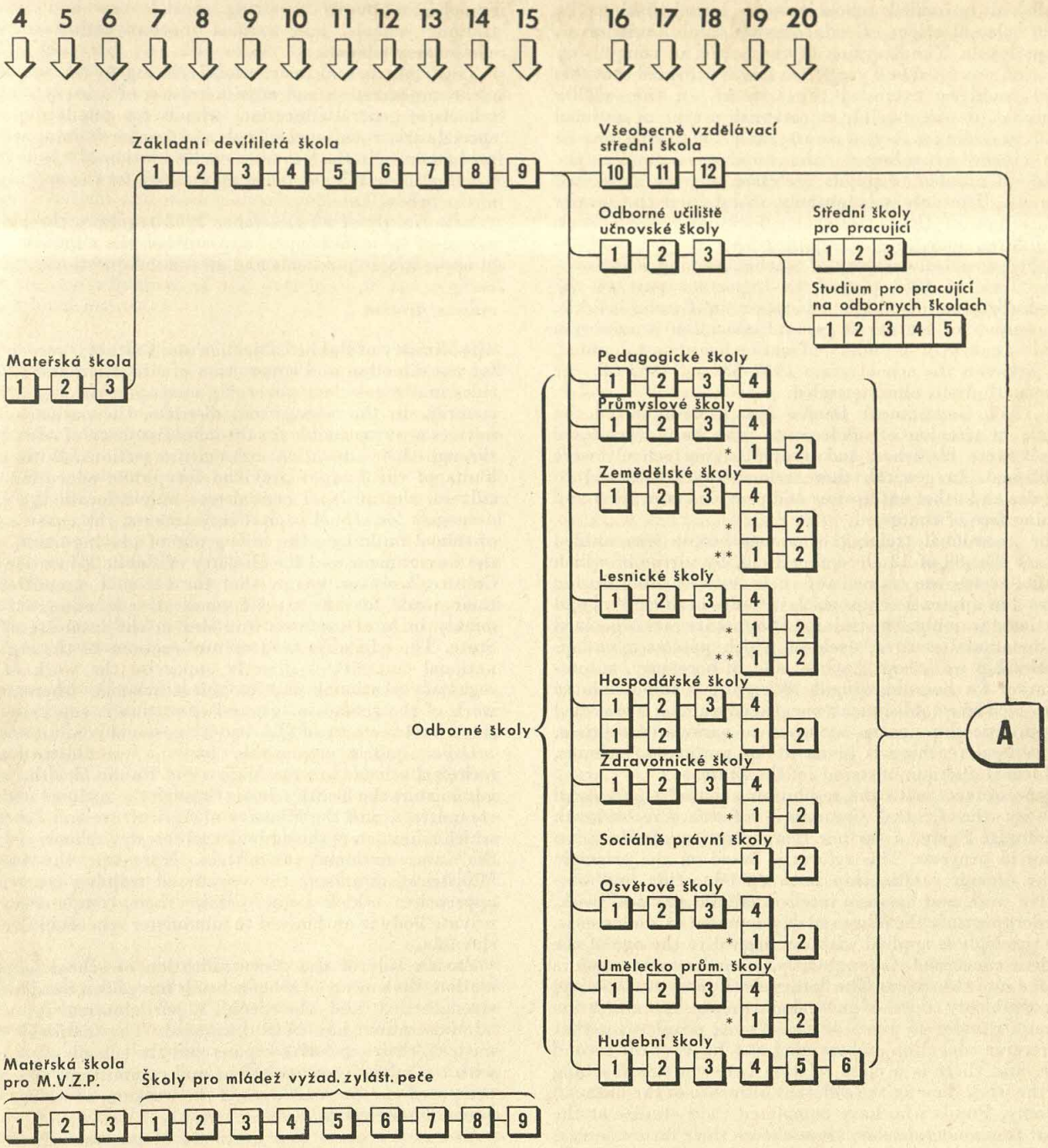
umělecko průmyslové školy: vocational secondary schools of applied art and crafts.

všeobecbě vzdelávací středni škola: general secondary school.

základní devitiletá škola: basic 9-year school, covering the period of compulsory education and organized in a first and second stage (*stupen*).

zdravotnické školy: vocational secondary schools for health workers.

A. Institutions of higher education (day and evening courses).


4 5 6 7 8 9 10 11 12 13 14 15
16 17 18 19 20
Základní devítiletá škola
1 2 3 4 5 6 7 8 9
Všeobecně vzdělávací střední škola
10 11 12
Odborné učiliště učnovské školy
1 2 3
Střední školy pro pracující
1 2 3
Studium pro pracující na odbornych školach
1 2 3 4 5
Mateřská škola
1 2 3
Pedagogické školy
1 2 3 4
Průmyslové školy
1 2 3 4
* 1 2
Zemědělské školy
1 2 3 4
* 1 2
** 1 2
Lesnické školy
1 2 3 4
* 1 2
** 1 2
Hospodářské školy
1 2 3 4
1 2 * 1 2
Zdravotnické školy
1 2 3 4
* 1 2
Sociálně právní školy
1 2
Osvětové školy
1 2 3 4
* 1 2
Umělecko prům. školy
1 2 3 4
* 1 2
Hudební školy
1 2 3 4 5 6
Odborné školy
A
Mateřská škola pro M.V.Z.P.
1 2 3
Školy pro mládež vyžad. zvlášt. peče
1 2 3 4 5 6 7 8 9

established a unified school system by abolishing the former classification of educational establishments at various levels. The duration of the period of compulsory education was fixed at 8 years, but it was provided that this period could be extended to 11 years. In the smaller communes, it was possible to establish a type of national school providing a 5-year course and comprising one or more classes according to the number of pupils; the maximum number of pupils per class was not to exceed 30 or 40. This law substantially maintained the former organization of the vocational schools and the schools for children and youths requiring special care, and established a special category of teacher training schools.

The Law of 1953 played an important part in the democratization of public education in Czechoslovakia. The number of schools of general education providing a complete course of secondary education has almost doubled, and, between the school years 1952–53 and 1957–58, the number of pupils almost tripled.

In 1954, Government Decree No. 19 reorganized the vocational training of adolescents. The basic vocational schools were abolished and apprenticeship schools were established. In general, these schools were attached to factories and other enterprises and provided education and training free of charge.

The vocational training of young people was unified by Law No. 89 of 12 December 1958, by virtue of which all adolescents are trained for their future calling during a period of apprenticeship which includes both general and vocational training. The training of apprentices is organized at educational centres, each of which possesses an apprenticeship workshop, a school and, if necessary, accommodation for boarding pupils. Where it is impossible to set up such an establishment, vocational training is provided at apprenticeship centres attached to various enterprises, and general teaching is given at apprenticeship schools, established and administered by the State.

In accordance with the resolution adopted on 23 April 1959 by the Central Committee of the Czechoslovak Communist Party, a further reorganization of education is now in progress. This reform is based on the principle of the organic relationship between education and productive work and between intellectual and physical work, in order to ensure the all-round development of adolescents. This principle is applied with due regard to the age of the children concerned. Consequently, secondary education is divided into two cycles. The first cycle (9 years of schooling) is a compulsory course of general and polytechnic education for pupils under 15 years of age. Young people over that age receive education and training at schools of the second cycle, and there is a close relation between this teaching and the work done in the different branches of the national economy. Pupils who have completed their studies at the 9-year fundamental schools can choose their future careers according to their individual tastes and aptitudes and with due regard to the needs of economic development.

Legal basis

Law No. 31 of 24 April 1953 (School Law), relating to the school system and teacher training, regulates the organization of schools of general education, vocational schools, schools for pupils requiring special care and teacher training schools, and various matters connected with compulsory education.

The fundamental instructions relating to the establishment, organization and administration of nursery schools, schools of general education, schools for pupils requiring special care, vocational schools and teacher training schools are laid down in the Government Resolution of 9 June 1953, which also contains detailed regulations for the application of the School Law.

Law No. 89 of 12 December 1958 regulates the organization of the education of apprentices, the administration of apprenticeship schools and all related questions.

Administration

The Ministry of Public Education and Culture is responsible for the direction and supervision of education and for the rules and regulations governing education throughout the country. In the regions and districts, the national committees are responsible for the administration of education, through their education and culture sections. Within the limits of the budget provided for public education and culture, the national committees may allocate the sums necessary for school capital investments, the construction of school buildings, the laying out of playing-fields, etc.; the Government and the Ministry of Public Education and Culture, however, ensure that the national committees in their work for the development of education act not merely in local interests but also in the interests of the State. The education and culture sections of the regional national committees directly supervise the work of the regional vocational and technical schools, whereas the work of the schools of general education is supervised by the school sections of the district national committees.

Other bodies responsible for the administration of technical schools are the Ministry of Public Health, which administers the health schools through the regional national committees, and the Ministry of Agriculture and Forestry, which administers the agricultural forestry schools through the same national committees. Moreover, the various Ministries administer the vocational training centres for apprentices which come within their competence. No private body is authorized to administer schools in Czechoslovakia.

As a result of the decentralization of school administration, the powers of schools heads have been considerably strengthened and the people's participation in school administration has been increased. The national committees, their executive organs and the schools co-operate with the advisory commissions and committees, which are composed of representatives of the workers, as well as with educational experts.

The study plans and curricula of general schools are drawn up by the National Institute for Educational Research, which depends on the Ministry of Public Education and Culture. The study plans and curricula of vocational and technical schools are prepared by the Institute of Research and Information for Vocational Schools. Highly qualified educational experts and experienced teachers co-operate in this work. After the study plans and curricula have been approved by the Ministry

of Public Education and Culture, they are binding upon the schools concerned.

The following also fall within the competence of the National Institute for Educational Research: the promulgation of educational directives for schools and for institutions for out-of-school education; the preparation and appraisal of school textbooks and teaching aids, including educational films, to be submitted for approval to the Ministry of Public Education and Culture; the study of the physical and mental development of children and youths; the preparation of articles and technical handbooks for teachers and educators; the organization of in-service training courses for teachers, educators and school workers; and the co-ordination of the activities of the regional educational institutes.

Supervision and inspection. Central, regional and district inspectors are responsible for supervising school work and equipment and for attending to the needs of the schools. The competence of the central inspectors of the Ministry of Public Education and Culture extends over the whole territory and covers, in particular, technical inspection. Regional inspectors, attached to the executive organs of the regional national committees are responsible for supervising the vocational schools and schools of general education of their region. The education and culture sections of the councils of the district national committees have district inspectors, who are responsible for superintending all the schools in their districts. The medical officers of the Public Health Department are responsible for the supervision of school health and hygiene.

Finance. All educational expenditure is borne by the State. Appropriations are made each year in the budget of the Ministry of Public Education and Culture, as well as in the budgets of the local, district and regional national committees. Teachers are state civil servants, the rate of their salaries varying according to the type of school in which they teach, their qualifications and their length of service.

Education is free, and some scholarships are available for secondary school pupils. During the school year 1957/58, 18 per cent of general secondary school pupils and 32.3 per cent of technical school pupils received government scholarships.

Buildings and equipment. The reorganization of education in Czechoslovakia, which was decided by the Order of the Central Communist Party's Decree of 23 April 1959, has necessitated an increase in school building as a result of the extension of the period of compulsory education from 8 to 9 years and the closer relations established between education and productive work. The system of separate pavilions, specially designed according to the purpose for which they are required, has been adopted as best suited to the needs of the new education.

In general, school buildings are constructed in accordance with standard plans, drawn up in co-operation with architects, educators and medical advisors.

Each school is responsible for procuring the equipment it needs. The funds for that purpose are assigned by the local, district or regional national committees, according to the type of school.

School building plans make the following provision for each school: ordinary classrooms (approximately 29½ ft. by 19½ ft. or 19½ ft. by 11¼ ft.) special classrooms for physics, chemistry and biology (39 ft. by 19½ ft.), each provided with a laboratory (19½ ft. by 11¼ ft.); one or two workshops; administrative premises, including a teachers' library, a pupils' library, a meeting room and from four to eight small rooms for various purposes (including a room for medical examinations); a gymnasium and its accessories; premises for out-of-class activities and recreation; a dining-hall and kitchens; cloak-rooms; caretaker's and driver's lodgings. In certain schools lodgings are provided for the head teacher and, in the new boarding-schools, for the teachers.

School building sites are usually large enough to include a garden, a playground and a playing-field with a running-track.

School welfare services. Nursery schools, national and secondary schools, and schools for children and youths requiring special care are provided with a health service, which is under the direction of a medical officer of the Public Health Department, assisted by a nurse specialized in child medical care. The school doctor carries out his duties at the school itself or in the consulting room of the administrative division under his control. All medical care for pupils is provided free and comprises regular medical inspections, prophylactic measures, treatment of chronic diseases, supervision of treatment given outside the school, anti-epidemic measures, hygienic supervision of the school buildings and the premises devoted to out-of-class activities, medical supervision of the staff, etc. The prophylactic measures include, in particular, dental care.

Schools are provided with canteens, where children may have lunch and, in some cases a morning or afternoon snack. Parents pay only part of the costs, the rest being borne by the State. The parents' contribution varies according to their income, and the number and age of their children. Teachers, also, may have their meals in the school dining-room, part of the costs being borne by the State.

School clubs, which are organically attached to the schools, enable children whose parents go out to work to spend their leisure hours to prepare their homework under the direction of a teacher, etc.

Pupils who do not live at the place where the school is situated are offered boarding accommodation paid for by the State; the parents make only a slight contribution to these costs and, in certain cases, are completely exempt.

TYPES OF SECONDARY EDUCATION

The basis of the Czechoslovak educational system is the compulsory 9-year school. The purpose of this system is to provide all children between 6 and 15 years of age with a complete general and polytechnical training, to prepare them to participate in productive work or to undertake higher studies, to assist them in the choice of a suitable profession and to give them a moral, aesthetic and physical training corresponding to the aims and needs of a communist society.

Young people over 15 years of age receive education and training in schools of the second cycle, which offer various courses combining teaching and productive work.

Complete secondary education is given at secondary schools for workers open to pupils who have completed their studies at a vocational school or an apprenticeship centre, at general secondary schools and at technical schools.

The democratic principle of orienting the young over 15 years of age towards certain specialized branches of education or certain studies guarantees the right of all sections of the population to acquire training of a high educational and social value in the appropriate educational establishments.

In all schools, the school year begins on 1 September and ends on 30 June, except for the terminal classes, in which the courses do not go beyond the end of the first fortnight of June. The first term of the school year, which comprises four terms, ends on 15 November, the second on the last Saturday in January, the third on 15 April and the fourth on 30 June. The holidays are as follows: winter holidays (from 23 December to 2 January), spring holidays (the dates of which are fixed by the Ministry of Public Education and Culture), and summer holidays (from the end of June to 1 September).

There are 6 school days per week and each lesson lasts 45 minutes.

Secondary schools for workers

These schools are designed essentially for young persons who, after completing their 9 years' compulsory schooling, have attended for 2 or 3 years an apprenticeship centre or a vocational school, where they have received specialized training for workers and extended their general and polytechnic knowledge. The degree of importance attached to practical training, on the one hand, and to technical, theoretical, general and polytechnical instruction, on the other, varies at the apprenticeship centres and vocational schools according to the trade taught.

The secondary schools for workers provide their pupils with complete secondary education and develop the vocational instruction they have already acquired; they also enable the pupils to acquire new qualifications and offer them the possibility of acceding to higher education. The courses which are provided by these schools and which usually last 3 years, are in the nature of evening courses, small group courses or correspondence courses. The organization and duration of the studies depend on the students' working conditions and on the general and technical training they have already received.

These secondary schools for workers are intended mainly to teach subjects that are related to a general and polytechnical education. They are organized at large enterprises or by national committees, and in all matters connected with teaching they are subject to the control of the Ministry of Public Education and Culture.

Courses for workers, particularly evening classes, are also being considerably extended in the technical schools. These courses, amounting to 15 hours a week, are given after working hours. The correspondence courses have not progressed to the same extent, the pupils following them study by themselves and have only to consult teachers every second week, each fortnightly consultation totalling 8 hours. The evening and correspondence courses last 5 years and are divided into two cycles. Pupils who successfully complete the first cycle are qualified to occupy technical and economic posts or, perhaps, some other specialized and subordinate position, while those who complete the 5-year course can present themselves for the school leaving examination. Employers are bound to grant facilities to all pupils who attend technical schools and schools of general education while in employment. One of the advantages most appreciated by these pupils is 4 hours' leave with pay every week until the conclusion of their studies.

General secondary schools

These schools, in which the duration of the attendance is 3 years (tenth to the twelfth years of schooling), also provide a complete secondary education; usually, each of these schools is organized as part of a 12-year school. In addition to complete secondary education (general and polytechnical), the pupils receive the elementary special training necessary for work in a particular branch of the national economy or a cultural occupation.

One of the main tasks of the 12-year schools is to prepare pupils for studies at an institution of higher education. Further, on leaving a 12-year school pupils can rapidly acquire the training required for the average technical post by following special technical courses; they can also be admitted to special technical courses organized at various enterprises or begin work immediately in certain branches of the national economy or cultural occupations.

The teaching at the 12-year schools is organically related to the pupils' productive work at industrial enterprises or on farms. For that purpose, a new subject has been included in the curricula, namely the 'bases of productive work'. In the teaching of this subject, the relation between theoretical and practical work and the alternation of the theoretical with the practical exercises, adapted to suit local conditions, are designed to promote the harmonious all-round development of the pupils.

The 10th class of the 12-year secondary schools is open to pupils who have successfully concluded their 9th year of compulsory schooling and who have been recommended by the school which they are attending or by the enterprise where they are working. A commission, presided over by the school head and consisting of representatives of the district national committee and of two of the school's teachers, decides whether candidates are to be admitted to the 'selective classes'. In doing so, the commission makes sure that the social composition of the group of young people thus admitted corresponds to the social composition of the Czechoslovak community and that due regard is paid to the importance of the working classes and their role in the State.

The following table shows the distribution of the weekly teaching hours among the various subjects included in the curriculum of the 10th-, 11th- and 12th-year classes of the 12-year secondary schools.

The practical work is done at the productive enterprises during the holidays, in accordance with the directives of the Ministry of Public Education and Culture.

TIME-TABLE FOR GENERAL SECONDARY SCHOOLS
(in periods per week)

Subject	Year		
	10	11	12
Compulsory subjects			
Mother tongue and literature	3	3	3
Russian language and literature	2	2	2
Another modern language	3	3	3
History	2	2	2
Geography	2	2	—
Mathematics	4	3	4
Physics	2	2	2
Chemistry	2	2	2
Biology	2	2	1
Physical culture	2	2	2
Bases of productive work	10	11	12
Alternative subjects[1]			
Descriptive geometry	2	2	2
Modern language (conversation)	2	2	2
Optional subjects			
Latin	2	2	2
Music	2	2	2
Art	2	2	2
Sport	2	2	2
Practical courses and activities	2	2	2

1. The pupil must choose one of these subjects.

The marks which are assigned to the pupil for the various subjects at the end of the school year are not an arithmetical mean, but indicate his level of learning, the skill he has shown and the aptitudes he has acquired during the year. These marks are based chiefly on the results of the pupil's last written work, but also take account of the quality of his work throughout the year.

Promotion of a pupil from one class to the next depends on the whole of his work during the year; he can be promoted only if he has not been marked 'poor' in any of the compulsory subjects. If marked 'poor' in any of these subjects, he must sit for an examination in that subject at the beginning of the new school year.

At the end of their 12th year's studies at a general secondary school (or at a technical school), pupils sit for the school written and oral leaving examination. The written examination is on the Czech and Russian languages and the oral examination on four subjects, three of which (Czech, Russian and mathematics), are compulsory. Each candidate chooses the fourth subject from among the following: biology, chemistry, geography, history, and physics. The board of examiners is presided over by a member of the school administration or by the head of another 12-year secondary school.

The 10th-, 11th- and 12th-year courses can also take the form of evening or correspondence courses for workers and there are also out-of-school courses, lasting a year, for those studying for the school leaving examination.

The 10th-, 11th- and 12th-year classes are entrusted to teachers who have been trained at the universities; these teachers complete their training by attending special courses and seminars.

Technical schools

The main purpose of these schools is to train technical workers for service in the national economy, public health, etc., and at the same time provide pupils with the general and polytechnical education they need. The principle of the connexion between education and productive work is also maintained at these schools even if their work is not directed to production.

The duration of the technical school course varies from 2 to 4 years, except at the schools of music, where the course lasts 6 years. Usually, technical schools provide a 4-year course for pupils who have completed their compulsory education. At present, only a small proportion of technical school pupils have already been engaged in productive work, but in about 3 years' time these schools will be open only to pupils who have been employed for at least a year on productive work. On completion of their studies at a technical school pupils sit for the school leaving examination. In the case of pupils who have completed their studies at a 12-year general secondary school, the duration of the technical school course is reduced by 2 years and the work is restricted almost entirely to technical subjects. In that case, the school leaving examination is only in these subjects, since the pupils will have already passed the general secondary school leaving examination.

There are also, at a lower level, schools for supervisors, which provide a 1- or 2-year course for skilled workers who have been employed for several years in agriculture, forestry and the consumer goods industry. In the mechanical construction industry, such training is usually given at the enterprises themselves, as part of the workers' education. Workers who successfully complete their studies at these schools become foremen or obtain subordinate technical posts. The course provided at the schools for supervisors does not qualify pupils for the school leaving certificate nor give them access to higher educational establishments.

The vocational training schools of economic administration, which provide a 2-year course and train their pupils for subordinate posts, are open to pupils who have completed their compulsory education and who have not yet been engaged in productive work. The course provided by these schools does not qualify pupils for the school leaving certificate nor give them access to higher educational establishments.

Young persons who have completed their studies at a technical school usually begin work immediately at an undertaking corresponding to their qualifications. Those who hold the school leaving certificate may continue their studies at a higher educational establishment. The proportion of those who do so is fixed in accordance with national economic needs. Particularly gifted pupils of schools of music are trained so as to enable them to study music at higher educational establishments. According to present plans this system of schools is to be extended considerably.

At the technical schools, of which there are several kinds, theoretical technology and general education are taught by teachers who have studied at the universities, hold a university diploma corresponding to the subjects they teach (technical subjects, economics, medicine, etc.) and

have received special training in teaching. They must have undergone a trial period in the practice of the discipline they are required to teach. Teachers employed in the practical training of the pupils must hold the school leaving certificate as well as a diploma of the technical school corresponding to their branch of teaching and in addition they must have received special training in teaching.

Industrial schools. These schools comprise 101 sections grouped in 16 main categories: nuclear technology, geology and geological prospecting, mining, energy, metallurgy, mechanics, electro-mechanics, chemical technology, technology of the food industry, wood and pulp industry, light industries, graphic industries, geodesy, building, transport, communications.

The following table shows the teaching plan of a school training for industrial occupations.

TEACHING PLAN OF A SCHOOL FOR INDUSTRIAL MECHANICS

Subject taught	Number of weekly hours								
	Courses common to the different sections (years)				Courses particular to the different sections				
					Mechanical technology (year)	Chemical industry, food industry, building industry, etc. (years)		Precision and optical instruments (years)	
	1st	2nd	3rd	4th	4th	3rd	4th	3rd	4th
Czech	4	3	3	2	—	—	—	—	—
Russian	2	2	2	2	—	—	—	—	—
History	3	2	—	—	—	—	—	—	—
Political economy	—	—	2	—	—	—	—	—	—
Mathematics	6	4	3	—	—	—	—	—	—
Physics	4	—	—	—	—	—	—	—	—
Chemistry	3	—	—	—	—	—	—	—	—
Electro-technics	—	—	4	—	—	—	—	—	—
Mechanics	—	5	4	—	—	—	—	2	—
Technical drawing	4	3	—	—	—	—	—	—	—
Mechanical parts	—	8	4	—	—	—	—	2	—
Machinery	—	—	5	4	6	3	—	2	3
Technology	2	3	3	2	3	—	—	2	—
Production techniques and productivity	—	—	—	4	12	—	—	—	—
Organization and economy	—	—	—	4	5	—	—	—	—
Laboratory work	—	—	—	4	—	—	—	—	—
Workshop practice	6	4	4	—	—	—	—	—	—
Physical culture	2	2	2	2	—	—	—	—	—
Assembling of machines	—	—	—	—	—	—	10	—	—
Special technology[1]	—	—	—	—	—	2	2	—	—
Optics	—	—	—	—	—	—	—	4	3
Apparatuses, machines and accessories	—	—	—	—	—	—	—	4	10
Total number of hours per week	36	36	36	24	36[2]	36[2]	36[2]	36[2]	36[2]

1. Special technology: chemical technology, technology of glassmaking, technology of ceramics, agricultural technology, technology of architecture, mechanization of construction.
2. Including the courses common to the various sections.

Agricultural schools. They comprise technical schools (4-year course) and schools for agricultural overseers (1- or 2-year course).

Forestry schools. They comprise technical schools (4-year course) and schools for forest supervisors (1-year course).

Economic administration schools. The task of these schools is to train skilled workers for posts in the fields of transport, communications, commerce, international economic relations and food, as well as directors for selected restaurants and hotels, and employees for the economic administration services.

Social law schools. Since the school year 1959/60, these schools have been replaced by 2-year courses open to holders of the 12-year school leaving certificate. They train social workers for all activities relating to public education and culture within the competence of the councils of the national committees, for social insurance, etc.

Schools for assistant medical workers (4-year course). They train nurses, staff for the laboratories of the health services and for dental, pharmaceutical and optical laboratories.

Cultural schools (4-year course). They train employees for libraries and cultural organizations (houses of culture, cultural circles, cultural parks, etc.).

Schools of music (6-year course). The music teacher training schools train directors of popular group performances as well as teachers for the elementary schools of music; the dancing sections train men and women dancers for theatrical and other groups.

Arts and crafts schools (4-year course). These schools train various categories of skilled workers (plastic and decorative arts, artistic finishing of industrial products, graphic arts, etc.).

Teacher training schools

Under the present system of teacher training in Czechoslovakia, only schools which train nursery school teachers are classed as technical secondary schools. The course lasts 4 years and at the end of it students sit for the school leaving examination. These schools are open to students who have completed their compulsory education at the 9-year schools; the teachers employed in these training schools must have obtained a university diploma for teachers of the last three classes of general secondary schools.

The teacher training schools provide future nursery school teachers with a general training as well as with specialized training in the following subjects: mother tongue and literature, Russian language and literature, mathematics, physics, chemistry and mineralogy, biology, geography, history, psychology and logic, pedagogy and the history of pedagogy, hygiene of infants of pre-primary school age, art training (theory and practice), musical training (theory and practice), study of a musical instrument, physical culture (theory and practice), manual work and gardening, methods of teaching the mother tongue, methods of developing teaching knowledge and practice.

Out-of-class activities

The State and the entire community ensure the child's education not only during, but also outside, class hours.

Besides the participation of the schools in the out-of-school education of children and youths, this task is also incumbent on the clubs which have been created at schools of general education and at schools for children requiring special care, on associations of parents and friends of the school, on the Czechoslovak Youth Union and its Organization of Pioneers, as well as on institutions concerned with out-of-school education proper, e.g. the Pioneer and Youth Centres. Further, the Committees of the Revolutionary Trade Union Movement (attached to the various enterprises) concern themselves with youth through their commissions; mention must also be made of the clubs attached to the various enterprises, the state bodies responsible for cultural education and the social organizations such as the Czechoslovak Physical Culture Association, the Czechoslovak Red Cross, the Women's Committees, etc.

It is the Czechoslovak Youth Union and its Organization of Pioneers which do the most for the more informal education of children and young people. In the schools and at the various enterprises the union applies itself to encouraging the young to study assiduously and conscientiously, to employ efficient working methods, to make themselves familiar with the most valuable aspects of the national culture and world culture and to keep themselves in good physical condition by taking an active part in physical culture and sport. At the same time, the union gives its members and young people in general a systematic political training.

The Organization of Pioneers which was founded in 1949, follows the traditions of the proletarian children's organizations which existed before the second world war; at present, its members total almost a million volunteers between 9 and 15 years of age, in addition to children between 6 and 9, known as 'sparks'. The basis of this organization is constituted by groups of pioneers formed at the schools and by sections of pioneers in each class. Within these sections, the children constitute small teams which devote themselves to various activities. Teachers, parents and other experienced workers assist the heads of sections, who are usually members of the Czechoslovak Youth Union.

The Organization of Pioneers encourages the children to devote some of their spare time regularly to work which is of use to the community in general; thus, for instance, they assist in the laying out of the school, town and communal surroundings and of parks and gardens, take part in the harvesting and autumn farm work, etc. A large number of choirs, dance groups, theatrical troupes and marionette companies give performances for the members of the Organization of Pioneers and arouse the children's interest in music, singing, the theatre and the creative principles of popular art. The organization also arranges such cultural and sports activities as open-air holidays, games, excursions, walks, tours, camps, athletic competitions and festivals.

In collaboration with the organization and with the help of the pupils' parents and other workers, the schools offer children the possibility of seeing plays and films, attending concerts, visiting exhibitions, taking part in excursions, in youth gatherings on the occasion of festivals, etc.

Out-of-school institutions, such as the Pioneer and Youth Centres, the Young Naturalists' Centres, the Young Technicians' Centres and the Tourist Centres, give considerable support to the organization. The chief aim of these institutions is to give systematic assistance to the monitors of the pioneers, as well as to teachers, educators and all those concerned with youth, by developing the children's interest and cultivating their natural gifts and talents.

The Revolutionary Trade Union Movement plays an important part in the organization of the children's out-of-school activities. More than four thousand factories support the schools. Through their commissions on mass cultural work and their commissions for work with children, the Committees of the Revolutionary Trade Union Movement (attached to the various enterprises) organize, for the benefit of the children, evening entertainments, theatrical performances or film shows, visits to factories, summer holiday camps, etc.

The school youth clubs, directly attached to the schools of general education, are of special importance. Their activities are laid down by the head of each school, and their main task is to provide occupation and recreation, under the supervision of monitresses, for children who remain on the school premises after school hours while waiting for transport or because their parents are at work. Their educational activities are co-ordinated with those of the school and those of the Organization of Pioneers of the Czechoslovak Youth Union. They offer children opportunities for rest and recreation, help them to prepare their lessons and homework for the following day and enable them to interest themselves in the most varied subjects: natural sciences, technology, art, sports, games, reading, etc. The children are grouped in sections according to their age and work under the direction of a trained educator. In 1958, approximately 150,000 children attended the school clubs.

TRENDS AND PROBLEMS

The reorganization of the educational system in Czechoslovakia, inaugurated by the Order, dated 23 April 1959, of the Central Committee of the Communist Party, is designed to provide the overwhelming majority of the country's young people with complete secondary education from 1970 on.

In order to show that physical work is a means of education and inculcate in young people a proper respect for work, the principles and contents of modern education in Czechoslovakia are based on the organic relationship between education and participation in social life and productive work, according to the child's age and capacities.

The aim of this new system of education is to train young builders of socialism and communism, by giving them instruction not only in the fundamental sciences, but also in the scientific principles of production and its technology and organization, so that they will become quite familiar

with the main branches of production and acquire a certain degree of manual skill, while receiving both a complete general secondary education and polytechnical training. Adolescents will thus have access to higher education and will have the basic technical training necessary for the exercise of activities in various branches of the national economy or of culture.

[*Text prepared by the National Institute for Educational Research, Prague, in July 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 13,470,000.
Area: 49,366 square miles; 127,859 square kilometres.
Population density: 273 per square mile: 105 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, school enrolment (not including foreign students enrolled in institutions of higher education, all students enrolled in evening, extra-mural and correspondence courses, or adults receiving a general or vocational education in such courses) reached a total of 2.5 million pupils, being 19 per cent of the total population. Of these pupils, 10 per cent were enrolled in nursery schools, 77 per cent in primary schools (grades 1 to 8), 3.5 per cent in general secondary schools, 5 per cent in vocational schools, 1 per cent were in teacher training institutions, 2 per cent in institutions of higher education other than teacher training colleges, and 1.5 per cent in special schools for handicapped children. The proportion of girls was 49 per cent in primary education, 57 per cent in general secondary education, 43 per cent in vocational education, 89 per cent in secondary teacher training, and 31 per cent in higher education. The average number of pupils per teacher in primary education was 26. Between 1953 and 1957, enrolment in grades 1–8 increased by 7 per cent, while secondary education altogether increased by 36 per cent. (See Table 2.)

Enrolment trends in secondary education, 1930–57. Between 1930 and 1936 there was a steady increase in enrolment at the secondary level (including grades 5–8 in the general secondary schools). The average total enrolment for 1935–36 was 22 per cent higher than that for the period 1930–34. Between 1947 and 1957, counting only grades 9–11 in the general secondary schools, there was a rapid increase in enrolment under each category, and particularly in teacher training schools. The average total enrolment for the 1955–57 period was almost 50 per cent higher than for

1. EDUCATIONAL FINANCE, 1957 (in thousand crowns)[1]

A. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure		**5 096 703**
Recurring expenditure		4 535 018
For central administration	37 215	
For instruction		
Salaries to teachers, etc.	2 430 495	
Other instructional expenditure	1 021 409	
Other recurring expenditure	1 045 899	
Capital expenditure		561 685
Educational facilities	517 989	
Auxiliary facilities	43 696	

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**4 535 018**		**100.0**
Central administration		37 215		0.8
Instruction		3 451 904		76.1
Pre-primary and primary education	424 833		9.4	
Secondary education	2 433 174		53.6	
General	2 142 244		47.2	
Vocational	248 628		5.5	
Teacher training	42 302		0.9	
Higher education	530 567		11.7	
Adult education	26 994		0.6	
Other education, not specified	36 336		0.8	
Other recurring expenditure		1 045 899		23.1
Board and lodging	754 959		16.7	
Scholarships	223 554		4.9	
Miscellaneous	67 386		1.5	

1. Official exchange rate: 1 crown = 0.14 U.S. dollar (approx.).

the 1947–49 period. For the latest period, the average total enrolment in secondary education represented about 20 per cent of the estimated population 15–19 years old. (See Table 3.)

Educational finance, 1957. In the fiscal year beginning in January 1957, educational expenditure amounted to 5,097 million crowns, averaging 382 crowns per inhabitant. Recurring expenditure was 89 per cent of the total; teachers salaries represented nearly half of the total expenditure. (See Table 1.)

Source. Czechoslovakia: Central Statistical Office, reply to Unesco questionnaire.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools						
	Total	**1957/58**	**6 262**	[1] **15 472**	[1] **15 472**	**255 309**	...
	„	1956/57	6 323	[1] 15 304	[1] 15 304	252 780	...
	„	1955/56	6 310	[1] 14 694	[1] 14 694	236 254	...
	„	1954/55	6 431	[1] 14 464	[1] 14 464	226 784	...
	„	1953/54	6 497	[1] 13 748	[1] 13 748	219 324	...
Primary[2]	National schools	1957/58	9 259				
	Eight-year schools	1957/58	2 833	73 458	...	1 916 660	940 101
	Eleven-year schools	1957/58	413				
	Total	**1957/58**	[3] **12 505**	**73 458**	**...**	**1 916 660**	**940 101**
	„	1956/57	[3] 12 445	69 855	...	1 867 115	915 486
	„	1955/56	[3] 12 378	66 416	...	1 846 598	909 624
	„	1954/55	[3] 12 310	64 617	...	1 801 682	883 794
	„	1953/54	[3] 12 146	62 199	...	1 786 790	875 391
Secondary *General*	Eleven-year schools, grades 9–11						
	Total	**1957/58**	**.**	[4] **5 131**	**...**	**88 410**	**50 246**
	„	1956/57	.	[4] 4 410	...	76 523	41 512
	„	1955/56	.	[4] 3 918	...	69 835	37 077
	„	1954/55	.	[4] 3 356	...	60 976	31 710
	„	1953/54	.	[4] 2 581	...	47 232	23 919
Vocational	Industrial schools	1957/58	183	[4] 4 097	...	62 172	9 903
	Schools of economie administration	1957/58	95	[4] 1 811	...	26 117	22 849
	Agricultural and sylvicultural schools	1957/58	246	[4] 1 799	...	21 518	6 443
	Public health schools	1957/58	78	[4] 824	...	14 901	14 405
	Schools for workers in cultural institutions (*osvětové*)	1957/58	3	[4] 40	...	472	360
	Schools of fine arts and music	1957/58	19	[4] 464	...	2 504	1 111
	Total	**1957/58**	**624**	[4] **9 035**	**...**	**127 684**	**55 071**
	„	1956/57	582	[4] 8 861	...	126 002	55 200
	„	1955/56	534	[4] 8 286	...	123 932	55 221
	„	1954/55	546	[4] 7 545	...	122 045	55 724
	„	1953/54	577	[4] 6 559	...	108 462	49 471
Teacher training	Teacher training schools	1957/58	77	993	295	16 308	14 500
	School of physical culture	1957/58	1	5	...	45	15
	Total	**1957/58**	**78**	**998**	[5] **295**	**16 353**	**14 515**
	„	1956/57	78	1 104	[5] 359	18 335	16 197
	„	1955/56	78	1 036	[5] 333	16 630	14 646
	„	1954/55	76	982	[5] 330	15 798	13 807
	„	1953/54	78	971	[5] 342	15 420	13 242
Higher *Teacher training*	Teacher training colleges	1957/58	12	[6] 887	164	[7] 7 138	[7] 4 600
	Institute of physical culture	1957/58	1	[6] 76	17	[7] 220	[7] 56
	Total	**1957/58**	**13**	[6] **963**	**181**	[7] **7 358**	[7] **4 656**
	„	1956/57	13	[6] 905	156	[7] 6 216	[7] 3 652
	„	1955/56	13	[6] 812	135	[7] 3 892	[7] 1 994
	„	1954/55	13	[6] 889	...	[7] 4 010	[7] 1 802
	„	1953/54	12	[6] 572	...	[7] 3 691	[7] 1 544

1. Including nurses.
2. Data relating to grades 1–8.
3. All primary and general secondary schools (including those for workers).
4. Including teachers in correspondence, evening and extra-mural courses for workers.
5. Not including school of physical culture.
6. Total staff. In 1957/58, there were 147 professors and lecturers in teacher training colleges and 1,486 in general and technical education.
7. Regular students of Czechoslovak nationality only; not including those enrolled in evening, extra-mural and correspondence courses.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Higher [cont.]							
General and technical	Universities	1957/58	7	[6]3 524	[6]644	[7]17 299	[7]7 736
	Technical colleges	1957/58	14	[6]3 772	[6]340	[7]26 573	[7]3 538
	Colleges of fine arts	1957/58	6	[6]314	[6]53	[7]1 138	[7]341
	Total[8]	**1957/58**	**27**	**[6]7 610**	**[6]1 037**	**[7]45 010**	**[7]11 615**
	„ [8]	1956/57	27	[6]7 014	[6]872	[7]45 255	[7]11 124
	„ [8]	1955/56	27	[6]6 331	[6]750	[7]44 642	[7]10 306
	„ [8]	1954/55	27	[6]6 182	...	[7]43 866	[7]9 700
	„ [8]	1953/54	27	[6]6 001	...	[7]43 047	[7]9 362
Special	Schools for handicapped children						
	Total	**1957/58**	**660**	**2 565**	**1 414**	**35 064**	**...**
	„	1956/57	627	2 416	1 311	32 859	...
	„	1955/56	524	2 162	...	30 932	...
	„	1954/55	519	+1 996	1 081	27 569	...
	„	1953/54	459	+1 760	...	23 555	...
Adult	Primary classes for adults	1957/58	78	...	...	1 680	142
	General secondary education[9]	1957/58	[10]4	...	...	6 462	2 455
	Vocational education[9]	1957/58	[10]14	...	...	51 396	11 526
	Secondary teacher training[9]	1957/58	[10]2	...	...	1 471	1 236
	Higher teacher training[9]	1957/58	...	...	...	8 429	3 838
	Higher technical education[9]	1957/58	...	...	...	15 344	2 192
	Total	**1957/58**	**...**	**...**	**...**	**84 782**	**21 389**
	„	1956/57	...	...	...	90 853	...
	„	1955/56	...	...	...	70 509	...
	„	1954/55	...	...	...	56 691	...
	„	1953/54	...	...	...	42 666	...

8. Not including faculties of divinity.
9. Evening courses, extra-mural courses and correspondence courses for workers.
10. Number of separately established schools for workers, but most of the courses for workers are held in regular day schools.

3. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrollment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	32 805	...	58 099	...	7 898	...			
1931	31 172	...	55 658	...	8 731	...			
1932	29 499	...	53 022	...	9 296	...	94	1 180	*8*
1933	28 752	...	51 327	...	9 378	...			
1934	31 455	...	53 616	...	9 505	...			
1935	38 029	...	59 135	...	9 432	...	115	1 199	*10*
1936	46 599	...	65 542	...	10 980	...			
1947	51 108	...	93 161	...	4 553	...			
1948	70 440	...	89 165	...	3 445	...	151	1 025	*15*
1949	57 902	...	81 696	...	1 458	...			
1950	50 471	...	83 303	...	8 857	...			
1951	45 560	...	89 687	...	9 627	...			
1952	40 289	...	95 384	...	10 743	...	160	1 058	*15*
1953	47 232	51	108 699	46	15 420	86			
1954	60 976	52	122 045	46	15 798	87			
1955	69 835	53	123 932	45	16 630	88			
1956	76 523	54	126 002	44	18 335	88	221	1 104	*20*
1957	88 410	57	127 684	43	16 353	89			

1. From 1930 to 1936, grades 5-11; from 1947 to 1957, grades 9-11.

DENMARK

THE EDUCATIONAL SYSTEM

In Denmark 'secondary education', in the sense of education beyond primary schooling for young persons aged from 12 to 18 years, covers three types of education: secondary education proper, of a general nature; further education for youth; and vocational education.

There is no constitutional authority for the provision of such secondary education; the Danish Constitution merely stipulates that all children of compulsory school age, from 7 to 14 years, shall have the right to free education in the public primary schools. In fact, up to the beginning of the twentieth century only a small minority of children and young people received more than elementary schooling. Subsequent social developments, the progress of democracy, and increased specialization and mechanization, have however made life ever more complex—requiring ever higher educational attainments on the part of the young.

Secondary education proper, of a general nature. Schools providing this type of secondary education are at present undergoing reorganization. Two Acts of 7 June 1958, the first amending the Public Education Act of 18 May 1937 and the other on the secondary schools preparing for university entrance (*gymnasier*), have introduced a new educational structure which will gradually replace the one provided under the Secondary Education Act of 24 April 1903 and the Public Education Act of 1937. Hitherto education in urban areas has been based normally on a 4- or 5-year primary school (*grundskole*) (from the age of 7 to 11 or 12) followed by a 3- or 4-year non-examination middle school (*examensfri mellemskole*), or a parallel 4-year examination middle school (*examensmellemskole*) leading to the middle school examination. The latter course is followed by a 1-year *realklasse* concluding with the *realeksamen*; alternatively, after the middle school examination, the pupils can enter a 3-year *gymnasieafdeling* or upper secondary department leading to the *studentereksamen* (which qualifies for university entrance). Instead of middle school plus *realklasse*, the primary school can also be followed in the old system by a 4- or 5-year preliminary school (*praeliminaerskole*); this prepares pupils for the 'general preliminary' examination, which on the whole is equivalent to the *realeksamen*. In rural areas the school system has been as a rule an undivided 7-year school (*landsbyskole*). In such cases an examination school cannot be provided, but sometimes a 2- or 3-year course for the general preliminary examination is set up. According to the new scheme (see diagram on page 411), education both in urban and rural areas is to consist of a 7- or 8-year general school (*hovedskole*) which can have a ninth-year class. In continuation of the seventh-year class, a 3-year *realskole* can be set up, concluding with the *realeksamen*. After the second year of *realskole*, pupils can be admitted to a 3-year *gymnasie* department which concludes with the *studentereksamen* (university entrance).

During the school year 1958/59, first-year middle school classes and first-year preliminary classes were allowed to be formed for the last time according to the Acts hitherto in force. These classes will pass through the school system provided under the old laws. In the school year of 1959/60, sixth-year general school classes will be formed for the first time under the new Acts, seventh-year classes in 1960/61, and so on up the new school ladder until the changeover has been completed.

The 'examination schools' are organized either as (a) middle schools with a *realklasse* ('middle and *real* schools') or preliminary schools (with or without primary school)—*realskoler* according to the new Act, or (b) *gymnasier*, consisting of two sections, a middle school and *realklasse*—*real* section under the new Act—and the *gymnasie* section. They may be run by municipalities, private persons or by the Central Government (except that the latter may run *gymnasier* only).

All schools are under the supervision of the Ministry of Education. However, the local education authorities have considerable influence upon the operation of municipal schools, and principals of private schools are also free within wide limits. On account of the small extent of the country and the homogeneity of the population, a strongly centralized educational system has been practicable. Thus all schools in Denmark, whether state, municipal or private, must meet the same requirements as regards equipment, teaching and examinations.

There are no great problems of language, culture or religion affecting the teaching in schools. The German minority in the region bordering on Germany is allowed to establish German language private examination schools, preparing pupils for the middle school and *real* examinations, with the same rights as Danish schools. Foreign religious denominations are free to establish private examination schools if they comply with the ordinary rules governing the organization of education. However, if such schools enrol children who belong to the Established Church of Denmark, they are required to provide these pupils with religious instruction in conformity with their faith (Lutheran). Pupils in all schools may be excused from attending religious instruction if their parents so desire.

Further education for youth. Further education is a non-compulsory form of instruction under the Ministry of Education. It is open to children and young people who have left school at the termination of compulsory school age or later. Institutions coming under this head are youth schools, evening schools, junior folk high schools, agricultural courses, correspondence schools, certain leisure activities for young people, domestic science colleges, folk high schools and agricultural schools. As shown by their names, some of these schools border upon vocational

education, as the instruction emphasizes a speciality. Municipalities, associations and private organizations may arrange for further education.

Vocational education. Vocational education proper, for children and young people beyond the compulsory school age, comes mainly under the Ministry of Commerce. The two most important groups of vocational schools are the commercial and the technical schools; they are usually private institutions and are operated by trade organizations, civic associations and the like. According to the provisions of the Apprentice Act of 2 October 1956, attendance at the respective vocational schools is compulsory for shop and clerical trainees and for factory and workshop apprentices; apprenticeship contracts must be signed between employers and apprentices under the age of 18, and contain certain conditions prescribed by the Act. In the contract the employers must undertake to give their apprentices practical training and to pay for their tuition at a vocational school.

The diagram on p. 411 shows the Danish educational system as a whole.

THE DEVELOPMENT OF SECONDARY EDUCATION

Already in the Middle Ages there were in Denmark 'learned' schools which prepared pupils for subsequent university studies. Up to the beginning of the nineteenth century they had the character of church schools. The rising forces of democracy looked with distrust upon the learned school, its social background and the way it was run.

The first preliminary school or *realskole* in Denmark was founded in 1787 after a German model, but it was not until the Ordinance of 29 July 1814 on board schools in urban areas that an effective foundation was laid for schools of this type. *Realskoler* were intended for children who, while not needing a particularly academic course, were however destined for work demanding certain educational attainments. In 1881 a final examination was introduced, the General Preliminary examination, which was given definite form through a Royal Ordinance of 1 March 1895.

In April 1903 a Secondary Education Act was promulgated, reforming both the old *realskole* and the learned school. The social significance of the Act was that it linked up secondary education with the elementary education in the public primary school, thus making it possible for a child to climb directly from the first-year primary class to the highest rung of the educational ladder.

The curriculum in the middle school was also brought more into line with that of the public primary school. The middle school supplemented by the *realklasse* was intended from now on to take the place of the preliminary school. However, things did not go quite that way and there are still a few preliminary schools in existence (about fifty).

The Public Education Act of 1937 made the 4-year middle school stage at the municipal middle school plus *realklasse* an integral part of the public primary school, and established the non-examination middle school to run parallel with it. The *gymnasier* which replaced the 'learned' schools were to consist of four middle school classes followed by three *gymnasie* classes, so that education throughout the course of the school should form an integrated whole. As a rule, the *gymnasier* also have a *realklasse*.

The two Acts of 7 June 1958, i.e. the Public Education Act and the *Gymnasie* Act respectively are now reforming the school structure. The background to this reform and the consequences for the organization of secondary education will be discussed in some detail in a later section.

As regards further education, the Public Education Act of 1814 had already provided that young people after confirmation age should be given facilities for keeping up their school attainments; in 1844 was established the first folk high school, a characteristic feature of Danish further education which has meant a great deal in popular enlightenment and character development, particularly for

GLOSSARY

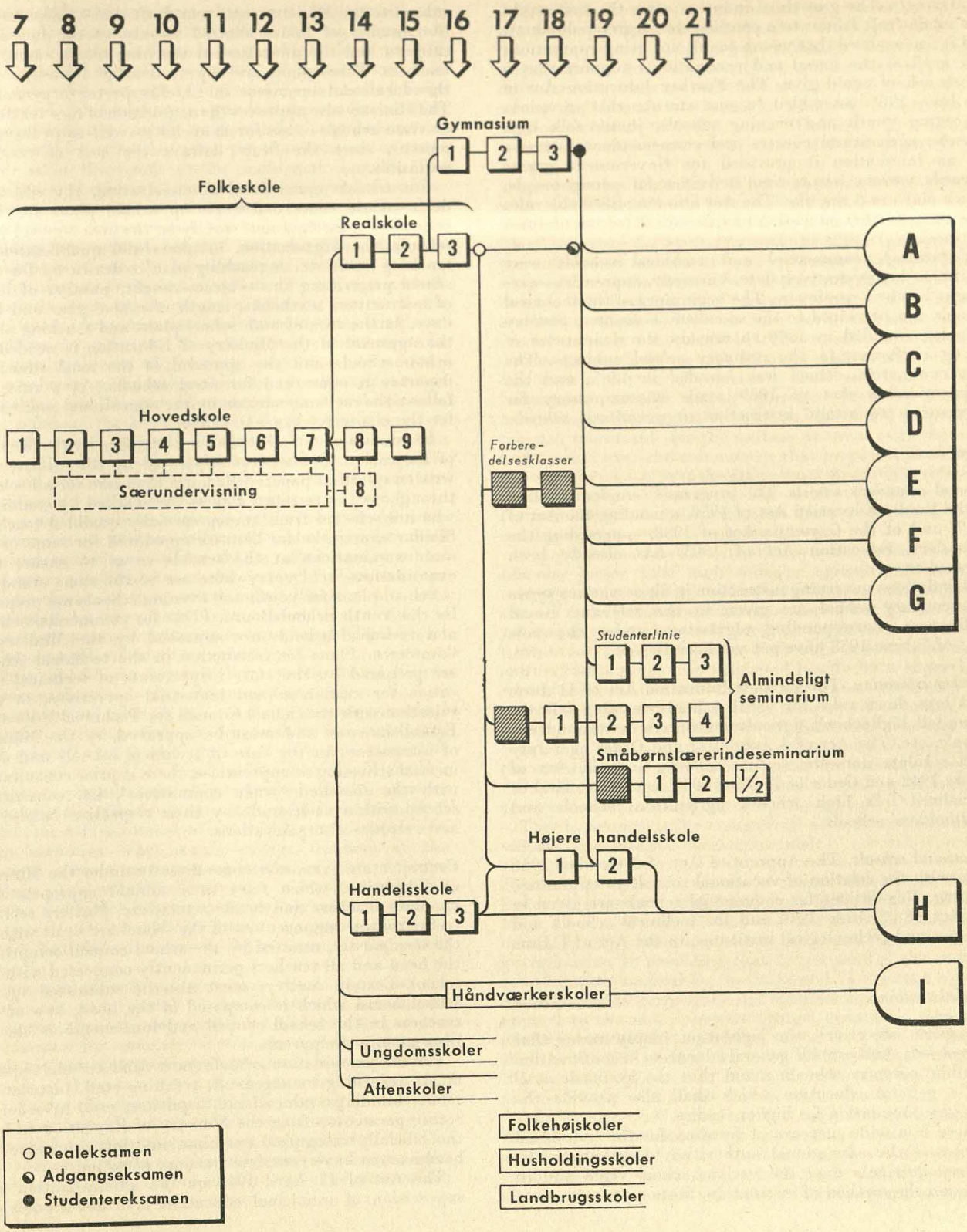
aftenskoler: evening schools for young people providing non-vocational education beyond compulsory school years.
folkeskole: complete course of elementary education covering primary school and lower secondary school.
folkehøjskoler: residential colleges providing courses of general education (folk high schools).
forberedelsesklasse(r): preparatory class(es) for entrance into certain institutions.
gymnasium: upper general secondary school.
handelsskole: lower vocational secondary school of commerce.
håndværkerskoler: part-time vocational training schools for apprentices.
højere handelsskole: upper vocational secondary school of commerce.
hovedskole: primary school.
husholdningsskoler: schools of domestic science for adults.
landbrugsskoler: agricultural schools of further education.
realskole: lower general secondary school.
småbørnslærerindeseminarium: teacher training college for teachers in pre-primary and infant classes.
særundervisning: special schools for physically and mentally handicapped children.
seminarium: teacher training college.
studenterlinie (på seminarium): accelerated course at teacher training college.
ungdomsskoler: schools for young unskilled workers.

POST-SECONDARY EDUCATION

A. *Universitetet:* university.
B. *Polyteknisk-læreanstalt:* technical university.
C. *Tandlægehøjskolen:* college of dentistry.
D. *Farmaceutisk læreanstalt:* college of pharmacy.
E. *Det kgl. akademi for de skønne kunster:* Royal Academy of Fine Arts.
F. *Musikkonservatoriet:* conservatory of music.
G. *Den kgl. veterinær- og landbohøjskole:* Royal Veterinary and Agricultural College.
H. *Handelshøjskolen:* business college.
I. *Teknikum og supplerende teoretisk og praktisk uddannelse:* technical college.

EXAMINATIONS

adgangseksamen: entrance examination.
realeksamen: lower secondary leaving examination.
studentereksamen: matriculation.


7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
Gymnasium
1 2 3
Folkeskole
Realskole
1 2 3
A
B
C
D
E
F
G
Hovedskole
1 2 3 4 5 6 7 8 9
Særundervisning
8
Forbere-
delsesklasser
Studenterlinie
1 2 3
Almindeligt
seminarium
1 2 3 4
Småbørnslærerindeseminarium
1 2 ½
Højere handelsskole
1 2
Handelsskole
1 2 3
H
Håndværkerskoler
I
Ungdomsskoler
Aftenskoler
Folkehøjskoler
Husholdingsskoler
Landbrugsskoler
○ Realeksamen
◔ Adgangseksamen
● Studentereksamen

rural youth. The growth of industry after the first world war made craft labour to a considerable degree redundant, and it was realized that young people not being apprenticed had need of the moral and occupational support that a youth school could give. The Further Education Act of 11 June 1954 assembled in one statute the provisions governing youth and evening schools, junior folk high schools, agricultural courses and correspondence schools. As an innovation it provided for Government grants towards various leisure-time activities for young people, youth clubs and the like. The Act also simplified the rules governing further education and decentralized its administration.

Vocational, commercial and technical schools were established comparatively late. Formerly, apprentices were taught by their employers. The beginnings of the technical schools can be traced to the so-called 'Massmann Sunday schools', founded in 1800 to remedy the deficiencies of young craftsmen in the ordinary school subjects. The first commercial school was founded in 1865, and the Apprenticeship Act of 1889 made it compulsory for apprentices to attend instruction at vocational schools.

Legal basis

General secondary schools. The progressive implementation of the Public Education Act of 1958, amending the Act of 1937, and of the *Gymnasie* Act of 1958, superseding the Secondary Education Act of 1903, has already been referred to.

Regulations governing instruction in these various types of secondary school are given in the relevant Royal Ordinances. Corresponding regulations under the new Acts of 7 June 1958 have not yet been issued.

Further education. The Further Education Act of 11 June 1954 lays down rules for youth schools, evening schools, junior folk high schools, agricultural courses, correspondence schools, etc. The Act of 4 July 1942 and Order of 6 July 1956 regulate domestic science schools, and the Act of 4 July 1942 and Order of 15 June 1955 regulate general or specialized folk high schools, agricultural schools and smallholders' schools.

Vocational schools. The Apprentice Act of 2 October 1956 deals with the relation of vocational schools to apprentice training. Regulations for commercial schools are given in the Act of 23 June 1920 and for technical schools and colleges, and technological institutes, in the Act of 7 June 1958.

Administration

As regards objectives, the legislation simply states that the *realskole* shall provide general education in continuation of public primary schooling and that the *gymnasie* shall give a general education which shall also provide the necessary foundation for higher studies.

There is a wide measure of freedom for the individual school and the educational authorities to distribute the required curricula over the various school years and to decide on the method of instruction. State *gymnasier* must submit to the Ministry each year draft time-tables showing the number of hours allotted weekly to the individual subjects and the allocation of teaching hours among the teachers. These plans are approved after discussion with the educational supervisor, the Chief Inspector for *gymnasier*. The Ministry also approves the acquisition of new textbooks at state schools—this for financial as well as pedagogical reasons, since the State defrays the cost of teaching requisites.

For schools under local administration, the education departments concerned draw up school plans for their respective municipalities, specifying the area served by the schools, the organization, numbers and qualifications of teaching staff, etc. A teaching plan is drawn up for each school prescribing the subjects taught, number of hours of instruction, textbooks, length of school year and holidays. In the case of both school plans and teaching plans, the approval of the Ministry of Education is needed for urban schools and the approval of the local education department concerned for rural schools. As a rule this follows the recommendation by the educational supervisors for the respective types of school.

Examinations for all schools are arranged by the Ministry of Education. Committees appointed by the Ministry set written question papers which are the same for all schools throughout the country. Papers are marked by examiners who are selected from among specially qualified teachers. Similar examiners are likewise appointed for some of the oral examinations at the schools so as to ensure that examinations held everywhere are of the same standard.

School plans for youth and evening schools are prepared by the Youth School Board. Plans for commercial schools and technical schools are approved by the Ministry of Commerce. Plans for instruction in the technical schools are prepared by the state inspectorate of technical education for craftsmen and industrial operatives, in consultation with the School Council for Technical Education Establishments, and must be approved by the Ministry of Commerce. In the case of technical schools and commercial schooling of apprentices, there is prior consultation with the so-called 'trade committees', i.e. committees set up within each trade by their respective employers' and employees' organizations.

Control. State *gymnasier* come directly under the Ministry of Education, which fixes their annual appropriations, appoints teachers and headmasters, etc. Matters relating to the routine management of the school are dealt with by the headmaster, assisted by the school council comprising the head and all teachers permanently connected with the school. Certain matters must also be submitted to the school board which is composed of the head, two of the teachers in the school council and four members elected from among the parents.

Private examination schools must fulfil certain requirements regarding management, teaching staff, instruction, school buildings, educational requisites, etc., in order to secure permission from the Ministry of Education to hold the officially recognized examinations, but otherwise the headmasters have complete freedom of action.

The Act of 12 April 1949 on the administration and supervision of municipal education lays down rules for

the management of municipal schools, including examination schools. A characteristic feature is the important role played by parents and the influence they exert through the municipal agencies concerned. Permission to hold examinations is also granted to municipal schools by the Ministry of Education subject to certain conditions. The Act provides that certain matters are to be decided by the Ministry, but in the main the management of these schools is in the hands of the municipal councils. The immediate supervision is carried out either by the education committee alone for the whole municipality, or by that committee in conjunction with boards of governors for individual or several council schools. The education committee is chosen by the municipal councils, making sure that parents from each school district are represented. The boards of governors consist of three or five members, one of whom is appointed by the education committee and the others by parents. The education committee, and sometimes the board of governors, supervise the teaching in the schools, make suggestions as to school plans and time-tables, etc. The general management of each school is in the hands of the headmasters. To assist him, there is a teachers' council which is entitled to a voice in certain matters. The teachers from all the schools in a town form the joint council, which must be heard on questions concerning the school system as a whole.

Urban municipalities come directly under the Ministry of Education in matters affecting schools, whilst rural municipal councils are under the so-called county school directorates which consist of the County Prefect and four members chosen by the county council. These directorates are assisted by the county educational adviser who is chosen from among teachers who have taught for at least 10 years in public elementary schools.

Youth schools are supervised by youth school boards set up for each municipality and consisting of representatives of the municipal council, the teachers, and organizations interested in youth work. Within each county, a county youth school board is also appointed with representatives of the county council, the Teachers' Association of Denmark and various organizations. These boards have to approve private youth schools or to recommend to municipal councils the establishment of municipal youth schools and leisure activities. The boards engage teachers at the municipal schools and suggest scales of pay, approve buildings, plans of instruction, etc.

Junior and senior folk high schools, agricultural schools, and domestic science colleges have to be approved by the Ministry but their running is the concern of the school principals.

Commercial schools and technical schools are under the management and control of the Ministry of Commerce. In practice they are supervised by the directors of the inspectorates for commercial schools and for technical schools for craftsmen and industrial operatives, respectively. For each of these two types of schools a school council is set up under the chairmanship of the respective directors and consisting of members chosen from commercial, industrial, building trade and teachers' organizations. The school councils make recommendations on matters submitted to them by the chairmen and may themselves bring up questions.

The trade committees mentioned in a previous section act as consultants to the Ministry of Commerce in all questions concerning apprentice training. An Apprenticeship Council is set up representing employers and employees in commerce, industry and the building trades, which also advise the Ministry of Commerce and other Ministries on matters referred to it by these Ministries. The Council generally works to promote the aims of the Apprentice Act.

Supervision and inspection. Whereas ministry officials deal with the administration proper, educational matters come under: the State Adviser on primary education, the Chief Inspector for *gymnasier* and the Chief Inspector for the middle and *real* schools and preliminary schools. There is also an inspector for each of the manual training subjects taught. All these are civil servants, chosen from among teachers or headmasters who have performed outstanding services in their particular fields. The educational inspection service gives advice to the Ministry and to the schools. The work of individual teachers is supervised by the Chief Inspectors, usually acting through their specialized assistants in the respective subjects. The Chief Inspectors are also responsible for the various external examinations and preside over the committees that prepare the written papers. They have to make statements on matters referred to them by the Ministry, such as the appointment of teachers, curricula, dispensations from regulations concerning teaching and examinations, etc.

Supervision of further education, youth schools, evening schools, junior folk high schools, agricultural courses, correspondence schools, leisure activities, senior folk high schools and agricultural schools is carried out by the State Adviser to the Ministry of Education on matters concerning further education for youth. Folk high schools and agricultural schools are also inspected locally by a supervisor who is a resident in the district and who is appointed by the school and approved by the Ministry. A committee of experts assists the Ministry of Education in matters concerning the domestic science colleges, which are under the supervision of a woman inspector for domestic science. As with the folk high schools, local inspection is carried out by a supervisor appointed by the school.

The inspectorates for commercial schools and technical schools have already been mentioned.

Finance. It is purely a matter of chance which places have had state *gymnasier* established and which places municipal ones. An Act of 1959 divided the cost of establishing and operating these schools between the central and the local governments. In providing that 25 per cent of the cost of establishment be paid by the State and 75 per cent by the municipality concerned, the Act confirms a practice already applied to the more recently opened *gymnasier*. The Act further provides that operating expenses of the *gymnasier* shall be divided so that the State defrays 90 per cent of the cost for pupils in municipal *gymnasier* and the municipalities 10 per cent of the cost in state schools.

The Government subsidizes the operation of municipal middle and *real* schools and preliminary schools to the extent of 85 per cent of teachers' salaries. The grant is made through the county school fund, which serves to distribute government subsidies to local organs, to defray

municipal school expenditures and to make grants for other school purposes. In addition to this subsidy towards teachers' salaries, which is also given to municipal non-examination schools, the Government gives a smaller subsidy specially for municipal examination schools. The Government subsidizes the setting up of municipal schools by granting fixed minor sums towards classrooms, gymnasiums, manual training workshops, domestic science kitchens, libraries, etc.

The remuneration and conditions of service of the permanent teaching staff in state schools are laid down by the Act of 7 June 1958 on salaries, pensions, etc., for government servants. Teachers at municipal schools are remunerated according to an Act of the same date on salaries, etc., for public primary school teachers. Teachers' salaries at the municipal *gymnasier* are the same as those at state schools.

Private middle and *real* schools and *gymnasier* receive considerable grants from the Government. Under two bills passed in 1959, private middle and *real* schools in Copenhagen and private *gymnasier* throughout the country are granted operating subsidies of respectively 66⅔ per cent and 80 per cent of the gross hourly operating cost of public *gymnasier* in the Copenhagen municipalities; and private middle and *real* schools outside Copenhagen are granted 85 per cent of teachers' salaries plus a fixed basic subsidy per school. The grants are paid direct to the heads of the schools. Teachers must receive the same salaries as those in municipal examination schools.

Youth and evening schools receive a subsidy from the State and the county school fund of two-thirds of teachers' salaries, while the municipality or a local organization pays the remaining third. The Further Education Act prescribes a minimum amount for teachers' salaries. Premises, equipment and teaching material are provided by the municipality. The necessary educational supplies are available without charge to the pupils, the cost being met by government subsidy. Besides subsidizing teachers' salaries, the State gives grants towards the running of youth boarding schools, up to 80 per cent of the total cost of operating the school. Considerable state subsidies are also given to junior folk high schools, agricultural courses, folk high schools, agricultural schools, etc., when these schools satisfy the conditions laid down in the Act as regards numbers of pupils, etc. As a rule the teachers at these schools receive the same remuneration as teachers at public primary schools in rural areas.

Commercial schools receive a state subsidy which at present amounts to 48 per cent of total expenditure on teachers' salaries and of expenditure on premises and teaching requisites. Technical schools receive an operating subsidy from the State of 60 per cent of the expenditure entitling to subsidy, in respect of premises, remuneration, teaching requisites, etc., supplemented by an amount to cover the cost of workshop or other particularly costly instruction.

For schools of all types, general and vocational, which are private foundations, the grant-in-aid laws make state building loans obtainable on particularly favourable terms (no amortization of principal, and interest at 4 per cent per annum).

Under the Free Education Act of 11 June 1954, education in municipal and state schools became free for all pupils. This also applies to attendance at youth and evening schools. Private examination schools, private further education establishments and advanced vocational schools charge fees but the State has made considerable allocations available to assist pupils without means to attend many of these types of school. Attendance at commercial and technical schools, as required for apprentices under the Apprentice Act, is paid for by their employers.

In 1952 a Youth Education Fund was established by the Government to provide scholarships or 'study loans' to needy, able young people seeking education at officially approved institutions of higher education and vocational schools. In 1958 the scope of the fund was widened so that it was also possible to give grants for travel expenses, board and lodging for pupils preparing for the *studenter-eksamen* in *gymnasier* or approved tutorial courses that prepare for that examination.

Buildings and equipment. There are detailed rules on building sites, insulation of the school building, size of classrooms (floor area to be at least 1.3 square metres per child), gymnasium with dressing room and baths, size of windows (ratio of glass area to floor area to be at least 1 : 8), lighting, heating and ventilation, and sanitary equipment. The children should also have access to manual training workshops and domestic science kitchens. Larger schools should also have reading rooms, rooms for needlework, singing, and school medical and dental services. Examination schools must have rooms for special subjects, namely, for physics and chemistry, natural history, and where possible for geography.

An institution called the State Institute of Building Research has carried out extensive research work on the most suitable form of construction and equipment for school buildings. This has been very valuable for the extensive school building programme that has been carried out lately.

School welfare services. After some municipalities had voluntarily employed school doctors at their schools for a great number of years, an Act was passed in 1946 providing that every state and municipal school under the Ministry of Education should keep a check on the general health of the children through regular medical examinations, carried out by a school doctor. For private schools the same rules broadly apply. Actual medical treatment is outside the scope of the school doctor. The State grants municipal and private schools a subsidy of 50 per cent of the cost of the school doctors. The legislation contains no provision requiring dental treatment for school children, but many municipalities have voluntarily established school dental services. About two-thirds of all children in school have access to school dental treatment. One half of the cost to the municipality can be refunded by the State.

Many municipalities have introduced free school meals. School meals are not limited to children from needy homes but are usually available only to pupils from the first seven classes. However, children in higher classes may also participate when this is considered desirable by the school doctor.

TYPES OF SECONDARY EDUCATION

The various courses open to primary school leavers who wish to continue their general education have already been outlined and will now be described in more detail. Pupils leaving school are able to supplement their education later through Further Education facilities or may seek admittance to one of the vocational schools.

Besides the help and guidance which teachers would naturally give the pupil and the parents as regards the choice of further education and training, the new school laws of 1958 have introduced vocational guidance for pupils in the seventh-, eighth- and ninth-year classes and in the *realskoler* and *gymnasier*. The Youth School Board sees that all children leaving school are given a booklet informing them how to avail themselves of this education, and that young persons are informed about the plans and times for the various youth school courses, etc., in the municipality. Youths seeking apprenticeships are guided by psychological tests, the results of which show whether they are suited for a particular occupation.

The organization of the school year will be dealt with separately in the sections on the various types of schools.

General secondary schools

It was mentioned above that the organization of the general secondary schools properly so called was being progressively modified. The old and the new provisions will now be discussed in greater detail, and some explanation given of the reasons for the change. Under the system based on the Secondary Education Act of 1903 and the Public Education Act of 1937, public primary education in towns consisted as a rule of a 4- or 5-year junior school, followed by a 4-year examination middle school alongside a 3- or 4-year non-examination middle school. Rural primary schools generally consisted of as many classes within the 7 years of compulsory schooling as were suited to the number of children, but a *realskole* section could not be formed at such a school. It was only possible to join on to the seventh-year class a course, lasting 2 or 3 years, to prepare pupils for the general preliminary examination; this form of education and examination could only be coped with by very able pupils. After the fifth year in school, pupils from both town and country could take an entrance test admitting them to urban middle schools. On the results of this test, which originally included all subjects but which became limited later in many places to a test in Danish and arithmetic, the pupils were allocated to the examination middle school or to the non-examination middle school. The examination middle school was concluded with a leaving test, the middle school examination, after which the pupils could either enter the *realklasse* and take the *realeksamen* or go to the *gymnasie* section and take the *studentereksamen* (matriculation). Pupils from the non-examination middle school left it without any examination, but they could obtain a statement from the school on their application, behaviour, etc.

Enrolments in the examination middle school, however, increased out of proportion to the enrolments in the non-examination middle school. This development has had certain unfavourable consequences, one of them being that a considerable number of pupils drop out by the end of the compulsory attendance period at the age of 14, because they have not been able to keep up with the others. At the same time the senior classes in the non-examination section have been regarded as inferior to those in the examination section, and bright pupils from the former have found it difficult to compete with pupils from the examination school when applying for jobs. The large number of pupils leaving school at the end of compulsory school age miss the rounding off of their education which should have been obtained in the senior classes.

The object aimed at in devising a new school structure was therefore to arrive at a system that would create a balance between the two sections, the examination middle school and the non-examination school, and to make it possible for country children to receive the same examination schooling as town children. It was also desired to abolish the test for children in their fifth year at school, it being regarded as unfortunate that such a test for 11 or 12-year-olds should determine their future so decisively. Finally a system was needed which could give a natural rounding off to the curriculum at the time when compulsory school attendance ceases.

Between 1954 and 1958, officials, educators, politicians and representatives of commerce and industry took part in negotiations on these matters and in the two Acts of 7 June 1958, the Danish educational system was given a form which it was felt could remedy the weaknesses in the previous structure. The new system (see diagram on page 411) applies both to town and rural schools so that children in the country are also able to receive secondary education near home.

All pupils in the sixth-year class must be given, in addition to the ordinary school subjects, instruction in one modern language, either English or German. In the seventh-year class those children considered by the school as being able to benefit from it, are taught one more foreign language, English or German, and mathematics.

At the end of the seventh school year, when pupils are 14 years of age, they can either leave school, continue for an eighth and possibly a ninth year at the general school, or be admitted to the 3-year *real* department. In the eighth and ninth school years, teaching in the ordinary primary school subjects is continued with the special view of preparing the pupils for transition to further education of a general or vocational nature. Where local school facilities permit, pupils may be divided into streams directed towards their future occupations, e.g. craftsmen, office workers, housework or the like, though actual vocational training is not given. When pupils leave school at the end of compulsory school age or later, the school is to give them leaving certificates stating their attainments in writing, Danish and arithmetic, a few other subjects and, if desired, a foreign language. Not before the eighth general school class may the school leaving certificates be based on special final tests in the subjects. The curricula of these classes that are now to be formed will be arranged so as to attract also the pupils formerly entering the examination section though intending later to seek apprenticeship in industry, commerce, etc. Employers are being induced to take kindly to these pupils who have received further schooling in the eighth- and ninth-year

classes. In this way it is hoped that a better balance will be created between the classes intended for pupils with practical gifts and the examination classes for more academically minded pupils.

The new Acts have retained the age limit of 14 for compulsory education, but municipalities are required to establish an eighth-year class when more than 10 pupils apply for this voluntary education. Municipalities are also obliged to pay for tuition of pupils in eighth- and ninth-year classes in another municipality if they have not set up such classes themselves.

Pupils wishing to take an examination may be admitted after the seventh school year to the 3-year *real* section provided that they have studied two foreign languages and mathematics in the sixth and seventh school years, and obtain a statement from their teachers that they are fitted for the *realskole* course and capable of completing this education in the normal time. As a rule no entrance test is required for admission to the *real* section but it can be asked for in certain cases.

The 3-year *real* section corresponds as regards period of schooling with the third- and fourth-year middle school classes and the *realklasse* of the former system, and the educational objectives and syllabus are the same. The *real* section stresses instruction in mathematics, physics, natural history and modern languages. It aims at giving all its students an education fitting them for civil life or preparing them for further training at certain institutions of higher education.

The time-table below is for the 4-year middle school plus *realklasse*. No syllabus and time-table have yet been prepared for the new 3-year *real* section. An innovation to meet the growing demand for technicians will be a special technical line in the third year of the new *realskole*, paying particular attention to the mathematics and physics group of subjects. Whilst arithmetic and mathematics were optional subjects for girls in the former *realklasse*, under the new scheme arithmetic will be a compulsory subject for both boys and girls and mathematics optional for both boys and girls in the third-year class (though not in the technical line).

The middle school examination (under the system now being replaced) is held at the completion of the fourth-year middle school class, as a written and oral test in the subjects that have been taught, though the school can choose to omit two subjects. Pupils who pass the middle school examination are admitted to the first-year class of the *gymnasie* or the *realklasse*. However, admission is at the school's discretion and pupils have no claim to enrolment. Many pupils who pass the middle school examination leave school in order to take up employment as apprentices in commerce and industry, etc.

Under the new school system, the examination at this stage is abolished. At the end of the second year of *realskole* a test is given which includes written papers in Danish, arithmetic and mathematics. Entry to the first class of a *gymnasie* is conditional upon a satisfactory result being shown in this test and a statement by the teachers that the pupil is fitted for education in the *gymnasie* section and considered capable of completing the studies there in the normal period of time. Pupils not admitted to the *gymnasie* section continue in the third class of the *realskole* section

TIME-TABLE FOR MIDDLE SCHOOLS
(in periods per week)

Subject	Class											
	1		2		3		4		4 (with Latin)		*Real-klasse*	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Religious knowledge	2	2	2	2	2	2	1	1	—	—	—	—
Danish	5	5	4	4	4	4	5	5	4	4	5	5
English	5	5	3	3	3	3	4	4	4	3	5	5
German	—	—	4	4	4	4	4	4	4	4	4	4
History	2	2	2	2	2	2	2	2	2	2	2	2
Geography	2	2	2	2	2	2	2	2	2	2	2	2
Natural history	2	2	2	2	2	2	2	2	2	2	2	2
Physics	2	2	2	2	2	2	2	2	2	2	2	2
Arithmetic and Mathematics	4	4	5	5	6	6	7	7	6	6	5	5
Writing	2	2	1	1	1	1	—	—	—	—	—	—
Drawing	2	2	1	1	1	1	1	0	—	—	—	—
Needlework	—	2	—	2	—	2	—	2	—	2	—	—
French (optional)	—	—	—	—	—	—	—	—	—	—	4	4
Latin (optional)	—	—	—	—	—	—	—	—	4	4	—	—
	28	30	28	30	29	31	30	31	30	31	31	31
Gymnastics	3	2	3	2	3	3	4	4	4	4	4	4
Singing	2	1	2	1	2	2	0	1	0	1	—	—
Woodwork	2	0	2	0	2	0	2	0	2	0	—	—
Domestic science	0	3	0	3	—	—	—	—	—	—	—	—
Total	35	36	35	36	36	36	36	36	36	36	35	35

and take the *realeksamen*. Appointments in certain civil service branches, post office, telegraphs, customs, state railways, etc., usually require the passing of the *realeksamen*. Pupils with this qualification can attend a 2-year course (*forberedelsesklasser*) to prepare for the *studentereksamen* (matriculation).

The *gymnasie* section under both the old and the new schemes comprises a 3-year course and concludes with the *studentereksamen*. Previously, pupils could choose one of three different lines, classical languages, modern languages or mathematics-science. In recent years the experiment has been made of establishing lines emphasizing other groups of subjects such as music, biology and sociology. Under the new Act no limit is set on the number of lines. The time-table given below is from the old scheme, as curricula and time-tables have not yet been prepared for the *gymnasie* section as organized according to the new Act.

The *studentereksamen* according to the new Act will be much the same as under the previous scheme. It will give admission to the universities and, though sometimes after special supplementary tests, to other institutions of higher education.

In examination schools, an annual test is given at the end of the school year which, in conjunction with the school's general assessment of the pupil, decides whether he will be moved up to a higher class. Several times a year the pupil is given a report book to take home to show parents, in which marks gained and teachers' comments are recorded.

In all state schools and in most municipal and private schools the school year runs from 1 August to 31 July, but there are a few schools where it is from 1 April to

TIME-TABLE FOR 'GYMNASIE' SECTIONS
(in periods per week)

Subject	Classical languages line			Modern languages line			Mathematics-science line		
	1	2	3	1	2	3	1	2	3
Religious knowledge	1	1	1	1	1	1	1	1	1
Danish	4	4	4	4	4	4	4	4	4
French	5	5	4	5	5	4	5	5	4
History	3	3	4	3	3	4	3	3	4
Greek	6	6	6	—	—	—	—	—	—
Latin	6	6	6	4	4	3	—	—	—
Ancient literature and art	—	—	1	1	1	1	1	1	1
English	—	—	—	5	6	5	—	—	—
German	—	—	—	5	4	4	—	—	—
English or German	—	—	—	—	—	—	2	2	—
English and/or German	3	3	—	—	—	—	—	—	—
Mathematics	—	—	—	—	—	—	6	6	6
Physics	—	—	—	—	—	—	6	6	6
Geography with physics	2	2	—	2	2	—	—	—	—
Geography	—	—	—	—	—	—	2	2	—
Natural history	—	—	4	—	—	4	—	—	4
	30	30	30	30	30	30	30	30	30
Physical exercises, singing, etc.	6	6	6	6	6	6	6	6	6

31 March. Holidays include 6 weeks in summer, 1 week in autumn, 2 weeks at Christmas, 1 week at Easter and occasional days, making about 65 weekdays in all. The school week comprises 6 working days and the weekly hours in class must not exceed 36 lessons of 50 minutes each.

Teacher at *gymnasier* usually have a university degree, having passed the *skoleembedseksamen* which qualifies for teaching in secondary schools. This degree course is taken with a major subject and a minor, and usually lasts 7 to 8 years. Before permanent appointment in schools, all teachers must complete a course and pass a test in practical teaching technique, theoretical pedagogics and school hygiene. At first the teachers are engaged temporarily or as substitutes. The lower grade of permanently appointed teacher with a university degree is called *adjunkt*. After 15 years of service an *adjunkt* is promoted to a higher salary grading as *lektor*. The head of a *gymnasier* has the title of *rektor*.

Teachers at municipal middle and *real* schools must have qualified at a teacher training college as primary school teachers. This training is often supplemented by a special course in particular subjects. After a prescribed number of years in service, teachers are promoted to a higher salary grading.

The rest of this section on 'general secondary schools' will be devoted to institutions providing what has been termed 'further education'. Some of these schools come close to being vocational schools but all lay stress on general education.

Youth schools. The aim of these is to consolidate and to extend the teaching of general school subjects for young people between 14 and 18 who have left school, and to give them an understanding of the economic and civic life they are entering upon. Attendance is voluntary, but the legislation prescribes that all municipalities where at least 15 pupils have registered for instruction shall set up a youth school. At least one-third of the minimum number of teaching hours prescribed must be devoted to economic and social subjects, e.g. local or national commerce and industry, civics, history, literature, current affairs or economic geography. For the rest of the course, the school is free to teach whatever it likes, since instruction may comprise general subjects or emphasize purely vocational subjects. Young persons between 14 and 16 years of age are entitled to one afternoon off per week without loss of pay in order to attend a youth school. However, this does not apply to young persons on apprenticeship contracts or otherwise obtaining instruction under the Apprentice Act.

Evening schools. Evening schools must not prepare for any qualifying examination. Vocational subjects may be taught when no such instruction has been provided locally. In contrast to the youth school, which must teach a number of specified subjects, the evening school is not restricted as to what subjects it offers. The following groups of subjects may be taught: (a) cultural and social, e.g. literature, history, religion, civics, psychology, art, current affairs, science; (b) ordinary school subjects, e.g. Danish, arithmetic, writing, foreign languages and domestic science; (c) manual subjects, e.g. woodwork, crafts and needlework; (d) vocational subjects, e.g. book-keeping, typewriting, shorthand, agriculture, horticulture and fishery.

Instruction at the evening schools must be of at least 20 hours' duration per week.

Junior folk high schools. The origin and aims of these schools are the same as those of the folk high schools proper, but the difference is that they are for young people between the ages of 14 and 18. Their purpose is to give instruction that will further the general education and training of the pupils but not prepare for any examination nor train for any definite occupation. The schools are usually residential, offering a summer course of not less than 3 months or a winter course of not less than 5 months, or possibly both. Instruction must be at least 30 hours weekly with particular emphasis on practical subjects. However, more general subjects such as Danish, arithmetic, history and geography may also be taught.

Agricultural courses. These are run by agricultural associations. They occupy an intermediate position between youth schools of a more general character and vocational schools, but are subject on the whole to the rules which apply to the evening schools. The main subjects are animal husbandry, treatment of soil, plant culture, book-keeping, etc. Up to one quarter of the total teaching time—at least 40 hours—can however be used for subjects connected with agriculture or its subsidiary occupations, such as the keeping of poultry, rabbits and bees, and fruit growing. The courses are generally run in winter but may be supplemented by summer courses.

Correspondence schools. To obtain recognition and state subsidy, a school must each year teach at least 50 pupils and receive and correct at least 500 lessons by post.

Leisure activities, etc. Besides the youth schools proper, financial support is given by the central and local government authorities to leisure activities for youth, when certain conditions are fulfilled. Thus this applies to youth clubs and camp schools run in connexion with youth schools. Independent clubs for young people between the ages of 14 and 18 can also obtain grants, subject to certain conditions.

Domestic science schools. Training is both theoretical and practical. Besides subjects such as cookery, cleaning, washing, chemistry, physics, nutrition, household finance and accounts, hygiene and the care of children, general subjects like history and literature, are also taught. Usually two separate courses are held each year of a minimum duration of 5 and 3 months, respectively, though a school with only one course a year may also obtain approval. Only pupils who reach the age of 17 years before the end of a course are counted for the purposes of obtaining a subsidy.

Folk high schools. In contrast to the junior folk high schools described above, the folk high schools are intended for rather older pupils who have to be 18 years of age before the completion of a course. They are private, are nearly all residential, and are chiefly attended by young people from farms. They aim partly at giving their pupils a general education in ordinary school subjects, such as Danish, arithmetic, civics, history, geography, book-keeping, drawing, singing and gymnastics; and partly through lessons, lectures and study groups to help develop character and to give the pupils a deeper understanding of their environment and of their country, fitting them to continue the development of an active mind in their later life. To obtain a state subsidy, a school must offer each year at least one course of 5 months' duration or one of 3 months.

Agricultural schools. Pupils must reach the age of 18 years before the close of their course. Besides instruction in agriculture, more general subjects are usually taught. The purpose of these schools and the prevailing spirit in the teaching are the same as in the folk high schools.

Teachers in the above-mentioned schools of further education have very often been trained as primary school teachers. In fact teachers in primary schools may also teach at youth and evening schools, their hours of instruction at the latter schools being included in the obligatory number of hours at the public primary schools. Teachers at youth schools of a vocational character must naturally have had special training in the subjects they undertake to teach.

Commercial schools

Schools for apprentices. Courses in general theory, usually 3-year, are obligatory for various categories of commercial apprentices. The schools for commercial apprentices have three different curricula: one for prospective shop-assistants, one for articled clerks, and one for prospective correspondents. As an example, the curriculum for articled clerks, who have generally passed the *realeksamen*, comprises: typewriting, English, German, bookkeeping, commercial arithmetic, commercial law, office routine. In 'office routine' the pupils are taught not only commercial correspondence, but also how to fill in and use correctly the documents connected with a business transaction: cheques, bills of exchange, bills of lading, invoices, etc.

According to the law on apprenticeship, attendance at the schools for commercial apprentices is compulsory. There is no freedom of choice among subjects; the pupils are given an all-round training in commercial subjects and do not specialize at this age. Having their practical work to attend to, apprentices take only 6 or 8 lessons a week for 3 years. The course ends with an examination. Compulsory school attendance after 6 p.m. is prohibited.

Evening courses. Besides the obligatory courses for apprentices a number of commercial schools run 1- or 2-year courses in single subjects: English, German, French, typewriting and shorthand, commercial and industrial book-keeping and accounting, business economics and commercial law. These are evening courses, as students, according to the official regulations, are admitted only if they are over 18 years, so that they are usually employed in ordinary daytime jobs in business. (This age limit is inserted in accordance with the provisions of the law on apprenticeship, which concerns young people who are under 18 when they start business careers.) Students taking these evening courses have usually passed the *realeksamen*, and often the Articled Clerks' Final Examination too. The number of weekly lessons is usually 4 to 6, so much homework is required. The courses lead to state-controlled examinations.

Full-time commercial schools. These are of two main types, one leading up to the Commercial Examination, and the other to the Higher Commercial Examination.

Commercial Examination. The course for this examination is usually of 1 year's duration and is organized in three different ways according to the qualifications of the students: (a) for students who have had no special schooling; (b) for students who have been educated to a level equivalent to the middle school examination; and (c) for students who have passed the *realeksamen*. Course (c) comprises Danish (3 periods per week), arithmetic (4), book-keeping and accounting (4), office routine (2), commercial law (2), commercial geography (2), national economics and Danish institutions (3), typewriting (2 or 4), English (6), German (6). The minimum number of periods per week is 34, but course (c) is often augmented by supplementary subjects. The average age of the students is 21, as quite a number of them have served their full apprenticeship and taken the final examination. All three courses lead up to the Commercial Examination, with differences only as far as the foreign languages are concerned.

The Higher Commercial Examination. This course was originally arranged as a 2-year course for young business people who had passed the *realeksamen*, or the *studenter-eksamen*, and served their apprenticeship, and was aimed at preparing students to take up leading positions in

business. This arrangement was later supplemented by 1-year classes for students who have passed the Matriculation examination, and 1-year classes for students who have passed the Commercial Examination, type (c) (including English and German). Whether a student attends the regular 2-year course or one of the special 1-year classes the same examination is taken.

The curriculum of the 2-year course includes: Danish, arithmetic, book-keeping and accounting, office routine, commercial law, commercial geography, universal history, commercial history, Danish institutions and statistics, business economics, English, German, typewriting, and one or more supplementary subjects (French, shorthand, management) are added to bring the total number of weekly periods up to 34.

Some teachers at the commercial schools have qualified themselves for teaching in the non-examination middle schools; others are masters of arts, i.e. qualified to teach in a *gymnasie;* others again, especially those who teach commercial subjects, have taken the diploma or certificate at the Graduate Business School. All take a special examination for commercial teachers which covers business law and economics and the subject in which they are to teach, e.g. book-keeping, commercial arithmetic, etc. They must attend lectures and pass an examination in the methodology of teaching, at the same time attending the lessons of an experienced teacher and doing some teaching themselves under his control and guidance.

Technical schools

Training of apprentices in workshops, factories and the building trades. School instruction consists of the teaching of theory and may also include practical work. Apprenticeships usually last 4 years, but there are some trades with a 2-year apprenticeship. Theoretical instruction at the technical school consists of 600–800 teaching hours distributed over the whole period of apprenticeship. The Apprentice Act provides that the respective trade committees, after consultation with the State Inspectorate of Craft Education, shall decide whether instruction shall be arranged in the daytime or in the evening, or as combined day and evening school. Day teaching must conclude by 6 p.m. and evening school by 8 p.m. The introduction of obligatory daytime instruction is contemplated, to begin in 1964. Instruction at the technical school is usually divided into a preliminary part which is intended to be completed in the first half-year at the school. This includes geometrical drawing, projection and free-hand drawing, and the subjects related to the students' trade such as specialized drawing, lettering, trade technology, and possibly laboratory work, materials, mechanical engineering, arithmetic and Danish, book-keeping. Other optional subjects include literature, history, languages, singing, etc. Apprentices completing the obligatory instruction receive on request a certificate of attendance. In conjunction with study at the technical schools, instruction can be given in special trade schools if these have been set up by the trade concerned. Advanced training can be given at special craft schools (daytime schools, both with or without final examinations), e.g. builders', carpenters', painters' schools, etc.

Training for certain types of technicians. Pupils in the eighth- and ninth-year classes of the primary school can prepare for an entrance test to a training course for certain types of technicians; the test consists of written papers in Danish, arithmetic and mathematics, and oral tests in these subjects, as well as in physics and English. Successful candidates, provided that they are at least 16 years of age, can take a course for technical assistants or one for laboratory assistants and technicians. Pupils who have passed the *realeksamen* do not need to take the test. The training of technical assistants is conducted at the technical schools and comprises one half-year of theoretical instruction followed by one year of practical training at a suitable workshop or factory and finally another half-year of theoretical instruction at the school. The course aims at qualifying students for work as calculators, draughtsmen and managerial assistants in factories and workshops.

The training course for laboratory assistants comprises 24 weeks at the technological institutes. After passing the examination and following 1 year of approved practice, a further 21 weeks of schooling enables the student to sit the examination for laboratory technicians.

Instructors at the technical schools are usually connected with factories, workshops or the building trades in their daily occupations and teach in their spare time, though a number of primary school teachers also teach at the schools. The State Technical Instructors' Course provides training for these teachers.

Other vocational schools

There are also *pre-sea training schools* for young persons between the ages of 15 and 18 who wish to qualify for signing on as junior ordinary seamen. These schools give a general education and elementary practical and theoretical instruction in seamanship.

Pre-sea training schools have been established by the State in three towns under an Act on the Training of Seamen of 7 June 1952. Expenses in connexion with operation and administration of the schools are borne by the Treasury. Every Danish ship liable to registry and of more than 60 tons (gross) in size, fishing vessels excepted, pays an annual contribution towards the operation of the schools of 18 öre per ton. Two private schools have also been opened.

The Director of Nautical Education is responsible for the management of the schools, which are residential. Each course lasts 3 months, this time counting for the 12 months' sea-service required under Danish manning rules for signing on as a junior ordinary seaman.

School fees covering instruction and full board are 375 kroner for a whole course. Deserving and impecunious pupils may be exempted from paying fees either wholly or in part. At each of the schools there is a local board consisting of three members whose task is to assist the school in planning lectures, excursions, sports, etc.

The training of *dairy apprentices*, which does not come under the *Apprentice Act*, is under the Ministry of Agriculture. Practical training is given under an employer for 3½ years, theoretical training at a commercial or technical school, and finally there is a 6 months' theoretical course at a dairy school which is residential as a rule. Instruction

covers 900 hours and includes Danish, arithmetic, civics, dairying, physics and chemistry, mechanical engineering, bacteriology, etc. Two-thirds of the lessons must be devoted to purely technical subjects. The course is concluded with a test.

Teacher training schools

Colleges for training teachers for primary schools are intended for rather older students who have to be at least 18 years of age at entrance. A detailed description is outside the scope of this report.

Other specialized schools

The conservatories of music in Copenhagen and in some of the other larger towns give advanced training in music and singing. The Royal Danish Academy of Fine Arts trains painters and sculptors. Other schools are the Craft School in Copenhagen, the Society for the Encouragement of Needlework, and a number of dramatic schools, foremost being the Royal Theatre School of Acting and Ballet in Copenhagen. All over the country there are also a great number of private schools and courses teaching typing, shorthand, languages, book-keeping and many other subjects.

Out-of-class activities

The legislation does not provide for the participation by pupils in the management of the schools. In practice, however, 'student councils' are often set up, chiefly at *gymnasier*. These are representative bodies, elected by the pupils, which protect the pupils' interests and negotiate with the headmaster and teachers on their behalf. In some cases the student council acts in conjunction with some form of prefect system, with the prefects being entrusted with certain duties of maintaining order. Together with other school associations (debating clubs, sports clubs, dramatic societies, musical societies, etc.) the student council takes care of arrangements for school parties and outings. Many schools publish school magazines which are edited by pupils and which deal with problems of the school, politics and matters of general interest, often without censorship by the headmaster.

The schools usually give the pupils an opportunity for voluntary athletics outside school time. The school gymnastics teacher is in charge and the activities are subsidized from public funds. In recent years many *gymnasier* have had voluntary school choirs and orchestras established with state assistance.

TRENDS AND PROBLEMS

The paramount problem in Danish education in recent years has been the implementation of the new educational scheme adopted in 1958 for the primary school and the *gymnasie*. The framework of the new system is given in the Acts, but detailed regulations are still to be drawn up and curricula prepared. Work on the latter is now being done by two committees appointed by the Ministry, consisting of officials and educationists; these curricula must be designed so that the non-examination section in particular will attract bright pupils who do not wish to take the examination course. Teaching will be directed towards the pupils' subsequent occupations and at making employers interested in engaging the pupils who have passed through the non-examination classes rather than those who have completed the *real* section. It must at the same time be borne in mind that the school has to give pupils a general education.

Recent developments in technology also necessitate the expansion of advanced technical training if Denmark is to be able to compete with other countries. This situation, in conjunction with the bulge caused by the high birth-rate years from the end of the 1930s and the early 1940s, will exert very great pressure upon the *gymnasier* in the immediate future. Both as regards premises (in spite of the considerable numbers of schools that have been built in recent years) and the securing of the necessary teaching staff, great difficulties will be experienced. To make it possible for all suitable pupils to receive higher education regardless of their financial situation, there must perhaps be a further expansion of economic assistance from the State for young people.

The technical and commercial schools are also under pressure from the bulge, and as a result of the increasing demands for training required by the advance of mechanization.

The form of instruction in the *gymnasier* has also been the subject of debate in recent years. It is claimed that efforts should be made to evolve a type of education that will develop independence in pupils to a greater degree than under the present system, to fight the tendency towards isolation of subjects—e.g. by conferences of teachers to improve co-operation or days during which the teaching is characterized by a definite group of subjects. It is desired also to have more time allocated to non-compulsory subjects and study group activities. All these problems, however, will be dealt with by the committee appointed to work on the curriculum for *gymnasier*.

[*Text prepared by the Danish National Commission for Unesco in August 1959.*]

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STATISTICS

Population (mid-year 1938 estimate):[1] 4,515,000.
Area: 16,619 square miles; 43,042 square kilometres.
Population density: 272 per square mile; 105 per square kilometre.

Summary of school statistics, 1953–57. For the school year 1957/58, total enrolment may be roughly estimated as over 810,000, although the most recent data relating to the number of pupils enrolled in vocational schools refer to 1956/57. The number of persons attending adult education classes or schools is not included in the total mentioned. This represents a school-going population of 18 per cent of the total population.

Between 1953 and 1957, total enrolment increased by 11 per cent. During this period, the proportion of girls in schools has remained fairly constant, i.e. around 49 per cent in primary schools, 51 per cent in general secondary schools, 47 per cent in higher teacher training colleges.

There has been no significant change in the proportion of women on the teaching staff: 48 per cent women teachers in primary schools in 1957/58 and 45 per cent in 1953/54; 35 per cent in general secondary schools in 1957/58 and in 1953/54.

In 1953/54 and in 1954/55, enrolment in vocational schools was higher than in general secondary schools, but in 1956/57 enrolment in the former was only 90 per cent of enrolment in the latter. Between 1953 and 1956, total enrolment in secondary education increased by 14 per cent. (See Table 2.)

Enrolment trends in secondary education, 1950–57. Enrolment in vocational secondary schools and in technical schools doubled between 1930 and 1949. Thus the ratio obtained by relating the average enrolment to the estimated population 15–19 years old rose significantly. For the years since 1950, this ratio has been based on enrolment in all types of secondary schools and is therefore not directly comparable with those for preceding years. Nevertheless, there was a real increase in enrolment between 1945 and 1954 which continued until 1957. (See Table 3.)

Examination results in secondary education, 1953–57. Diplomas and certificates in 1957/58 numbered 35,954 as compared with 29,476 in 1953/54, an increase of 12 per cent for this period. The proportion of certificates awarded to girls was 51 per cent in both years. (See Table 4.)

Sources. Denmark: Statistical Department, replies to Unesco questionnaires; *Statistik Årbog* for 1957 and 1958.

1. *De jure* population. Excluding Faroe Islands and Greenland, shown separately.

1. EDUCATIONAL FINANCE, 1957/58 (in thousand kroner)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	...
Central Governments[3]	499 814
Provincial authorities[3]	250 395

B. EXPENDITURE BY PURPOSE

		Amount
Total expenditure		...
Recurring expenditure[3]		750 209
For central administration	7 265	
Salaries to teachers and other instructional expenditure	742 944	
Other recurring expenditure		
Capital expenditure	...	

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure	**750 209**	**100.0**
Central administration	7 265	1.0
Instruction[4]	742 944	99.0
Pre-primary, primary and secondary education[5]	686 797	91.5
Higher education	56 147	7.5

1. Official exchange rate: 1 krone = 0.145 U.S. dollar.
2. Total receipts are not known. Data are available for the central and provincial authorities only.
3. Closed account.
4. Includes 'other recurring expenditure'.
5. Includes 18,066,000 kroner (2.4 per cent) for teacher training.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	2 911	14 395	6 928	509 675	247 861
	Primary schools, private	1957/58	229	922	495	13 741	6 435
	Total	**1957/58**	**3 140**	**15 317**	**7 423**	**523 416**	**254 296**
	,,	1956/57	3 224	15 268	7 188	527 578	256 397
	,,	1955/56	3 375	14 705	6 862	525 620	255 471
	,,	1954/55	3 494	14 510	6 674	517 095	251 720
	,,	1953/54	3 563	13 998	6 296	498 543	243 146
Secondary							
General	State secondary schools	1957/58	37	968	224	16 216	6 920
	Municipal secondary schools	1957/58	357	7 136	2 374	93 193	48 615
	Secondary schools, private	1957/58	128	1 836	855	39 808	20 565
	Total	**1957/58**	**522**	**9 940**	**3 453**	**149 217**	**76 100**
	,,	1956/57	502	9 150	3 193	136 662	69 611
	,,	1955/56	488	8 699	3 089	127 799	65 254
	,,	1954/55	466	8 283	2 916	118 515	60 483
	,,	1953/54	452	7 896	2 762	111 792	57 077
Vocational	Technical schools	1956/57	335	...	...	[1]66 587	[1]7 988
	Technological institutes	1956/57	2	...	...	[2]15 201	...
	Engineers' schools	1956/57	12	...	...	681	—
	Commercial schools	1956/57	215	...	...	40 174	20 878
	Nautical schools	1956/57	9	...	...	580	28
	Total	**1956/57**	**573**	**...**	**...**	**123 223**	**...**
	,,	1955/56	576	...	...	120 850	...
	,,	1954/55	583	...	...	121 340	...
	,,	1953/54	580	...	...	116 149	...
Teacher training	College for kindergarten teachers, public	1957/58	1	18	9	166	...
	Colleges for kindergarten teachers, private	1957/58	2	...	...		
	Total	**1957/58**	**3**	**...**	**...**	**166**	**...**
	,,	1956/57	3	...	...	107	...
	,,	1955/56	3	...	...	107	...
	,,	1954/55	3	...	...	101	...
	,,	1953/54	3	...	...	102	...
Higher							
Teacher training	Teacher training colleges, public	1957/58	8	176	44	1 507	670
	Teacher training colleges, private	1957/58	18	605	139	4 345	2 086
	Total	**1957/58**	**26**	**781**	**183**	**5 852**	**2 756**
	,,	1956/57	25	739	180	5 543	2 590
	,,	1955/56	25	671	167	5 243	2 472
	,,	1954/55	25	628	167	5 158	2 387
	,,	1953/54	25	612	164	4 493	2 131
General and technical	University, public	1957/58	1	469	...	4 786	1 320
	Technical University, public	1957/58	1	215	...	1 986	74
	Royal Dental College, public	1957/58	1	76	...	421	133
	Royal Veterinary and Agricultural College, public	1957/58	1	165	...	962	35
	Royal Academy of Fine Arts, public	1957/58	1	104	...	531	101
	University, private	1957/58	1	217	...	1 878	397
	Total	**1957/58**	**6**	**1 246**	**...**	**10 564**	**2 060**
	,,	1956/57	6	1 205	...	10 499	2 009
	,,	1955/56	6	1 198	...	10 180	1 984
	,,	1954/55	6	1 142	...	10 275	1 922
	,,	1953/54	6	1 062	...	10 080	1 846
Adult	Folk high schools	1957/58	64	...	...	6 601	4 132
	Agricultural schools	1957/58	29	...	...	3 156	164
	Domestic science schools	1957/58	34	...	...	2 567	2 567
	Private continuation classes	1957/58	...	...	...	7 840	4 162
	Night schools	1957/58	...	...	...	315 868	220 537
	Vocational agricultural training	1957/58	...	...	...	7 001	—
	Public continuation schools for unskilled workers	1957/58	...	...	...	13 622	7 710
	Total	**1957/58**	**...**	**...**	**...**	**356 655**	**239 272**
	,,	1956/57	...	...	...	354 694	240 850
	,,	1955/56	...	...	...	364 015	249 398
	,,	1954/55	...	...	...	339 455	232 277
	,,	1953/54	...	...	...	329 541	221 388

1. Including part-time pupils, number unknown.

2. Of which 4,054 evening pupils. Students at these institutes may be also enrolled in other technical courses.

3. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational[2]		Teacher training[3]				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	...	...	47 473	15	...	...			
1931	73 437	49	49 784	15	...	...			
1932	...	...	50 208	15	...	...	[4]51	292	[4]17
1933	...	...	51 575	15	...	...			
1934	...	...	53 992	16	...	...			
1935	...	...	57 283	16	...	...			
1936	63 259	48	60 439	17	...	...			
1937	...	...	66 227	17	...	...	[4]63	293	[4]22
1938	...	...	66 796	19	...	...			
1939	...	...	64 791	20	...	...			
1940	...	...	61 569	20	...	...			
1941	68 895	48	63 066	21	...	...			
1942	...	...	66 811	21	...	...	[4]67	293	[4]23
1943	...	...	70 359	23	...	...			
1944	...	...	74 995	24	...	...			
1945	70 845	49	79 231	24	...	...			
1946	73 437	49	83 946	25	...	...			
1947	75 355	50	92 536	26	...	...	[4]89	298	[4]30
1948	78 643	50	94 362	25	...	...			
1949	83 350	50	95 952	24	105	100			
1950	97 817	51	111 734	...	106	100			
1951	102 724	51	110 490	...	107	100			
1952	106 994	51	111 968	...	107	100	222	298	75
1953	111 792	51	116 149	...	102	100			
1954	118 515	51	121 340	...	101	100			
1955	127 799	51	120 850	...	101	100			
1956	136 662	51	123 223	...	107	100	*260	317	82
1957	149 217	51	...	...	166	100			

1. From 1930 to 1949, incomplete data because some classes in private education are not included.
2. From 1930 to 1949, including data referring to technical adult education. Since 1950, enrolment in technological institutes of Copenhagen and Jutland are included.
3. Elementary rural teacher training schools only.
4. Based on enrolment in technical education only.

4. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Studentereksamen	2 984	1 231	3 048	1 277	3 132	1 367	3 368	1 419	3 682	1 649
Middle school examination	15 638	8 095	16 751	8 787	18 089	9 475	17 630	9 053	19 020	9 813
Girls' school leaving examination *(Pigeskoleeksamen)*	48	48	47	47	54	54	58	58	70	70
Realeksamen	8 868	4 640	9 637	5 060	10 013	5 252	10 910	5 752	11 145	5 840
Preparatory examination (teacher training)	1 938	907	2 037	1 023	2 071	997	1 956	908	2 037	1 027

FAROE ISLANDS

Faroese education is based mainly on the Act of 1 March 1854 on the organization of schools and education in the Faroe Islands, the Royal Ordinance No. 11 of 16 January 1912 on various matters relating to the primary schools, and Act No. 199 of 12 April 1949 on salaries and pensions for primary school teachers in the Faroe Islands, all with their subsequent amendments.

There are four schools preparing for the middle school and *real* examinations or for the general preliminary examination (see chapter on Denmark). There are also some 2-year and 3-year tutorial courses preparing for the general preliminary examination, and in 1937 one was established to prepare for the *studentereksamen* (university entrance). These examination schools and courses are all run by the public authorities, and organized as regards teaching and examinations according to the same rules that apply to similar schools in the rest of Denmark. In 1870 a training college was already established in the Faroe Islands for the education of teachers to be appointed to local schools. The training takes 4 years.

An important part of the education of young Faroese is provided by the evening schools, which are well attended.

Throughout the years it has been a problem whether Danish or Faroese should be the language of instruction in the Faroese schools. Both languages are included as subjects in the school curriculum. An Ordinance of 12 December 1938 required equal proficiency in the reading, speaking and writing of the two languages. Actual recognition of Faroese as the main language came with Act No. 137 of 23 March 1948 on home rule for the Faroe Islands. However, Danish must be taught carefully and well, and can still be used for official purposes as well as Faroese.

The above Act on Faroese home rule prescribes that a number of fields of public administration shall be wholly within the hands of the Faroese, whilst others shall be matters of joint concern to be subsidized by the Danish State and subject to rules laid down by the Danish Parliament. Although in principle education is to be taken over by the Faroese the Act provides that for the present it shall continue to be of joint concern. The Danish Treasury thus defrays about one-half of the expenditure on Faroese education. Under Act No. 199 of 12 April 1949 on salaries and pensions for primary school teachers in the Faroe Islands, salaries for teachers were fixed at the same level as those in the rest of the kingdom.

The highest organ of educational administration is the Faroese Educational Authority, comprising the *Rigsombudsmand* (Danish Government Commissioner), the Dean, and three members chosen by the *Lagting* (Faroese legislature). In 1955 the post was created of a Faroese educational adviser, who is to act as the educational authority's consultant in school and educational matters. The local education authorities consist of a managing board (parish council) and the education committee.

The two Danish Education Acts of 7 June 1958 reorganizing the Danish school system, do not apply to the Faroe Islands. However, there is provision for the Acts to be made applicable to the Faroe Islands through Royal Ordinance, with such amendments as may be required by the different conditions. The question as to whether the school system should be changed so as to provide pupils in Faroese schools with the same educational opportunities as those enjoyed by children in the rest of the kingdom is now under consideration.

[*Text prepared by the Danish National Commission for Unesco in August 1959.*]

STATISTICS

Population (mid-year 1958 estimate): 34,000.
Area: 540 square miles; 1,399 square kilometres.
Population density: 63 per square mile; 24 per square kilometre.

Summary of school statistics, 1953–57. In the school year 1957/58, a total of 5,628 pupils were enrolled in primary schools, general secondary schools or courses, and in teacher training classes. As compared with 1953/54, total enrolment in these schools had increased by 10 per cent. In general secondary schools total enrolment increased by 34 per cent but girls' enrolment by only 14 per cent. (See table.)

Educational finance, 1957/58. For the year 1957/58 the Danish Government provided 1,564,000 Danish kroner for recurring expenditure on education, including 1,494,000 kroner for primary and secondary education and 70,000 kroner for teacher training. In addition an estimated amount of 1,551,000 kroner was budgeted by the local government. The estimated total expenditure on education therefore amounted to 3,115,000 kroner.

Source. Faroe Islands: Directorate of Schools, reply to Unesco questionnaire.

SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary[1]	Primary schools, public	1957/58	89	177	45	4 483	2 115
	Primary schools, private	1957/58	2	...	...	400	207
	Total	**1957/58**	**91**	**[2]177**	**[2]45**	**4 883**	**2 322**
	„	1956/57	90	[2]161	[2]35	4 837	2 354
	„	1955/56	90	[2]151	[2]31	4 286	...
	„	1954/55	91	148	42	4 634	2 232
	„	1953/54	91	145	42	4 551	2 205
Secondary							
General	General secondary schools, public	1957/58	5	[3]63	...	586	305
	Tutorial course, public	1957/58	1	8	—	119	44
	Total	**1957/58**	**6**	**[3]71**	**...**	**705**	**349**
	„	1956/57	5	[3]60	...	686	341
	„	1955/56	5	[3]55	...	620	...
	„	1954/55	5	31	5	582	284
	„	1953/54	5	31	5	526	246
Vocational	Technical schools, public	1955/56	...	40	...	244	...
	Commercial schools, public	1955/56	...	11	...	114	...
	Nautical schools, public	1955/56	...	8	...	99	...
	Total[4]	**1955/56**	**...**	**59**	**...**	**457**	**...**
	„	1954/55	...	56	4	399	85
	„	1953/54	8	60	3	402	64
Teacher training	Teacher training college, public						
	Total	**1957/58**	**1**	**...**	**...**	**40**	**14**
	„	1956/57	1	...	...	33	11
	„	1955/56	1	12	...	33	...
	„	1954/55	1	12	2	27	6
	„	1953/54	1	14	2	27	1
Adult	Evening schools, public						
	Total	**1957/58**	**26**	**...**	**...**	**...**	**...**
	„	1956/57	23	...	...	751	470
	„	1955/56	19	...	...	751	...
	„	1954/55	19	...	...	578	375
	„	1953/54	...	...	...	...	...

1. Information on nursery schools is available only for 1956/57 when there were two schools with 154 (F. 95) pupils.
2. Public schools only, including teachers of general secondary schools.
3. Teachers in general secondary schools are also included in primary schools.
4. No information is available for 1956/57 or 1957/58.

GREENLAND

During the nineteenth century seminaries were set up for the training of catechists, and later a post-primary school of 2 years' duration was established to provide for brighter pupils completing the 7-year primary course. This was further expanded under the Act of 18 April 1925 by a 2-year high school followed again by a 2-year seminary. When the desire arose to conform as closely as possible to the Danish educational system, the entire structure of Greenland education was altered by the Act of 27 May 1950.

There are now three post-primary schools giving a 2-year course, and serving partly as classes where the better qualified over-14-year-olds from the smaller district schools are assembled. Their function is also to round off and consolidate the children's attainments; the course is concluded by both written and oral examinations. Some of the pupils then enter occupations; others go on to institutes and workshops for further special training.

There is also a *realskole* (general secondary school) in

Godthaab. A 4-year course comprising all the general school subjects and including English, German, and mathematics, is concluded with a written and oral official examination, giving the same privileges and prospects as the *realeksamen* in Denmark. Up till now only a small number of pupils from the post-primary schools have been able to enter the *realskole* but the intention is that in time the post-primary schools should disappear, so that pupils from the primary school can proceed directly to secondary school.

The language of instruction in the post-primary schools and the *realskole* is Danish, except in the subjects of religion and Greenlandic. Teaching material is likewise in Danish. Fully qualified teachers are employed at these establishments, which are all boarding schools. Board and tuition are free, and pupils receive in addition an allowance for clothing and pocket money, irrespective of their parents' financial circumstances.

After passing the *realeksamen* pupils can be recommended for further education at State expense (loans on favourable terms) at *gymnasier* (upper secondary schools preparing for university) or teacher training schools in Denmark, and then for the university or other institutions of higher education. They can also enter the teacher training course at the seminary in Godthaab. This offers a special 2-year course in the history and practice of education, which is followed by 1 year of practice teaching at smaller Danish schools.

In 1955 domestic science schools were set up in connexion with two of the post-primary schools, offering an 8 months' course. At the shipyard in Holsteinsborg there is an apprentice hostel with a technical school, giving the apprentices a 4-year course of theoretical instruction. The teaching staff includes specially engaged instructors as well as teachers from the local schools.

Technical education in general, and commercial education, are provided in evening schools, which also teach other subjects such as foreign languages, domestic science, woodwork, needlework, arithmetic, etc.

All secondary education comes under the school directorate in Godthaab, though the *realeksamen* is controlled by the Danish Ministry for Greenland, which also administers the year of practice teaching done by seminary students. All expenditure on secondary education is voted under the annual Finance Act as part of the Danish state budget.

[*Text prepared by the Danish National Commission for Unesco in August 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 28,000.
Area: 840,001 square miles; 2,175,600 square kilometres.
Population density: 0.03 per square mile; 0.01 per square kilometre.

Summary of school statistics, 1953–57. As compared with 1953/54, total enrolment at all levels in 1957/58 had increased by 7 per cent and total enrolment in secondary schools and in the teacher training college by 34 per cent. (See Table 2.)

Educational finance, 1957. Table 1 shows that during the fiscal year beginning in January 1957 a total of 11.5 million Danish kroner was spent on education, averaging a little over 400 kroner per inhabitant as compared with 300 in 1954 (see *World Survey of Education: II—Primary Education*). Of this amount, 79 per cent was recurring expenditure; the remaining 21 per cent was capital expenditure.

Source. Denmark: Ministry for Greenland, reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1957 (in thousand Danish kroner)[1]

A. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**11 498**
Recurring expenditure		9 120
For instruction		
Salaries to teachers, etc.	6 995	
Other instructional expenditure	280	
Other recurring expenditure	1 845	
Capital expenditure		2 378

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent
Total recurring expenditure		**9 120**	**100.0**
Instruction		7 275	79.8
Primary, secondary and higher education	7 209		79.1
Adult education	66		0.7
Other recurring expenditure		1 845	20.2

1. Official exchange rate: 1 Danish krone = 0.145 U.S. dollar.
2. Closed account.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public						
	Total	**1957/58**	**122**	**286**	...	**4 963**	...
	"	1956/57	126	283	...	4 680	...
	"	1955/56	127	283	...	4 777	...
	"	1954/55	145	285	...	4 697	...
	"	1953/54	145	302	...	4 698	...
Secondary							
General	Secondary schools, public						
	Total	**1957/58**	**4**	[1] ...	...	**218**	**92**
	"	1956/57	4	[1] ...	...	211	86
	"	1955/56	4	[1] ...	...	183	65
	"	1954/55	4	[1] ...	...	165	56
	"	1953/54	4	[1] ...	...	148	46
Teacher training	Teacher training college, public						
	Total	**1957/58**	**1**	**2**	—	**10**	**4**
	"	1956/57	1	2	—	5	—
	"	1955/56	1	...	...	—	—
	"	1954/55	1	...	...	12	4
	"	1953/54	1	...	...	21	7
Adult	Technical schools	1957/58	3	[1] ...	...	...	...
	Domestic schools	1957/58	2	[1] ...	...	30	30
	Continuation schools	1957/58	55	[1] ...	...	3 266	...
	Total	**1957/58**	**60**	[1] ...	...	[2] **3 296**	...
	"	1956/57	58	[1] ...	...	3 796	...
	"	1955/56	66	[1] ...	...	4 102	...
	"	1954/55	[2] 52	[1] ...	...	[2] 3 524	...
	"	1953/54	[2] 49	[1] ...	...	[2] 2 628	...

1. The teachers are primary school teachers who are partly engaged at these schools.

2. Not including technical schools.

DOMINICAN REPUBLIC

THE EDUCATIONAL SYSTEM

Paragraph 4 of Article 6 of the Constitution recognizes freedom of education as a right inherent in the human personality. It states further: 'Primary instruction shall be under the supervision of the State, and shall be compulsory for children of school age, in the form established by law. In official institutions, this instruction, as well as that provided by schools of agriculture, manual arts and domestic economy, shall be free.'

The Dominican school system is governed by the Organic Law on Education, the Law on Compulsory Primary Education and the Law on University Organization.

Role of public authorities. The administrative and executive authority in the Dominican educational system is the Ministry for Education and Fine Arts, which is advised by the National Board of Education (*Consejo Nacional de Educación*). The latter consists of six members under the chairmanship of the Minister of Education and Fine Arts, who is a member *ex officio*.

The main duties of the board are: (a) to define the scope of the various branches of education, excepting universities; (b) to establish curricula for each branch of education and the syllabus to be followed in the teaching of each subject; (c) to determine the examinations to be taken by candidates for official diplomas or certificates, and to lay down rules concerning such examinations and the dates at which they are to be held; (d) to establish regulations concerning the diplomas or certificates required for appointment to

teaching posts in the various branches and levels of education, school and competitive examinations, and school discipline; (e) to determine equivalence between studies pursued abroad and the corresponding national courses, except in the case of university studies; and (f) to approve textbooks for use in teaching.

For the purposes of school administration, the Dominican national territory is divided into 5 regions, or *intendencias de educación*, and 65 school districts, each of the former being under an education officer (*intendente*), and each of the latter under an inspector of schools. Education officers must carry out, or ensure the implementation within their region of all decisions emanating from the Ministry of Education and Fine Arts and the National Board of Education. They must also inspect personally, at least once every two months, each institution in their region providing secondary education, teacher training, and vocational and special education and the administrative offices belonging to these institutions.

There are both public and private schools. Public schools may be official or semi-official institutions, depending on whether they are maintained entirely out of public funds or, as in the case of colleges and schools receiving grants-in-aid from the State, only in part.

Role of private agencies. Private schools are entirely free, and any person, corporation, association or society may found educational establishments and give instruction in any branch of knowledge without being required first to obtain a licence or to comply with official regulations, syllabuses, methods or texts, except in the case of primary education, which is always subject to the official regulations, syllabuses and texts, and is supervised by the State.

Structure of the school system. The following types of education are recognized by Article 3 of the Organic Law on Education (1951): (a) nursery; (b) primary; (c) intermediate; (d) secondary; (e) rural primary and secondary teacher training; (f) further vocational, technical and artistic education; (g) special; (h) university. The principal types of schools are shown in the diagram on p. 429.

THE DEVELOPMENT OF SECONDARY EDUCATION

At the end of the last century (1895), the General Law on Public Instruction placed the control of education in the hands of the Higher Educational Council (*Junta Superior de Estudios*), provincial councils and local committees. Primary and teacher training schools remained under the jurisdiction of the provincial councils, while institutions at secondary level known as 'central colleges' and the Professional Institute (vocational training) were placed under that of the council.

1902. A Directorate of Teacher Training was established. The central colleges were abolished and replaced by training colleges for primary and secondary teachers and by *escuelas de bachilleres* (general secondary schools). The general law on education was amended. A Higher Council of Administration and a Special Council of Administration were placed in charge of all forms of education except teacher training and ecclesiastical and vocational education. A inspector of education was appointed in each provincial capital, and a special committee set up in each commune and administrative district.

1914. The organic statutory code on public education was promulgated. It laid down that the Minister of Education should be generally responsible for education and should direct public instruction in collaboration with the National Board of Education, the provincial councils and the district education committees. Technical direction and inspection were to be the principal responsibilities of a superintendent of education and of the provincial supervisors and municipal inspectors of public education. Education, from the nursery and primary stages onwards, was divided into official-public, semi-official and private categories.

1918. The Law on the Administration of Public Education was promulgated, laying down rules for the organization, operation and work of the National Board of Education.

1930. Law No. 53 provided for the revision of all laws and regulations governing education, and set up a committee on educational reform.

1951. A new Organic Law on Education was approved, embodying all previous regulations which were still pertinent, laying down in detail the basic policy of Dominican education, and recognizing and organizing the various types of education (see above). University education is governed by special laws. Primary instruction, which is compulsory for all children between the ages of 7 and 14, is also completely free of charge in official schools.

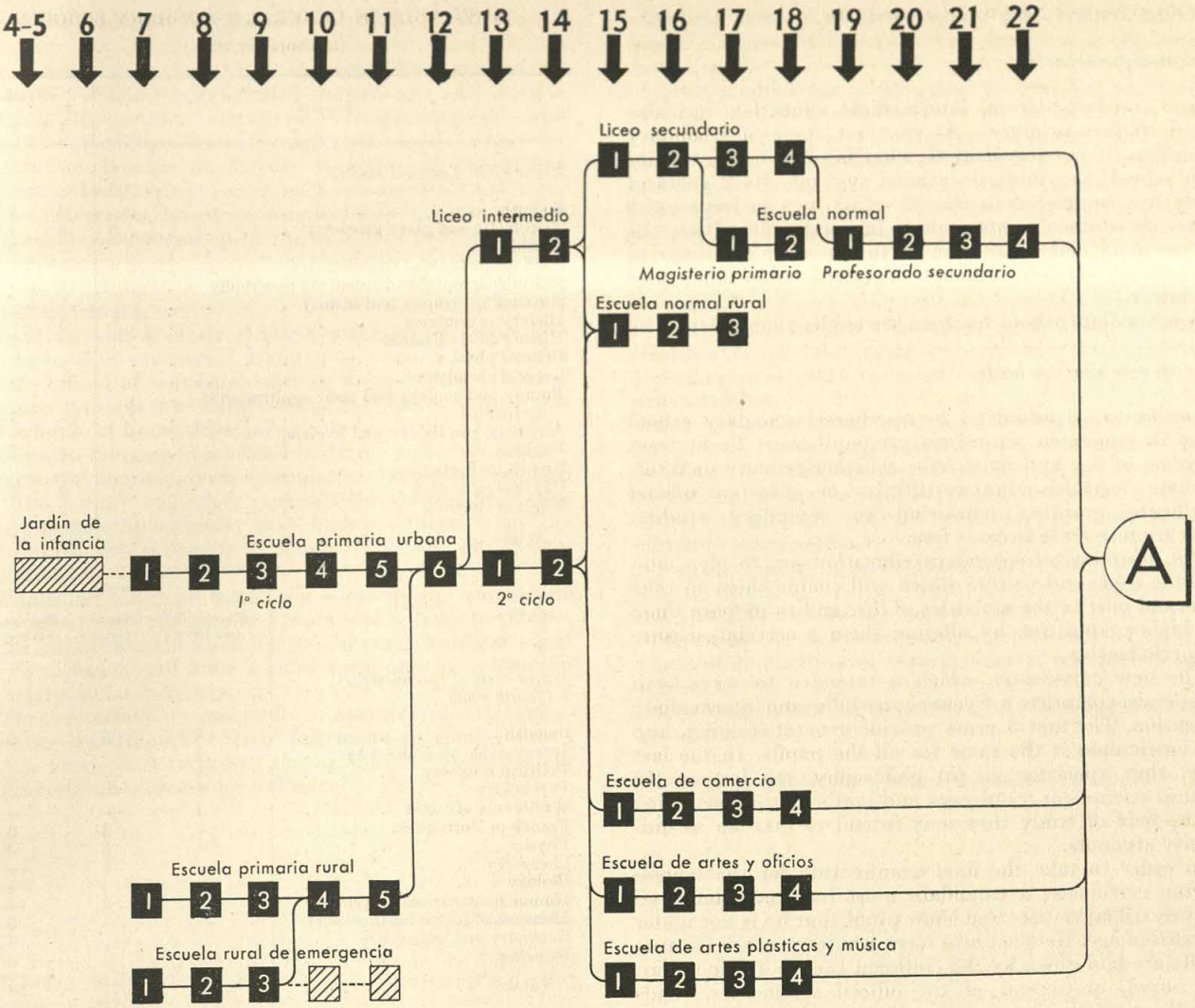
1952. The relevant ordinances establishing teacher training colleges and rural teacher training schools were approved.

1954. Under the Concordat signed by the Dominican Government and the Holy See, the education provided by the State in public schools shall be guided by the principles of Catholic doctrine and ethics. In all public schools, the Catholic religion and ethics shall be taught to all pupils whose parents or guardians do not ask in writing for them to be excused from such instruction. Furthermore, the Dominican State guarantees to the Catholic Church full liberty to establish and maintain schools of all types and levels under ecclesiastical authority; certificates awarded by primary schools of this class will have the same value as those awarded by the corresponding state institutions.

Administration. The Ministry of Education and Fine Arts includes a General Directorate of Primary and Intermediate Education and a General Directorate of Secondary, Teacher Training and Vocational Education.

All public schools providing secondary education, teacher training, and vocational and special education are under the direct authority of the regional education officers (*intendentes*), except in cases where the National Board of Education places a school under some other educational authority. Public intermediate establishments are without exception directly controlled by the district inspectors.

Secondary school teachers are paid by the State. Their remuneration is in proportion to their hours of work, and there is no uniform salary scale applied throughout the country. The work assigned to teachers and the salaries they receive depend on their academic qualifications, their experience and their speciality.



GLOSSARY

escuela de artes plásticas y música: school providing vocational training in fine arts and music.

escuela de artes y oficios: school providing vocational training in applied arts and crafts.

escuela de comercio: vocational secondary school of commerce.

escuela normal superior: teacher training college; sections for primary teachers (*magisterio primario*) and secondary teachers (*profesorado secundario*).

escuela normal rural: teacher training school for teachers in rural primary schools.

escuela primaria rural: rural primary school with practical bias related to needs of environment.

escuela primaria urbana: urban primary school.

escuela rural de emergencia: incomplete rural primary school.

jardín de la infancia: pre-primary school.

liceo intermedio (*liceo de educación intermedia*): lower general secondary school.

liceo secundario (*liceo de educación secundaria*): upper general secondary school with course providing 3 years of general study and a final year of specialization (in philosophy, or mathematics and physics, or physics and natural sciences), leading to baccalaureate.

HIGHER EDUCATION

A. University of Santo Domingo (faculties of dentistry, law, medicine, pharmacy and chemistry, philosophy, science and engineering, veterinary science and agronomy), Loyola Polytechnic Institute, College of Accountancy, and various national schools of advanced professional training.

TYPES OF SECONDARY EDUCATION

Intermediate schools

Before the last reform, intermediate education was also called 'higher primary'. As the first stage of secondary education, it is equivalent to what is often called 'junior high school' in other educational systems. Its 2 years of study are completed in schools of its own in large cities (*liceos de educación intermedia*); in smaller localities, the intermediate classes are housed in the same buildings as the primary schools, although organized independently of the latter.

Intermediate school teachers are subject specialists.

General secondary schools

In order to be admitted to a general secondary school (*liceo de educación secundaria*), a pupil must be at least 12 years of age and must have a higher-primary or intermediate school-leaving certificate, or else an official certificate granting admission to secondary studies. Education in state *liceos* is free.

The purposes of secondary education are to give adolescents a general culture which will enable them to take a normal part in the activities of life, and to prepare them for higher education by offering them a certain measure of specialization.

The new curriculum, which is intended to serve both these ends, comprises a 4-year course following intermediate education. The first 3 years provide general training, and the curriculum is the same for all the pupils. In the last year, they specialize in (a) philosophy and letters, (b) natural sciences or (c) physics and mathematics, according to the field of study they may intend to take up as university students.

In order to take the final examination for the school-leaving certificate, a candidate must have completed all the prescribed courses and show proof that he is not under 16 years of age. He must also meet whatever other requirements are laid down by the National Board of Education; the board, on receipt of the official certificates, sends *bachillerato* diplomas to pupils who have obtained a pass in all subjects.

The National Board of Education determines the form to be given to examinations. Pupils in secondary and teacher training schools must take the following: four-monthly examinations, in February and June, to check their progress; general examinations in July, which may be completed in or postponed until September; one exceptional examination for pupils in their last year who still have to pass in three subjects.

The subjects taken for the usual *bachillerato* course, designed to meet the needs of students going on to university, are shown in the accompanying table.

There is also a feminine *bachillerato en artes y letras* which offers girls who do not wish to pursue university careers an opportunity to acquire general culture and certain artistic and domestic skills. This is a 3-year course, and the subjects include general culture, languages, home economics, gardening, sports, dressmaking, outline of the history of art, music and painting.

TIME-TABLE IN GENERAL SECONDARY SCHOOLS
(in hours per week)

Subject	Years		
	1	2	3
Lower cycle of general studies			
Spanish	5	5	4
Arithmetic and plane geometry	5	—	—
Algebra	—	5	—
Solid geometry and trigonometry	—	—	4
World geography and American geography	3	—	—
National geography and history	—	—	3
History of America	3	—	—
History of civilization	—	3	—
General physics	—	3	—
General chemistry	—	—	3
Botany and zoology and their application in agriculture	—	3	—
Anatomy, physiology and hygiene	—	—	2
English	4	3	3
French or Portuguese	—	—	3
Physical education	2	2	2
Music or drawing	2	—	—
Total	24	24	24

Subject	Course		
	Philosophy and letters	Natural sciences	Physics and mathematics
Upper cycle of specialization (fourth year)			
Spanish	5	5	5
Introduction to philosophy	3	—	—
Political economy	4	—	—
Psychology	3	—	—
Rudiments of Latin	3	—	—
French or Portuguese	3	3	3
Physics	—	3	3
Chemistry	—	5	—
Biology	—	4	—
Human anatomy and physiology	—	2	—
Elements of higher mathematics	—	—	5
Geometry and trigometry	—	—	4
Drawing	—	—	3
Total	21	22	23

Teaching staff. Teachers in general secondary schools must have a secondary school teacher's diploma from an *escuela normal superior* (teacher training college). Candidates for enrolment in the professional training courses at these colleges must have completed the secondary course leading to the *bachillerato*. The duration of studies at teacher training colleges is 4 years, comprising 2 years of general education and 2 more of professional training. There are three possible fields of specialization: letters, sciences, and modern languages (French or English).

Each teacher must do at least 25 hours of teaching per week. At the age of 60, and after at least 25 years of service, teachers retire with a pension amounting to between 40 and 60 per cent of their final salary, according to the number of their dependents and the cost of living in their place of residence.

Vocational and technical schools

The National School of Arts and Crafts (Escuela Nacional de Artes y Oficios) trains skilled workers and craftsmen in general engineering, carpentry, cabinet-making, automobile engineering, electricity and radio engineering.

The San Ignacio de Loyola Institute of Technology (Instituto Politécnico 'San Ignacio de Loyola') has more than 1,000 pupils. Its curriculum includes subjects relating to general culture and special preparation for agricultural experts, mechanics, electricians, plumbers, cabinetmakers, etc. The teaching is divided into primary, intermediate and secondary stages.

Girls' education receives special attention in Dominican curricula, and vocational training of women is provided by the school of industrial training for girls, the school of nursing, the school of hairdressing and beauty culture and the schools of home economics.

Business training is provided in three stages: elementary commercial courses given in semi-official schools subsidized by the State; secondary commercial courses, in state business-training schools; and higher education in the College of Accountancy (Escuela Superior de Peritos Contadores).

Pupils wishing to enter the elementary commercial school must hold the intermediate school-leaving certificate. After two years, they receive an assistant business secretary's diploma, and after a third year, that of a business secretary or book-keeper.

The secondary commercial course in state business-training schools, which is a full business course, has a 3-year curriculum including the ordinary subjects for the secondary school-leaving certificate.

In the College of Accountancy the syllabus covers 4 years of specialized studies and leads to a diploma in accountancy.

Artistic education is dispensed by the National School of Fine Arts (Escuela Nacional de Bellas Artes) where teachers of drawing, painting and sculpture are trained, the National Conservatory of Music and Elocution (Conservatorio Nacional de Música y Declamación), the Liceo Musical 'Pablo Claudio' at San Cristobal (college of music), and various other institutions.

Teacher training schools

Primary teachers are trained at rural teacher training schools or in special sections of the teacher training colleges, according to whether the pupil wishes to be a rural or an urban teacher.

For admission to the rural teacher training institutions, pupils must be at least 14 years of age, hold the official certificate of satisfactory performance in the intermediate course, and present a health certificate issued by the school doctor. Candidates over 20 years of age must pass an entrance examination.

Pupils wishing to enter the special section of a higher teacher training college mentioned above must have completed 2 years of secondary school.

The course lasts 3 years for rural teachers, and 2 for urban teachers, in addition to their 2 years of general secondary studies.

The courses are free, and most of the training institutions are residential.

[*Text prepared by the Unesco Secretariat in January 1960 from official sources listed in the bibliography.*]

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STATISTICS

Population (mid-year 1958 estimate): 2,797,000.
Area: 18,816 square miles; 48,734 square kilometres.
Population density: 149 per square mile; 57 per square kilometre.

Summary of school statistics, 1953–57. Information for the school year 1957/58 is incomplete. Enrolment in primary and secondary schools, except teacher training schools, was about 464,500 pupils in 1956/57, representing nearly 18 per cent of the population. The proportion of girls in primary and general secondary schools in 1956/57 was about 50 per cent, in secondary technical schools 60 per cent and in teacher training schools 85 per cent. No data are available on the number of teachers and pupil teacher ratios at any level of education. There appears to have been a striking increase in primary enrolment of nearly 84 per cent between 1953/54 and 1957/58. On the other hand, enrolment in general secondary and teacher training schools in 1956/57 was 10 per cent lower than at the beginning of the period under review. (See Table 1.)

Enrolment trends in secondary education, 1936–56. Average enrolment in general and vocational secondary education trebled over the period under review. The ratio of secondary enrolment to the estimated population 15–19 years old rose from 3 to 7 between 1936 and 1956. By 1956, the proportion of girls in secondary education was between 50 and 60 per cent. (See Table 2.)

Examination results in secondary education. In 1954, the only year for which data are available, some 2,072 *bachillerato* diplomas and teaching certificates were awarded.

Educational finance, 1957. In 1957, the budget for educational expenditure amounted to 11,537,433 pesos. (Official exchange rate: 1 Dominican peso = 1 U.S. dollar.) Of this amount, the Department of Education had at its disposal the sum of 10,002,922 pesos. The balance of 1,534,511 pesos was expenditure for construction and included 762,645 pesos for the building of the Secretariat for Education and Fine Arts.

Sources. Dominican Republic: State Secretariat for Education and Fine Arts, *Revista de Educación Año XXVII* Nos. 1–2–3; *Educación para la paz. La educación en la República Dominicana en el era de Trujillo*, (1955); other official publications.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	4 176	...	...	441 463	...
	Primary schools, private	1957/58	156	...	...	19 552	...
	Total	**1957/58**	**4 332**	**...**	**...**	**461 015**	**...**
	„	1956/57	4 185	...	...	444 942	221 104
	„	1955/56	[1]4 055	...	...	385 544	...
	„	1954/54	3 682	...	...	398 608	197 798
	„	1953/54	2 450	...	...	251 179	...
Secondary							
General	*Liceos*, public	1956/57	[2]53	...	...	[2]8 499	[2]4 091
	Liceos, private	1956/57	13	...	...	1 011	619
	Total	**1956/57**	**[2]66**	**...**	**...**	**[2]9 510**	**[2]4 710**
	„	1955/56	[1 2]65	...	...	[1 2]9 239	...
	„	1954/55	67	...	...	9 637	4 577
	„	1953/54	61	...	...	10 374	...
Vocational	Vocational schools, public	1956/57	126	...	...	8 775	5 363
	Vocational schools, private	1956/57	24	...	...	1 341	710
	Total	**1956/57**	**150**	**...**	**...**	**10 116**	**6 073**
	„	1955/56	[1]125	...	...	[1]7 947	...
	„	1954/55	127	...	...	9 311	5 243
	„	1953/54	116	...	...	7 690	...
Teacher training	Teacher training schools, public						
	Total	**1958/59**	**5**	**...**	**...**	**308**	**...**
	„	1957/58	...	...	...	...	...
	„	1956/57	...	...	...	...	...
	„	1955/56	...	...	...	...	...
	„	1954/55	5	...	...	319	272
	„	1953/54	4	...	...	240	...
Higher							
General and technical	University						
	Total	**1957/58**	**1**	**144**	**...**	**3 828**	**...**
	„	1956/57	1	...	...	...	...
	„	1955/56	1	...	...	3 016	...
	„	1954/55	1	...	...	3 009	...
	„	1953/54	1	...	...	2 780	...
Adult	Primary night schools for adults	1956/57	13	...	...	613	292
	Literacy centres	1956/57	...	...	...	...	...
	Total	**1956/57**	**...**	**...**	**...**	**...**	**...**
	„	1956/57	...	...	...	...	...
	„	1955/56	10 149	...	...	266 999	...
	„	1954/56	9 300	...	...	252 917	110 660
	„	1953/54	3 187	...	...	81 061	...

1. Public schools only.
2. Including secondary teacher training.
3. Included in secondary general education.

2. TRENDS IN SECONDARY EDUCATION, 1936–56

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1936	1 584	43	3 724	70	...	...	6	164	3
1937	1 789	41	3 451	70	...	...			
1938	2 025	43	3 645	67	...	...			
1939	2 559	46	3 782	69	...	...			
1940	2 983	48	3 753	68	...	...	7	181	4
1941	3 222	47	3 401	65	...	...			
1942	3 084	47	3 978	68	...	...			
1943	3 125	49	4 566	65	...	...			
1944	2 402	49	5 498	64	...	...			
1945	3 850	49	6 502	57	...	...	13	204	6
1946	4 531	48	7 159	58	...	...			
1947	4 598	48	7 083	62	...	...			
1948	5 192	49	9 518	53	...	...			
1949	6 673	46	9 452	58	...	...			
1950	7 433	46	9 110	62	200	...	[2]18	242	[2]7
1951	9 110	...	8 181	...	202	...			
1952	9 312	...	8 181	...	225	...			
1953	10 374	...	7 690	...	240	...			
1954	9 637	47	9 311	56	319	85			
1955	[1]29 239	...	[1]7 947	...	...	...	[2]18	272	[2]7
1956	[2]9 510	50	10 116	60	...	...			

1. Public schools only.

2. Including teacher training.

ECUADOR

THE EDUCATIONAL SYSTEM

The political constitution now in force, promulgated on 31 December 1946, contains the following provisions relating to education:

Article 134. Preference shall be given in the Budget to National Defence and Public Education.

Article 171. Children's education is primarily the responsibility and prerogative of their parents or of those representing them. The State shall ensure that such responsibility is discharged, and shall facilitate the exercise of that prerogative. Education and instruction, in conformity with the institutions of the Republic, shall be free. Municipalities may subsidize free private education. Such subventions shall not exceed 20 per cent of the amount approved for education. When the Government considers it appropriate to grant assistance, it must secure the approval of the Council of State. Primary and technical education in public establishments shall be free; primary education either in public or in private establishments shall be compulsory. School welfare services shall be provided without discrimination, in all free establishments, both public and private, for the benefit of all pupils who may need them. At all levels of education, special attention shall be devoted to the pupils' moral and civic training. In both public and private schools, special attention shall be given to Indian pupils. All teachers in the country, whether serving in public or private schools, shall be represented on the national governing bodies for education. All state education, whether under the responsibility of the Central Government or of the provincial or municipal authorities, shall be secular—that is, the State as such shall neither teach nor attack any religion. The State shall respect the right of parents or those representing them to give their children the kind of education they deem most appropriate.

Article 172. The universities, both state and private, shall be autonomous. To make such autonomy effective for the state universities, the law shall favour the building-up of university endowments.

Article 173. The State shall establish and maintain special institutions for free training in the arts, crafts, commerce, agriculture and other kinds of remunerative work, such training also to include education in ethics and civics. In primary and secondary schools, pupils' aptitudes for various kinds of work shall be cultivated in special sections providing a practical education. In public establishments for primary education and training in the arts and crafts, the State shall provide pupils in need of them with items of equipment essential for their training.

Ethnic, linguistic, social, cultural, religious and other factors affecting the provision of education. The population of Ecuador has several ethnic components varying in distribution according to the part of the country, which comprises three natural divisions: Coast, Mountain and Eastern Region. The language of the country is Spanish. But the Indians, who make up over half of the population, speak Quechua, with the exception of those in the Eastern Region, who live in their own fashion and speak their own languages.

The structure of the school system is shown in the diagram on page 435.

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary education dates back to 1 June 1897 when by decree of the Constituent National Assembly the Colegio Mejía was founded to provide both primary and secondary education and primary teacher training.

The present Organic Law on Secondary Education was ratified by the Constituent National Assembly in August 1946. Ten of its sections relate particularly to the objectives of secondary education, the organization of secondary schools, the duties and responsibilities of the authorities and teaching staff, the school system, private establishments and the medical service.

The first article of the Organic Law defines secondary education as 'that given to adolescents who, on completion of primary education, go on to *colegios de bachillerato* (preparing for the secondary school leaving certificate), vocational training schools and rural teacher training establishments. Its basic objective is the balanced all-round development of the adolescent's personality by discovering and channelling individual aptitudes. It will therefore equip students to make the best use of the knowledge, experience and habits acquired during their years of study, so that they may be of use to themselves and to their country as a member of the community of nations. It will also prepare them for higher studies.'

The *colegios de bachillerato* include general secondary schools with modern and classical courses, teacher training schools (*colegios de ciencias de educación*) and technical schools.

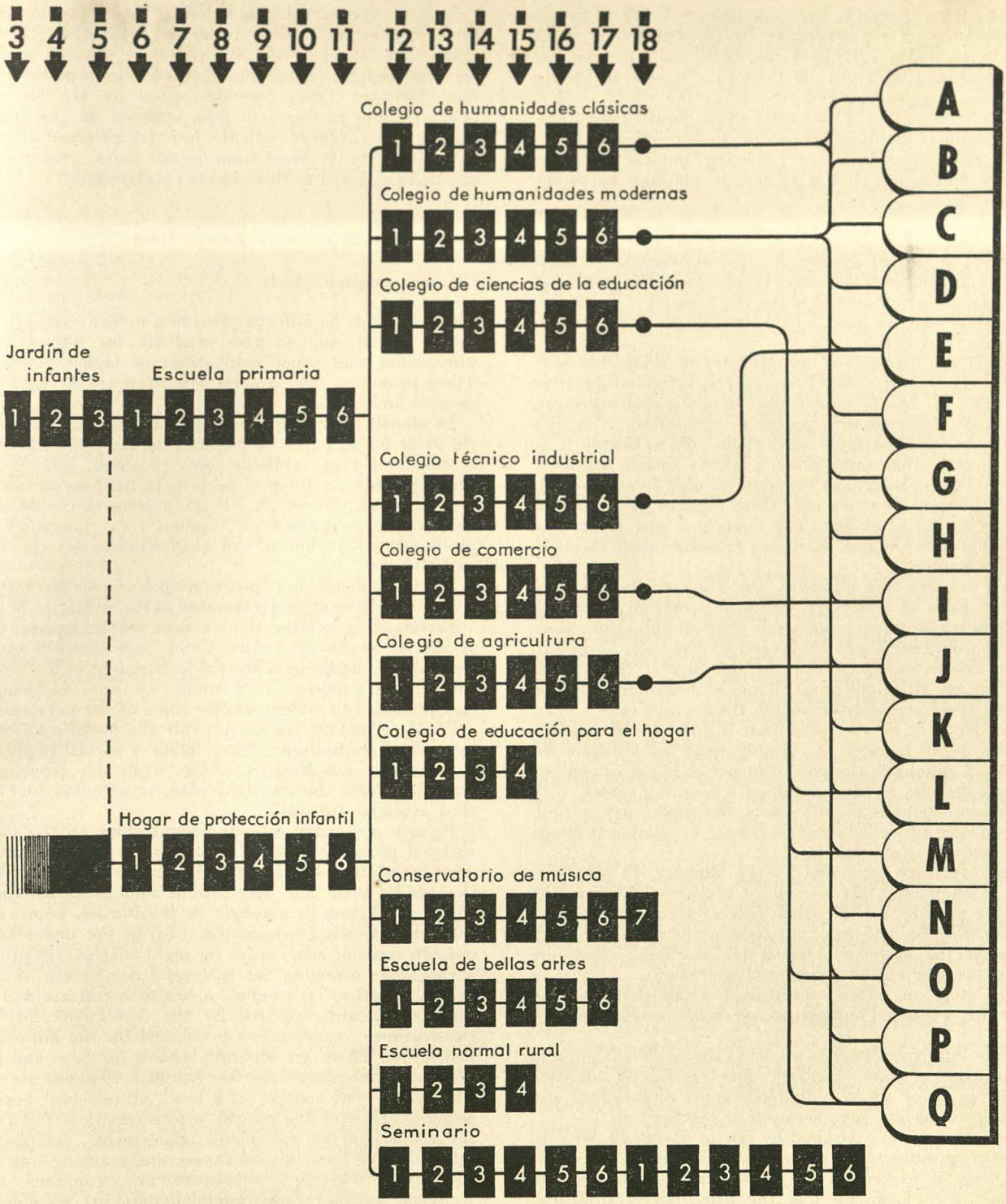
Technical education is governed by General Regulations dated 29 December 1947. It is under the control and direction of the following bodies: the Ministry of Education, the Advisory Council on Technical Education, the Directorate of Technical Education. The Advisory Council on Technical Education keeps the Ministry of Education and the Directorate of Technical Education informed of the needs of industry and of the most suitable direction to be given to technical education services. The Council is composed of the following: the Minister of Education; the head of the Technical Department of the Ministry of Education; the Technical Education Adviser of the Ministry concerned; a representative of the Ministry of Economics; a representative jointly designated by the Chambers of Industry, Commerce and Agriculture, the Rotary Club and the Lions' Club of Quito, and another

GLOSSARY

colegio de agricultura: vocational secondary school of agriculture.
colegio de ciencias de la educación: teacher training school.
colegio de comercio: vocational secondary school of commerce.
colegio de educación para el hogar: vocational training school of home economics.
colegio de humanidades clásicas: general secondary school with curriculum including Greek and Latin.
colegio de humanidades modernas: general secondary school with curriculum offering a choice in final year of study between (a) literature and philosophy; (b) mathematics and physics; (c) chemistry and biology.
colegio técnico industrial: vocational secondary school for industrial occupations.
conservatorio de música: vocational training school of music.
escuela de bellas artes: vocational training school of fine arts.
escuela normal rural: teacher training school for primary teachers in rural districts.
escuela primaria: primary school.
hogar de protección infantil: an institution for homeless or delinquent children combining a *casa cuna* institution (for infants under 3 years of age), *jardín de infantes* (see below) and *reformatorio* (reform school covering the primary course).
jardín de infantes: pre-primary school.
seminario: vocational college for the priesthood.

HIGHER EDUCATION

A. *Derecho:* law.
B. *Derecho Internacional (Instituto ecuatoriano de):* International Law (Ecuadorian Institute of).
C. *Medicina:* medicine.
D. *Odontología:* dentistry.
E. *Ingeniería:* engineering.
F. *Arquitectura:* architecture.
G. *Ingeniería química:* chemical engineering.
H. *Farmacia y bioquímica:* pharmacy and biochemistry.
I. *Economía:* economics.
J. *Agronomía:* agronomy.
K. *Medicina veterinaria:* veterinary medicine.
L. *Ciencias de la educación:* education.
M. *Periodismo:* journalism.
N. *Idiomas:* linguistics.
O. *Psicología:* psychology.
P. *Obstetricia:* obstetrics.
Q. *Enfermería:* nursing.


3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
Colegio de humanidades clásicas
1 2 3 4 5 6
Colegio de humanidades modernas
1 2 3 4 5 6
Colegio de ciencias de la educación
1 2 3 4 5 6
Jardín de infantes
Escuela primaria
1 2 3 1 2 3 4 5 6
Colegio técnico industrial
1 2 3 4 5 6
Colegio de comercio
1 2 3 4 5 6
Colegio de agricultura
1 2 3 4 5 6
Colegio de educación para el hogar
1 2 3 4
Hogar de protección infantil
1 2 3 4 5 6
Conservatorio de música
1 2 3 4 5 6 7
Escuela de bellas artes
1 2 3 4 5 6
Escuela normal rural
1 2 3 4
Seminario
1 2 3 4 5 6 1 2 3 4 5 6
A B C D E F G H I J K L M N O P Q

representative elected in the same manner by these bodies in Guayaquil; a representative of the Confederation of Ecuadorian Workers (CTE). Under the General Regulations the Directorate of Technical Education is responsible for organizing, supervising and controlling the whole service. The Director is assisted by a chief administrative secretary, an inspector of technical schools, and other officials.

The law on compulsory schooling applies solely to primary education, that is to say, to children up to the age of 12 years.

Supervision and inspection. The supervision of secondary education is carried out by the Director-General of Education and the secondary school inspectors. The inspectors are responsible to the Head of the Department of Secondary Education who, in turn, is responsible to the Director-General of Education.

One of the concerns of the Ministry of Education is to provide the Department of Secondary and Higher Education with a corps of suitably qualified secondary school inspectors, to keep it informed with regard to each of the country's secondary establishments and, above all, to enable it to help them in their educational work by specific guidance and directives. It has not yet been possible to achieve this object, because there are only three regional inspectors for a commitment of at least two visits per year to each of more than two hundred secondary establishments throughout the country.

To overcome this difficulty, the Ministry has assigned the functions of secondary school inspector to secondary teachers whose talents and merit warrant this distinction. In this way a corps of four inspectors has been formed to cover the secondary schools in the Sierra; though the numbers are still inadequate, it has at least been possible to visit every secondary school in the country once a year.

The Ministry is convinced that it will not be possible to secure the services of suitably qualified teachers for this work so long as the post of inspector is not considered as a promotion, as the summit of a teaching career, with appropriate remuneration to mark the superiority in rank of inspectors of secondary schools even in relation to heads of secondary establishments.

Inspectors are appointed by the Minister. In principle, they must possess the secondary teacher's diploma, the diploma awarded by the urban teacher training schools or the *bachillerato*, and have attained at least to the sixth grade of the scale established for teachers. There are inspectors specializing in physical education.

Inspectors of state educational establishments also supervise municipal and private secondary establishments.

Finance. All expenditure involved in the establishment and maintenance of state secondary schools is met by the State (construction of school buildings, supply of furniture and teaching materials, remuneration of teachers, etc.).

Municipalities are required by law to devote 15 per cent of their revenue to education, and in many cases this percentage is exceeded. The provincial councils assist in the building of schools and the provision of furniture. Education in state secondary schools is not free; parents have to pay certain enrolment, examination and diploma fees.

Secondary establishments derive their revenue from: (a) the yield from property owned by them; (b) sums allocated to them by the State by laws, decrees, and the national budget; (c) enrolment, examination and diploma fees, and any other fees prescribed by the Ministry; (d) forfeitures of pay and fines imposed on the staff of schools in accordance with the law; (e) gifts and bequests to schools; (f) the yield from special taxes, property and annuities assigned to them in laws and decrees.

TYPES OF SECONDARY EDUCATION

General secondary schools

The *colegios de bachillerato* provide a 6-year course in two cycles (4+2) and prepare students for admission to universities and other institutions of higher education. Those providing only general education are of two types: modern and classical.

In schools providing the modern course, the syllabus is the same for all pupils throughout the six years. However, in the final year, students have to select, according to their aptitudes, a group of subjects in the general syllabus for more exhaustive study. For this purpose three specialized groups are recognized as 'options': (a) literature and philosophy; (b) physics and mathematics; (c) chemistry and biology.

In girls' schools and co-educational schools the syllabus includes additional subjects suited to the education of girls.

In schools providing the classical studies course, there is special study of Latin, Greek and classical culture generally, in addition to the subjects taught in the modern course. The programme of studies is thus the 'modern' one, amended to make room for these additional items.

Night secondary schools provide the *bachillerato* course in modern studies only. They follow a special study plan approved by the Ministry which, while not departing in essentials from the standard plan, is adjusted to fit the time available for work.

Private secondary schools benefit from all the constitutional guarantees and, like the State schools, have to comply strictly with the prescriptions of the Organic Law, the Study Plan, the Regulations and State syllabuses.

For enrolment in a *colegio de bachillerato*, pupils must fulfil the following requirements: (a) be not under 12 nor over 16 years of age, except for night schools; (b) produce a certificate attesting the successful completion of the 6 primary grades; (c) produce a health certificate and any other certificates required by the regulations; (d) pass the entrance examinations prescribed by the Ministry of Education. There are separate schools for boys and girls. Normally there should not be more than 40 pupils per class. The school staff consists of a head, an assistant head (in schools with over 800 pupils), a secretary, a bursar (when the school has to administer endowments, buildings or funds derived from special taxes), and teaching staff with permanent, 'acting', substitute or temporary rank, technical assistants, superintendents and other employees.

Teaching staff. A permanent teacher is one who possesses the qualifications required by the Law on Grades and

TIME-TABLE FOR GENERAL SECONDARY SCHOOLS

(in hours per week)

Subject	Modern						Classical					
	First cycle				Second cycle		First cycle				Second cycle	
	1	2	3	4	5	6	1	2	3	4	5	6
Spanish and composition	5	5	—	—	—	—	5	5	—	—	—	—
Ecuadorian literature (Spanish literature in the fourth year) and composition	—	—	4	4	—	—	—	—	4	4	—	—
American and world literature (sixth year, Ecuadorian literature) and composition	—	—	—	—	4	3	—	—	—	—	4	—
Ecuadorian and world literature and composition	—	—	—	—	—	—	—	—	—	—	—	4
Mathematics	5	5	4	4	4	2	5	5	4	4	4	2
History of Ecuador	3	—	—	—	—	—	3	—	—	—	—	2
History of Ecuador and the Americas	—	3	—	—	—	—	—	3	—	—	—	—
World history (sixth year, history of Ecuador)	—	—	2	2	2	2	—	—	3	3	3	—
Geography of Ecuador (including elements of general geography in the first year)	2	—	—	—	—	2	2	—	—	—	—	2
Geography of Ecuador and the Americas	—	2	—	—	—	—	—	2	—	—	—	—
World geography	—	—	2	2	—	—	—	—	2	2	—	—
Elements of world political and economic geography	—	—	—	—	2	—	—	—	—	—	2	—
Nature study	3	3	—	—	—	—	3	3	—	—	—	—
Physics	—	—	2	3	3	—	—	—	2	2	2	—
Chemistry	—	—	2	3	2	—	—	—	2	2	2	—
Anatomy, physiology and hygiene	—	—	3	—	—	—	—	—	2	—	—	—
Biology	—	—	—	2	2	—	—	—	—	2	—	—
Civics	—	—	—	—	—	2	—	—	—	—	—	2
Philosophy	—	—	—	—	—	2	—	—	—	—	—	2
Psychology	—	—	—	—	—	2	—	—	—	—	—	2
Logic and ethics	—	—	—	—	2	—	—	—	—	—	2	—
English	3	3	3	3	2	2	3	3	2	2	2	2
Drawing	—	2	1	—	—	—	—	2	—	—	—	—
Social education	2	—	—	—	—	—	2	—	—	—	—	—
Physical training and sports	2	2	2	2	2	2	2	2	2	2	1	—
Pre-military instruction or domestic economy	—	—	—	—	—	4	—	—	—	—	—	4
Latin	—	—	—	—	—	—	—	4	4	4	4	5
Greek	—	—	—	—	—	—	—	—	4	4	4	5
Unallocated time[1]	7	7	7	7	7	—	7	3	1	1	2	—
Optional subjects[2]	—	—	—	—	—	9	—	—	—	—	—	—
Total	32	32	32	32	32	32	32	32	32	32	32	32

1. 'Unallocated' time can be used by the governing board for purposes which may include the following: (a) providing an extra period or periods for a subject or subjects in the prescribed grade syllabus; (b) providing a period for a complementary subject or activity; (c) art work, etc; (d) practical workshop or agricultural training; (e) literary or scientific discussion groups; (f) typing and shorthand practice; (g) social activities; (h) sports. In girls' schools the unallocated time, including 4 hours for the sixth grade, is reserved mainly for domestic economy courses.
2. The optional groups are: (a) literature and philosophy; (b) physical and mathematical sciences; (c) chemical and biological sciences.

Salary Scales of Teachers, and has been appointed by the Ministry in a permanent capacity.

A teacher may be 'acting' on two grounds: either because he is serving a probationary period under Article 34, or because he is occupying a post in a category higher than his own in the scale established for teachers.

A substitute teacher is one replacing a permanent or 'acting' teacher during the latter's temporary absence on leave or because of suspension. A temporary teacher is one filling a vacant post on a purely temporary basis.

Each secondary school has a governing council consisting of the head, the assistant head and three teachers, a committee of senior staff and teachers and a committee of class teachers with special duties.

Teachers in private establishments must possess the same professional qualifications as those required in State schools. The Ministry may, however, concede equivalence with the secondary teachers' qualifications for the internal teaching qualifications conferred by religious institutions, when the holders have long experience in education and teaching, and particularly when they have pursued higher studies.

Vocational and technical schools

Vocational and technical schools are national, municipal and private.

Secondary technical education is provided by *colegios artesanales* (training schools for artisans) and *colegios técnicos* (technical schools).

The artisans' training schools award skilled worker certificates (*titulo de prácticos*) after 3 years of study and 1 year of practical work.

Technical schools may specialize in: industrial education; commercial education; education in domestic economy; agricultural education.

Technical schools for industrial education grant the following certificates: *práctico* (3 years of study and 1 of practical work) in the following branches: iron-working, sanitary installations, electrical installations, carpentry, tailoring and boot making; *maestro industrial* (4 years of study and 1 of practical work) in the following branches: industrial mechanics, automobile mechanics, electricity, broadcasting (wireless telegraphy and assembly of radio apparatus), graphic arts, cabinet making and wood carving; *bachiller industrial* (6 years of study and 1 of practical work) in the following: mechanics, electricity, radio technology, graphic arts. In 1957, there were 14 schools of this type. The year of practical work is carried out and supervised in the school and in industry.

Technical schools for commercial education grant the diploma of *auxiliar de oficina* (office assistant) (3-year course) and the following certificates: *secretario-taquigrafo* (secretary-typist) (5-year course) and *bachiller perito contador* (expert accountant) (6-year course). In 1957, there were 74 schools of this type.

The home economics schools grant certificates for teachers of cutting, sewing, weaving, etc. (4-year course). In 1957, there were 26 schools of this type.

Farming schools (6-year course) grant the certificate of *bachiller técnico* in the agricultural sciences. In 1957 there were 2 schools of this type.

In 1957 there were in all 116 technical schools (including academies and institutes).

There are in addition 2-year accelerated courses for skilled workers, and shorter optional courses for certain specialities based on two years spent in secondary schools. Thus all individuals are given the opportunity to improve themselves in accordance with their ability, means and desires.

The conditions for admission to vocational and technical schools are as follows. For the first course in a training school for artisans a pupil must have completed primary school, be at least 12 years of age and submit a satisfactory medical certificate. Pupils who have completed the third year of the artisans' training school may enter the third year of technical school. Pupils from the second and third years of the humanities who have received good grades and those from the fourth year may enter the second year of technical school.

The examinations are quarterly. The final quarterly mark is the average of the grade in the examination and that given for progress shown during the quarter.

At the end of the last year of study pupils must, in order to obtain a diploma, show proof of the stage they have reached in subjects related to the occupation; and after completing the supervised period of practical work, they must take examinations in design, technology and practical work in the workshop.

During the practical work year, the pupil must prepare a theoretical and practical thesis covering his experience in the industry in order to obtain his diploma of *bachiller-técnico*. As soon as the thesis has been accepted by the commission, the pupil must appear before a board of examiners to discuss the thesis; the board of examiners then awards marks and grants a diploma.

Industrial education. Further details about this branch of vocational and technical education are given below.

Resolution No. 575 of 30 September 1955 specified that industrial education should have the following general purposes: canalization of individual interests and aptitudes (development of vocational guidance, promotion of creative ability); ethico-professional and aesthetic training (encouragement of habits of work, cultivation of the sense of responsibility, affirmation of individual duties and rights, cultivation of aesthetic feeling); and civic and social training (development of the spirit of tolerance, promotion of solidarity and co-operation, respect for human dignity, preparation for democratic life).

Specific purposes were defined as follows: (a) training and preparation of personnel to meet the industrial needs of the country; (b) development of technical procedures in order to improve the quality of production, reduce costs and prices and raise the standard of living and culture; (c) training of skilled workers in employment in new methods and technical procedures; (d) promotion of better relations between capital and labour; (e) co-operation with a view to the better development, use and conservation of Ecuadorian natural resources.

Technical subjects taught in the 3-year artisan training schools include geometrical, free-hand and technical drawing, and a course on industrial occupations and workshop technology and practice. The ratio of hours per week devoted to general and technical subjects respectively in each of the 3 years is 20:18; 19:21; 15:25.

In the technical schools the technical subjects taught in the first 2 years are the same as those in the artisan training schools. In the third and fourth years students choose one of the specialized sections shown in the following time-table.

TIME-TABLE FOR TECHNICAL SCHOOLS (third and fourth years)
(in hours per week)

Subject	Machine shop mechanics and fitting		Automobile mechanics		Electricity		Radio		Carpentry		Graphic arts	
	3	4	3	4	3	4	3	4	3	4	3	4
Technical drawing	4	4	4	4	4	2	4	2	4	4	4	2
Freehand drawing	—	—	—	—	—	—	—	—	2	—	2	—
Applied mechanics	2	2	2	2	—	—	—	—	—	—	—	—
Electro-technics	2	—	2	—	4	4	4	—	2	—	2	—
Internal combustion engines	—	2	—	2	—	2	—	2	—	—	—	—
Radio-technics	—	—	—	—	—	—	2	4	—	—	—	—
Telegraphy	—	—	—	—	—	—	6	—	—	—	—	—
Labour legislation	—	1	—	1	—	1	—	1	—	1	—	1
Industrial management	—	1	—	1	—	1	—	1	—	1	—	1
Technology and practice	17	18	17	18	17	18	9	18	17	22	17	19
	25	28	25	28	25	28	25	28	25	28	25	23
General subjects	15	12	15	12	15	12	15	12	15	12	15	17
Total	40	40	40	40	40	40	40	40	40	40	40	40

Students who successfully complete this stage are admitted to the 2-year course for *bachilleres-técnicos*.

Teacher training schools

Rural primary school teachers are trained at the rural teacher training schools.

There are 10 co-educational rural teacher training schools and one institution for girls. The rural teacher training school at Uyumbicho has been conducted as an experimental institution since October 1956. As organized at present the course includes a 6-year cycle, whereas the other rural teacher training schools comprise only a 4-year course on completion of primary school. They confer a diploma of *maestro rural* (rural schoolteacher). These schools try to give future rural teachers a preparation which is in accordance with the needs of life in the country, by studying the natural environment and the problems of the community. The purpose is to embody these essentials in the educational programmes of the schools so that the schools will make a positive contribution towards the establishment of a better bond between man and his native soil and raise the cultural level of society.

Urban primary teachers are trained in the *colegios normales* which grant the diploma of *bachiller* in the educational sciences. These are secondary schools (13 are official and 8 private) with a 6-year course on completion of primary school. The first four years are similar to the

TIME-TABLE FOR TEACHER TRAINING SCHOOLS
(in hours per week)

Subject	First cycle				Second cycle	
	1st year	2nd	3rd	4th	5th	6th
Spanish and composition	5	5	—	—	—	—
Ecuadorian literature and composition	—	—	5	4	—	—
Mathematics	5	5	4	4	—	—
History of Ecuador	3	—	—	—	—	—
History of Ecuador and America	—	3	—	—	—	—
History of the world	—	—	2	2	—	—
Geography of Ecuador (including introduction to general geography)	2	—	—	—	—	—
Geography of Ecuador and America	—	2	—	—	—	—
Geography of the world	—	—	2	2	—	—
Natural sciences	3	3	—	—	—	—
Physics	—	—	2	3	—	—
Chemistry	—	—	2	3	—	—
Anatomy, physiology and hygiene	—	—	3	—	—	—
Biology	—	—	—	3	—	—
Psychology	—	—	—	2	—	—
English	3	3	2	2	2	—
Drawing	2	2	2	1	—	—
Social education	2	—	—	—	—	—
Physical education and games	2	2	2	2	2	—
Workshop (men), home economics (women)	2	2	2	2	—	—
Penmanship	1	1	—	—	—	—
Music and singing	1	2	2	1	—	—
Work chosen by the pupil	1	2	2	1	—	—
Spanish and literature	—	—	—	—	3	—
Geography and history of Ecuador	—	—	—	—	4	—
Sciences	—	—	—	—	2	—
Introduction to philosophy	—	—	—	—	2	—
Principles of education	—	—	—	—	3	2
Educational psychology	—	—	—	—	3	2
Teaching procedures and teaching practice	—	—	—	—	12	12
History of education	—	—	—	—	—	3
School legislation, organization and administration	—	—	—	—	—	2
Educational sociology	—	—	—	—	—	2
Education for the home and community and practical farming	—	—	—	—	—	3 (5)[1]
Civic education	—	—	—	—	—	2
Physical education	—	—	—	—	—	2[2]
Pre-military instruction	—	—	—	—	—	4[3]
Total	32	32	32	32	32	32

1. Three hours for boys, 5 for girls.
2. Girls only.
3. Boys only.

modern studies course. During their fifth and sixth years, the future urban school teachers intensify their study of educational sciences and practise teaching.

The qualifications required of a teacher in a teacher training school are the same as those for secondary school-teachers. In making appointments, the Ministry considers qualifications as far as possible in the following order: (a) qualification as secondary school teacher (4 years of university studies); (b) university degree; (c) diploma of *bachiller* in educational sciences; (d) other *bachillerato* diplomas. Teaching work is also taken into account.

Other specialized schools

Schools of fine arts are attached to the Universities of Quito and Cuenca. They cover a 6-year course after the primary school.

Schools of music are attached to the Universities of Quito, Cuenca and Guayaquil. The course lasts 7 years. Pupils are admitted upon attaining the age of 12 years.

The lower seminaries cover a 6-year course on completion of primary schools and are conducted by the religious authorities.

The Ministry of Defence maintains a military college which grants the diploma of *bachiller* of modern studies.

The Ministry of Economics maintains a school of agriculture.

The Ministry of Social Welfare has a social welfare school to train social workers. The course lasts 3 years subject to completion of the second year of secondary school.

[*Text prepared by the Unesco Secretariat in December 1959 from official sources listed in the bibliography.*]

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STATISTICS

Population (mid-year 1958 estimate): 4,007,000.
Area: 104,506 square miles; 270,670 square kilometres.
Population density: 38 per square mile; 15 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58 enrolment in all educational institutions (including some night schools at the primary level) totalled 572,500, representing about 15 per cent of the estimated population, as compared with 13 per cent in 1953/54 (see *World Survey of Education*, II). The increase in school enrolment at every level was more marked during the period 1953–57 than between 1950 and 1954. Thus, primary school enrolment increased 26 per cent between 1953 and 1957; secondary schools, 40 per cent; and higher education, 30 per cent.

Of the school-going population in 1957, 90 per cent was in pre-primary and primary schools, 9 per cent in institutions at the secondary level, and 1 per cent in higher education. The proportion of girls was 47 per cent in primary schools, 28 per cent in general secondary schools, 69 per cent in vocational schools, 56 per cent in teacher training schools, and 20 per cent in institutions of higher education. In general, the proportion of girls was higher in private schools than in public schools. Women teachers constituted about 55 per cent of the teaching staff. (See Table 2.)

Enrolment trends in secondary education, 1938–57. From Table 3, it appears that enrolment in secondary schools more than doubled between 1948 and 1957. However, the ratio obtained by relating average enrolment to the estimated population 15–19 years old shows an increase of about 50 per cent over this period. In view of the large number of pupils enrolled in primary schools, it may be expected that secondary enrolment will increase even more rapidly in years to come.

Examination results in secondary education, 1953–57. Between 1953 and 1957 the number of secondary school leaving certificates granted showed an increase of 36 per cent, though this is less than the increase in general secondary school enrolment (46 per cent) over the same period. The number of vocational and rural normal school certificates changed little during these years, but the number of urban teacher training school certificates showed a considerable increase. (See Table 1.)

Educational finance, 1957. In 1957 (fiscal year beginning 1 January) total expenditure for education amounted to 200 million sucres, averaging 52 sucres per inhabitant, as compared with 37 sucres per inhabitant in 1953 (see *World Survey of Education:* II—*Primary Education*). Of this total, 72 per cent came from the Central Government, 12 per cent from provincial authorities and the rest from tuition fees, donations and other sources. Recurring expenditure represented 96 per cent of the total expenditure. (See Table 4.)

Source. Ecuador: Ministry of Education, Statistics Section, reply to Unesco questionnaire.

1. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Secondary school leaving certificate	1 786	514	1 830	560	2 064	651	2 350	702	2 423	705
Diploma of trade and crafts schools	225	161	220	174	219	177	241	185	...	...
Diploma of commercial schools	493	368	476	352	543	412	454	353	...	...
Urban teacher training school leaving certificate	281	180	291	174	327	185	345	199	450	266
Certificate of rural normal schools	221	103	206	115	209	95	193	111	203	121

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1957/58	60	221	214	8 866	4 701
	Kindergartens, private	1957/58	26	48	47	893	521
	Total	**1957/58**	**86**	**269**	**261**	**9 759**	**5 222**
	„	1956/57	77	230	224	9 475	5 082
	„	1955/56	72	210	201	8 941	4 728
	„	1954/55	68	204	197	8 068	4 304
	„	1953/54	67	201	196	8 287	4 303
Primary	Urban primary schools, public	1957/58	475	3 903	2 742	155 155	74 751
	Rural primary schools, public	1957/58	3 459	5 066	3 260	234 601	104 960
	Night schools, public	1957/58	76	304	202	13 847	4 655
	Urban primary schools, private	1957/58	381	2 412	1 536	77 262	41 611
	Rural primary schools, private	1957/58	250	603	408	18 183	9 159
	Night schools, private	1957/58	20	87	31	2 574	509
	Total	**1957/58**	**4 661**	**12 375**	**8 179**	**501 622**	**235 645**
	„	1956/57	4 525	11 543	7 528	490 277	226 663
	„	1955/56	4 386	10 301	7 176	461 325	214 623
	„	1954/55	4 170	10 360	6 923	419 607	197 334
	„	1953/54	3 901	9 455	6 221	396 862	185 093
Secondary							
General	Secondary schools, public	1957/58	56	1 545	336	21 212	6 188
	Secondary schools, private	1957/58	95	1 575	458	12 257	3 343
	Total	**1957/58**	**151**	**3 120**	**794**	**33 469**	**9 531**
	„	1956/57	144	2 905	744	29 794	8 105
	„	1955/56	126	2 672	746	26 611	7 662
	„	1954/55	113	2 444	647	25 026	7 242
	„	1953/54	109	2 269	619	22 899	6 568
Technical	Technical schools, public	1957/58	43	772	354	9 197	5 966
	Technical schools, private	1957/58	32	379	208	5 774	4 308
	Total	**1957/58**	**75**	**1 151**	**562**	**14 971**	**10 274**
	„	1956/57	66	1 077	498	13 430	9 050
	„	1955/56	64	988	442	12 101	8 138
	„	1954/55	68	1 017	477	11 275	7 530
	„	1953/54	65	1 018	468	11 177	7 613
Teacher training	Urban teacher training schools, public	1957/58	4	180	83	3 019	1 784
	Rural teacher training schools, public	1957/58	11	135	46	1 683	825
	Urban teacher training schools, private	1957/58	7	67	32	632	349
	Rural teacher training school, private	1957/58	1	7	5	66	56
	Total	**1957/58**	**23**	**389**	**166**	**5 400**	**3 014**
	„	1956/57	22	380	160	5 029	2 936
	„	1955/56	21	365	148	4 558	2 709
	„	1954/55	19	335	140	4 216	2 478
	„	1953/54	19	340	143	4 465	2 573
Higher[1]							
Teacher training	Teacher training colleges, public	1957/58	3	...	...	526	263
	Teacher training college, private	1957/58	1	...	...	89	56
	Total	**1957/58**	**4**	**...**	**...**	**615**	**319**
	„	1956/57	4	...	...	634	344
	„	1955/56	4	...	...	463	190
	„	1954/55	4	...	...	338	136
	„	1953/54	3	...	...	322	152
General and technical	Universities, public	1957/58	5	648	10	5 408	891
	Technical college, public	1957/58	1	23	1	198	2
	University, private	1957/58	1	128	24	425	97
	Total	**1957/58**	**7**	**799**	**35**	**6 031**	**990**
	„	1956/57	7	743	29	5 495	869
	„	1955/56	7	720	23	5 382	985
	„	1954/55	7	618	7	4 901	787
	„	1953/54	6	516	5	4 771	744

1. In the previous edition, a breakdown between enrolment in the teacher training colleges and enrolment at the other colleges was not available. The University teaching staff comprises teaching staff of all colleges.

3. TRENDS IN SECONDARY EDUCATION, 1938–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1938	5 842	...	...	...	...	...	[1]6	235	[1]3
1939	6 233	...	...	...	...	...			
1940	6 267	...	...	...	...	...	[1]7	250	[1]3
1941	6 646	...	...	...	...	...			
1942	6 818	...	...	...	...	...			
1948	14 900	30	7 233	64	2 364	58	26	303	9
1949	15 926	30	8 028	64	2 825	57			
1950	17 572	30	8 873	64	3 348	60	35	336	*11*
1951	19 226	29	9 196	65	3 965	59			
1952	21 120	29	9 963	66	4 184	59			
1953	22 899	29	11 177	68	4 465	58			
1954	25 026	29	11 275	67	4 216	59			
1955	26 611	29	12 101	67	4 558	59	48	376	*13*
1956	29 794	27	13 430	67	5 029	58			
1957	33 469	28	14 971	69	5 400	56			

1. Based on general education only.

4. EDUCATIONAL FINANCE, 1957 (in sucres)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**200 336 166**
Central government	143 337 654
Provincial authorities	24 617 737
Tuition fees	4 633 825
Donations	490 395
Other sources	
Autonomous authorities	27 256 555
Examinations	

B. EXPENDITURE BY PURPOSE

		Amount
Total expenditure[2]		**200 336 166**
Recurring expenditure		193 034 082
For central administration	2 068 000	
For salaries to teachers, etc.	185 821 303	
Other recurring expenditure	5 144 779	
Capital expenditure		7 302 084

C. TOTAL EXPENDITURE BY LEVEL AND TYPE OF EDUCATION[3]

	Amount		Per cent
Total expenditure[3]		**200 336 166**	**100.0**
Central administration		2 068 000	1.0
Pre-school education		2 283 180	1.1
Primary education		93 889 590	46.9
Secondary education		59 739 421	29.8
General	37 570 916		18.75
Vocational	13 755 109		6.87
Teacher training	8 413 396		4.20
Higher education		39 811 196	19.9
Subsidies, etc.		2 544 779	1.3

1. Official exchange rate: 1 sucre = 0.067 U.S. dollar.
2. Includes data from closed account and from budget estimates.
3. The distribution includes recurring expenditure of 193,034,082 sucres and capital expenditure of 7,302,084 sucres.

THE EDUCATIONAL SYSTEM

The Constitution of 7 September 1950 contains the following references to education:

'Education is an essential attribute of the State, which shall organize the educational system and establish such institutions and services as may be necessary.' (Article 197.)

'Education must aim at developing the full potentialities of the students' personalities so that they may co-operate constructively with the community. It must inculcate observance of the rights and duties of man, combat all attitudes of intolerance and hatred, and promote the ideal of the unity of the Central American peoples. There must be organic continuity between all levels of education, which shall embrace intellectual, moral, civic and physical training.' (Article 198.)

'All inhabitants of the Republic have the right and the duty to receive such basic training as shall fit them to play their parts conscientiously and effectively as workers, parents and citizens. Basic training shall include primary education which, in state schools, shall be free of charge.' (Article 199.)

'Literacy training is in the public interest. All inhabitants of the country shall contribute to it in such form as may be prescribed by the law.' (Article 200.)

'Education given in public establishments shall be secular. Private educational establishments shall be subject to regulation and inspection by the State. The State may assume exclusive charge of the training of teachers.' (Article 201.)

'No educational establishment may refuse admission to a pupil on the grounds of irregularity in the marital status of his parents or guardians, or on the grounds of class, race or political beliefs.' (Article 202.)

'The right to engage in teaching shall be subject to proof of capacity in such form as the law may prescribe. In all educational establishments, public or private, the teaching of history, civics and the Constitution must be given by teachers who are Salvadoreans by birth. Freedom of teaching is guaranteed.' (Article 203.)

'The University of El Salvador shall be autonomous with respect to teaching, administration and finance, but it must perform a social service. It shall be governed by statutes based on a law establishing the general principles for its organization and operation.

'The State shall assist in providing and increasing the university's assets and shall annually include in its budget items for the university's maintenance.' (Article 205.)

Departments, agencies and institutions coming under the Ministry of Culture (*Ministerio de Cultura*) include: (a) the State Secretariat; (b) the Under-Secretariat; (c) the Technical and Planning Section; (d) the National Council of Education; (e) the Central Administrative Office (*Oficialía Mayor*) and the administrative departments; (f) the technical departments, including the four directorates-general (primary education, teacher training, secondary education and physical education); (g) the cultural departments and the educational extension department; (h) educational institutions and centres: autonomous cultural institutions, the School of Rhetoric, the Higher Teacher Training School, state, municipal and private schools and state institutions providing special education.

The structure of the school system is shown in the diagram on page 445.

THE DEVELOPMENT OF SECONDARY EDUCATION

The Law of 29 April 1825 established a *colegio* (general secondary school). Some of the earliest institutions were the Colegio Aurora del Salvador, which operated in the capital between 1832 and 1844, a school of philosophy established in Tecapa (now the city of Alegría) in 1837, a Latin grammar school at Suchitoto in 1839, and *colegios* at Sosonate and San Miguel in 1841. By the Decree of 16 February 1841 the National Constituent Assembly founded the Colegio de la Asunción and the National University. The Executive Decree of 7 February 1885 created the National Institute at San Salvador, which was followed a few years later by the opening of institutes at Santa Ana and San Miguel. At present there are 15 national institutes (state secondary schools).

In 1949 the present Directorate-General of Secondary Education was established; it controls the first and second stages of general secondary education, and commercial education.

Legal basis

Secondary education is governed by the following decrees and regulations:

The Executive Decree which established the general basic plan stage of secondary education and which was published in the *Official Gazette* (*Diario Oficial*) on 15 March 1947.

The Executive Decree which established the study plan for the evening secondary education sections and which was promulgated on 15 October 1952.

The Regulations governing the admission of pupils to secondary educational establishments, which were published in the *Official Gazette* on 1 December 1950 and replaced those published in the *Official Gazette* of 11 December 1947.

The Executive Decree instituting term examinations for the promotion of students taking the upper secondary course for the *bachillerato* (secondary leaving and pre-university certificate) in science and letters and published in the *Official Gazette* of 3 July 1946.

The Regulations concerning term examinations, published in the *Official Gazette* of 14 August 1946.

The Executive Decree concerning equivalence of teacher training and studies for the *bachillerato* in science and letters, published in the *Official Gazette* of 28 March 1947.
The General Regulations governing secondary education, established by Executive Decree of 12 September 1956.
The Regulations concerning examinations for the *bachillerato* in science and letters, published in the *Official Gazette* of 2 July 1958.

Administration

The Directorate-General of Secondary Education comprises an administrative section, and a technical section; the first consists of the Director-General, his assistants, the inspectors and the secretariat; the second has offices for the basic general course and the upper or *bachillerato* stage of the secondary course, vocational and educational guidance, industrial arts, audio-visual aids, handicrafts and small industries.

The duties of secondary school inspectors are of three kinds—professional, administrative and litigious. They exercise control not only over the national institutes and secondary education sections, but also over private schools. Inspectors must hold the teacher's diploma of the Higher Teacher Training School or of the University of El Salvador, or must be certificated teachers or *bachilleres* in science and letters with at least three years' experience in education, two of which must have been spent in administrative posts dependent on the Ministry of Culture.

TYPES OF SECONDARY EDUCATION

General secondary schools

As defined by the General Regulations for Secondary Education, established by the Decree of 12 September 1956, the aims of secondary education are: (a) to complete the education begun at the primary school; (b) to promote the development of the pupil's personality with due regard to the career he intends to take up; (c) to prepare citizens for intelligent and co-ordinated co-operation in the task of promoting social and national progress; (d) to train pupils for higher and technical education. Secondary education 'must assume responsibility for technical development, increased productivity, and the establishment of just and harmonious relations between all Salvadorean citizens; promote the ideal of Central American and continental unity with a view to the permanent defence of democracy and respect for fundamental human values'.

Secondary education is organized in two stages: the basic general course (*plan básico*) comprises three years of study and leads not only to the 2-year upper cycle of general secondary studies, known as the *bachillerato*, but also to commercial studies, teacher training and various vocational courses. The subjects taken in the two stages of the general course are given below; the *bachillerato* provides the necessary training for entry to the University of El Salvador.

TIME-TABLE OF BASIC GENERAL COURSE
(in periods per week)

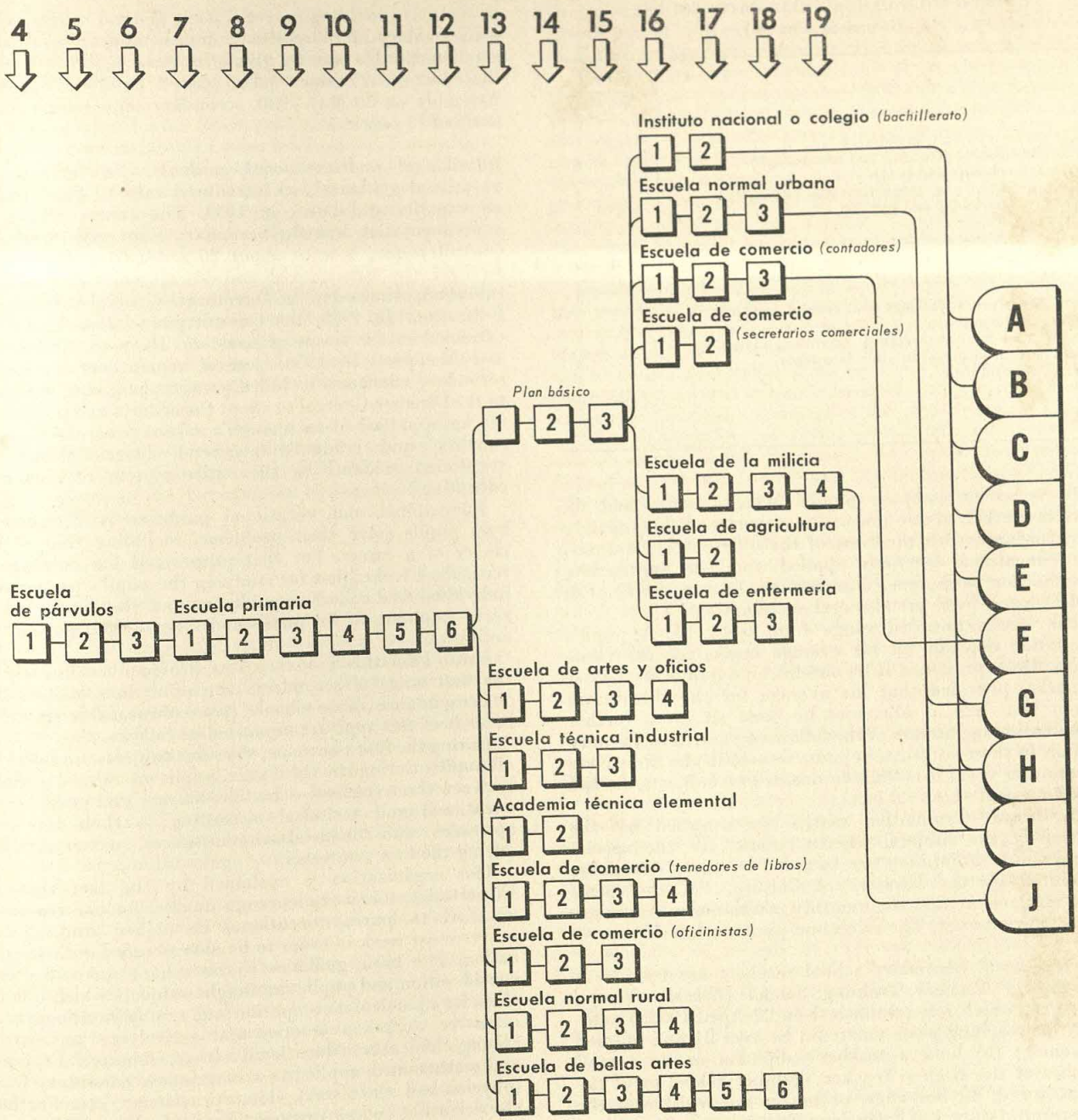
Subjects	Years		
	1st	2nd	3rd
Mathematics	5	5	5
Spanish	5	4	3
Spanish literature	—	—	2
English	3	3	3
Geography	3	3	3
History	3	3	3
Civics	3	3	3
Biology	4	3	3
Physics	—	4	—
Chemistry	—	—	3
Drawing	2	2	2
Handicrafts	2	2	2
Music	2	2	2
Physical education	2	2	2
Total	34	36	36

GLOSSARY

academia técnica elemental: elementary vocational training school.
bachillerato: upper stage of general secondary course.
colegio: private secondary school.
escuela de agricultura: vocational training school of agriculture.
escuela de artes y oficios: vocational training school of applied arts and crafts; also offers 5-years courses in graphic arts.
escuela de comercio: vocational secondary and training school of commerce; courses for book-keepers (*tenedores de libros*), clerks (*oficinistas*), accountants (*contadores*) and secretaries (*secretarios comerciales*).
escuela de enfermería: vocational training school of nursing.
escuela de la milicia: vocational secondary school for careers in the armed forces.
escuela de párvulos: pre-primary school.
escuela normal rural: teacher training school for rural primary teachers.
escuela normal urbana: teacher training school for urban primary teachers.
escuela primaria: primary school.
escuelas de bellas artes: vocational training schools of art, music, etc., with various types of course.
escuela técnica industrial: vocational training school for industrial occupations.
instituto nacional: state general secondary school.
plan básico: basic course of lower general secondary studies.

HIGHER EDUCATION (university faculties and higher institutes)

A. Law and social sciences (7 years).
B. Medicine and surgery (6 years) and related technical occupations (2 years).
C. Chemistry and pharmacy (5 years).
D. Dentistry (5 years).
E. Engineering (11 semesters).
F. Economics (5 years).
G. Arts (5 years).
H. Education (4 to 6 semesters).
I. Social services (3 years).
J. Armed Forces Staff College (2 years).


4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Instituto nacional o colegio (bachillerato)
1 2
Escuela normal urbana
1 2 3
Escuela de comercio (contadores)
1 2 3
Escuela de comercio (secretarios comerciales)
1 2
Plan básico
1 2 3
Escuela de la milicia
1 2 3 4
Escuela de agricultura
1 2
Escuela de enfermería
1 2 3
Escuela de párvulos
1 2 3
Escuela primaria
1 2 3 4 5 6
Escuela de artes y oficios
1 2 3 4
Escuela técnica industrial
1 2 3
Academia técnica elemental
1 2
Escuela de comercio (tenedores de libros)
1 2 3 4
Escuela de comercio (oficinistas)
1 2 3
Escuela normal rural
1 2 3 4
Escuela de bellas artes
1 2 3 4 5 6
A
B
C
D
E
F
G
H
I
J

TIME-TABLE OF 'BACHILLERATO' COURSE
(in periods per week)

Subject	Years	
	4th	5th
Plane geometry and trigonometry	6	—
Three-dimensional geometry and cosmography	—	6
Physics (mechanics and heat)	5	—
Physics (sound, light, magnetism and electricity)	—	5
Anatomy, physiology and hygiene	3	—
Inorganic chemistry	4	—
Organic chemistry and elementary geology and mineralogy	—	4
History of Central America and of El Salvador	3	—
Constitution	—	3
World literature, etymology and current locutions in other languages	4	—
Spanish and Spanish-American literature, etymology and current locutions in other languages	—	3
Psychology and logic	—	4
French	3	3
Total	28	28

In order to compare pupils' school results and fix criteria for their promotion, examinations are held quarterly in accordance with the aims of the different institutions, the educational methods applied and the appropriate examination technique. For foreign languages (English and French), there are also oral examinations.

The marks awarded range from 0 to 10. A pupil's promotion depends on his average marks for the three terms. He is promoted if he obtains an average of at least 5 marks, provided that his average for the third term is not less than 5: otherwise he must sit for a further examination in January of the following year. If in January he fails in three subjects, he must remain in the same class for another year; if he fails in one or two subjects, he has only to repeat these subjects.

The term examination marks are awarded by the teacher of the subject, whereas marks for the special examination in January are awarded by three examiners appointed by the Ministry of Culture. For the latter examinations, neither the monthly marks nor averages are taken into account. The minimum pass mark is 5.

Teaching staff. Secondary school teachers are trained at the Higher Teacher Training School (*Escuela Normal Superior*), which was established on 22 April 1952. Candidates for teaching posts must: (a) be over 21 and of good behaviour; (b) hold a teacher's diploma or be a staff member of the Higher Teacher Training School or of the University of El Salvador, or be on the register of the Directorate-General of Secondary Education.

Secondary school teachers are classified in three groups—first class, second class and third class according to qualifications. Those in the third class are regarded as temporary teachers. There is no system of automatic promotion for secondary school teachers.

Teachers of the *bachillerato* course are paid three colons an hour; those of the first stage (general basic course) two colons an hour. In the capital, principals of national institutes earn 600 colons a month. Principals of schools or sections providing only the basic general course receive a base salary of 150 colons a month, and are entitled to supplement this sum by giving lessons.

Under the Pensions Law, passed by the Legislative Assembly on 30 May 1930, secondary school teachers are entitled to pensions.

Educational and vocational guidance. Educational and vocational guidance was introduced into El Salvador, on an experimental basis, in 1953. The centre chosen for experimentation was the Secondary Education Section at Quezaltepeque, a town about 20 miles from the capital. In 1954 the Educational and Vocational Office was established, attached to the Directorate-General of Secondary Education. In 1955, the Quezaltepeque experiment was extended to the towns of Armenia, Ilobasco, Chalchuapa and Metapán. In 1956, general regulations concerning secondary education included paragraphs giving authority to the Director-General to adopt the criteria and procedures for an appraisal of each pupil's school progress and personality', and 'gradually to extend educational and prevocational guidance to the entire system of secondary education'.

Educational and vocational guidance is designed to help pupils solve their problems, including that of the choice of a career. For that purpose, it has recourse to recognized techniques for studying the pupil's personality, individual and collective guidiance and the service which seeks employment for pupils and follows their post-school activities.

Until 1956 this guidance was provided exclusively at the first stage of secondary education, in schools called 'basic guidance course schools' (*planes básicos de orientación*). Schools of this type are organized as follows.

During the first two years, the same subjects are taken by all pupils; during the third year, pupils are offered a choice between three courses—scientific, literary and pedagogical, vocational and technical—according to their interests, aptitudes and financial circumstances, as ascertained during the first two years.

This organization is explained by the fact that, in El Salvador, many students are unable, for one reason or another, to pursue vocational or higher studies, and others must work in order to be able to pay for their education. The basic guidance course schools take this into consideration and pupils are taught subjects which qualify them for a particular occupation; e.g. typing (multicopying), intensive workshop practice and agriculture and cattle-raising, elementary educational science, commercial Spanish and mathematics applied to accountancy, laboratory work (physics and chemistry), domestic science, etc. Further, the scientific course prepares pupils for the *bachillerato;* the literary and pedagogical course, for the urban teacher training schools and the institutes of science and letters; and the vocational and technical course, for the school of agriculture and for commercial studies.

Under this system each teacher acts as a guide and adviser to the pupil, and a study is made of each pupil's personality; at present, this study begins in grade 6 of the primary school and comprises family history, school progress, results of psychological tests, teachers' observations of the pupil's artistic and scientific propensities,

conduct, etc.; autobiographical information, medical examinations, results of inquiries and interviews. The cumulative index card sums up almost all the above-mentioned material, which is kept in individual record books.

The Educational and Vocational Guidance Office has begun to co-operate with 12 more institutions: 7 secondary education sections (first stage), 4 national institutes (second stage) and a women teachers' training school.

The only condition of admission to the basic guidance course schools is the certificate of grade 6 of the primary school.

Teachers of basic guidance course schools are mostly young and are carefully selected. They are required to have attended three summer courses before their appointment and they also receive regular advice from their respective principals and from the Directorate-General of Secondary Education through the Educational and Vocational Guidance Office.

Since 1955, a course on guidance has been provided at the Higher Teacher Training School for all pupils, irrespective of their speciality; since 1957, the same course has been given at the Department of Psychology of the Faculty of Humanities.

Vocational and technical schools

Training for industries, arts and crafts. In 1955, the Government included in the Law relating to the Budget and Salaries of the Republic appropriations enabling the Institute of Technical Education to be incorporated in the national educational system. The task of this institute is to train a sufficient number of fully qualified persons to meet the needs of the various branches of national industry. The general study plan already covers the following fields: building, carpentry and cabinet-making, ornamental mechanics, general mechanics, radio mechanics, electricity, motor mechanics. The institute plans to organize progressively courses in the following subjects: diesel engine mechanics, air-conditioning, refrigeration, factory-made clothing.

In accordance with the present plan of organization (experimental), industrial education comprises the following four co-ordinated stages:

First stage: pre-vocational. This takes place during the first 3 years of the basic guidance course, pupils being made familiar with the various industrial arts. No specialized training is given at this stage, but the pupil is initiated systematically, in turn, in various handicrafts. The second stage (vocational) is also open to pupils who have completed their primary education; in this case, they are given a 1-year transitional course of initiation in different industrial activities.

Second stage: vocational. During this stage, which lasts 3 years, pupils receive systematic practical and technical training. The first year is devoted chiefly to exploratory work and adaptation so that the following two years can be reserved exclusively for specialization. Teaching is given at the lower secondary level. At the end of the 3-year course, the pupil receives a certificate indicating that he has completed his vocational training for industrial work. The reports drawn up by the industrial firms with which the pupil comes into contact during his period of training determine the moment at which he receives the qualification of skilled worker (*oficial vocacional*) in his chosen field.

Probable third stage: technical. This stage will comprise a 2-year course at upper secondary level, and will be designed to train experts or technicians. Successful completion of this course of scientific studies and laboratory work in chosen crafts will entitle them to the *Certificado de Bachiller Vocacional* (pre-university vocational certificate) and will give them access to university technical faculties. In the meantime, they will be capable of performing duties (direction, organization, supervision and management) in industrial enterprises.

Probable fourth stage: university technical. According to the pre-established plan already in operation at the first two stages, technical and industrial studies will be completed at this fourth stage. The diploma to be conferred will be determined by the study plan and its application by the teachers, as well as by the research, experimental work and scientific studies undertaken during this stage.

Other institutions providing industrial and technical courses are the Escuela Nacional de Artes y Oficios (National School of Arts and Crafts) and the Colegio Santa Cecilia. The former confers diplomas for draftsmen and artists, draftsmen and architects, photo-engravers, lithographers, commercial drawing. It is open to pupils who hold the certificate of grade 6 of the primary school. The courses last 4 years, except in lithography and photo-engraving, which last 5 years. The Colegio Santa Cecilia, a private school, provides various courses for pupils who have completed grade 6 of the primary school, and confers a specialized worker's diploma at the end of the 5-year course.

Agricultural education. The School Gardening Section was established in 1946 and was later transformed into the Department of Agricultural Education. Its activities may be summed up as follows: (a) it provides various primary schools and basic general course schools with the materials necessary for the teaching of agriculture; (b) it guides and supervises institutions applying programmes relating to the teaching of agriculture; (c) its staff has trained the teachers of agriculture employed at the basic guidance course schools; (d) in 1956, it held a special summer course for teachers of schools at different educational levels; (e) it has obtained fellowships for the best teachers of agriculture so that they may continue their studies abroad.

The Ministry of Agriculture maintains a National School of Agriculture for pupils who have completed their lower secondary studies (basic general course).

Commercial education. The specific aims are: (a) to provide pupils with training corresponding to their vocational aptitudes; (b) to train accountants for posts in the governmental, commercial and industrial fields; (c) to inculcate in pupils a social spirit by imbuing them with the principles which determine the ethics of their profession; (d) to develop the pupil's personality so that he may be in a position to meet the requirements of his profession.

Commercial education forms part of vocational education and qualifies pupils for various diplomas including those of accountant and commercial secretary, which

require 3 and 2 years' technical specialization respectively, following on from lower secondary studies (basic general course).

Domestic science education. The Domestic Science Section was established in 1954 and placed under the immediate control of the Directorate-General of Secondary Education.

Its general aims are to provide teachers with training in domestic science so that they will be able to teach this subject, train good housewives, and provide pupils with the necessary knowledge and skill to meet their personal and family needs.

This teaching is provided at the following institutions: the Social Service School and the Higher Teacher Training School (higher educational establishments); Escuela Normal de Maestras España (teacher training school); Instituto Nacional Central de Señoritas (second stage of secondary education); basic guidance course schools (first stage of secondary education); primary schools; mothers' clubs (in certain communities); various private schools.

Teacher training schools

The rural teacher training schools provide a 4-year course of training, following the 6-year primary course, for future teachers in rural primary schools.

The urban teacher training schools provide a 3-year course, following the 3-year courses of the secondary Basic Plan schools, for future teachers in urban primary schools.

[*Text prepared by the Unesco Secretariat in 1960 from official sources listed in the bibliography.*]

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STATISTICS

Population (mid-year 1958 estimate): 2,434,000.
Area: 7,700 square miles; 20,000 square kilometres.
Population density: 315 per square mile; 122 per square kilometre.

Summary of school statistics 1953–57. Total enrolment in educational institutions at all levels was nearly 289,000 pupils in 1957/58, representing some 12 per cent of the population. There were, in addition, 31,741 adults, a quarter of whom were women, attending literacy courses. Of the school-going population, under 5 per cent were enrolled in kindergartens, 85 per cent in primary schools, nearly 6 per cent in general secondary schools, 3.5 per cent in technical secondary schools, under 1 per cent in all teacher training courses and 0.5 per cent at the National University. Girls made up 48 per cent of enrolment at primary schools, 41 per cent in general secondary schools, two-thirds of enrolment at secondary teacher training courses and 38 per cent at higher teacher training schools. However, at the National University only 12 per cent of those enrolled in 1956/57 were women. The proportion of girls to total enrolment in primary and secondary education was unchanged compared with the beginning of the period under review. The full time teaching staff at all levels numbered some 9,900 in 1957/58; three-quarters of primary school teachers and nearly one-third of general secondary school teachers were women. The average pupil teacher ratio, excluding part-time staff, was 33 in primary schools compared with 31 in 1953/54; in general secondary schools the ratio was 10 in 1957/58. Compared with 1953/54, enrolment increased at all levels of education and in particular by 39 per cent in primary schools, by 46 per cent in general secondary schools, by over 300 per cent in vocational schools, by 62 per cent in secondary teacher training schools and by 31 per cent at the university. Adults attending literacy course increased by 77 per cent over the period under review. (See Table 3.)

Enrolment trends in secondary education, 1950–57. Table 1 shows the rapid development of all sectors of secondary education since 1950. Over the 8 years under review, enrolment in general secondary schools increased nearly two and a half times and the number of students in vocational and in teacher training schools was three times higher in 1957 than in 1952. The ratio of secondary school enrolment to the estimated population 15–19 years old

passed from 6 over the 5 years 1950–54 to 10 in the 3-year period 1955–57.

Examination results in secondary education 1953–56. Examination results reflect the expansion of secondary education in recent years. Students passing the baccalaureat increased by 43 per cent over 4 years and commercial diplomas more than tripled over the corresponding period. Teaching diplomas awarded increased by 39 per cent between 1953/54 and 1956/57. Information on women candidates for examinations is very incomplete. (See Table 2.)

Educational finance 1959. The budget of the Ministry of Education for 1959 amounted to 30,192,000 colones averaging about 12 colones per inhabitant. (Official exchange rate: 1 colon = 0.40 U.S. dollar.) Of this total 18,689,000 colones, or about 62 per cent, were allocated for primary education. Further details are not available.

Sources. El Salvador: Dirección General de Estadística y Censos, *Anuarios Estadísticos;* regional Office of Unesco for the Western Hemisphere, *Report on the Implementation of Major Project No. 1.*

1. TRENDS IN SECONDARY EDUCATION, 1950–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1950	6 927	40	[1] 1 977	...	...	...			
1951	6 830	43	2 927	...	...	...			
1952	8 509	44	2 836	42	608	74	*13	213	*6
1953	11 355	42	2 405	44	1 005	67			
1954	11 218	43	3 079	...	1 239	67			
1955	12 816	42	6 324	...	1 469	66			
1956	14 016	41	9 444	48	1 500	66	25	243	*10*
1957	16 605	41	10 240	52	1 626	69			

1. Excluding fine arts schools whose enrolment in 1951 was 717 students.

2. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year							
	1953/54		1954/55		1955/56		1956/57	
	Total	Female	Total	Female	Total	Female	Total	Female
Bachillerato	373	...	429	...	416	...	535	...
Technical and trade schools diploma	...	...	...	...	48	48	59	33
Commercial diploma	250	...	694	...	631	...	841	...
Public administration diploma	...	...	...	...	...	...	91	18
Nursing and social services diplomas	15	15	33	30	37	35	26	25
Teaching diploma	334	...	354	...	376	...	464	...

3. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, 'oficiales'	1957/58	80	310	...	11 586	
	Kindergartens, 'semi-oficiales'	1957/58	6	16	...	507	*6 800
	Kindergartens, 'municipales'	1957/58	3	20	...	574	
	Kindergartens, private	1957/58	30	41	...	1 046	
	Total	**1957/58**	**119**	**387**	**...**	**13 713**	*** 6 800**
	"	1956/57	108	359	...	13 379	...
	"	1955/56	101	325	...	11 515	6 131
	"	1954/55	89	314	314	10 808	5 819
	"	1953/54	89	262	262	9 879	5 464
Primary	Primary schools, 'oficiales'	1957/58	2 059	6 409	4 771	218 039	103 561
	Primary schools, 'semi-oficiales'	1957/58	24	172	136	5 186	2 987
	Primary schools, 'municipales'	1957/58	83	193	159	7 658	3 548
	Primary schools, private	1957/58	125	641	451	14 295	6 598
	Total	**1957/58**	**2 291**	**[1]7 415**	**[1]5 517**	**245 178**	**116 694**
	"	1956/57	2 119	[1]6 614	[1]4 929	219 594	105 118
	"	1955/56	2 060	[1]6 295	[1]4 523	207 254	98 648
	"	1954/55	2 033	[1]6 020	[1]4 392	196 928	94 306
	"	1953/54	1 937	[1]5 756	[1]4 230	176 398	85 318
Secondary *General*	Secondary schools, public	1957/58	191	993	275	16 605	6 762
	Secondary schools, private	1957/58		723	238		
	Total	**1957/58**	**191**	**[2]1 716**	**[2]513**	**16 605**	**6 762**
	"	1956/57	180	[2]1 634	[2]489	14 016	5 780
	"	1955/56	120	...	...	12 816	5 440
	"	1954/55	132	...	...	11 218	4 847
	"	1953/54	105	...	...	11 355	4 754
Vocational	Commercial schools	1957/58	109	[3]...	[3]...	8 092	4 210
	School of Public Administration	1957/58	1	17	—	87	24
	Agricultural school	1957/58	1	10	—	147	—
	Nursing school	1957/58	1	41	19	89	89
	Schools of fine arts	1957/58	...	...	...	1 264	941
	Other schools	1957/58	22	43	11	561	68
	Total	**1957/58**	**[4]134**	**...**	**...**	**10 240**	**5 332**
	"	1956/57	[4]112	...	...	9 444	*4 543
	"	1955/56	[4]73	...	...	6 324	...
	"	1954/55	[4]57	...	...	3 079	...
	"	1953/54	[4]29	...	...	2 405	1 053
Teacher training	Teacher training schools, public and private						
	Total	**1957/58**	**13**	**[3]...**	**[3]...**	**1 626**	**1 124**
	"	1956/57	12	[3]...	[3]...	1 500	990
	"	1955/56	12	...	...	1 469	972
	"	1954/55	12	...	...	1 239	825
	"	1953/54	11	...	...	1 005	675
Higher *Teacher training*	Higher teacher training school						
	Total	**1957/58**	**1**	**45**	**9**	**146**	**55**
	"	1956/57	1	42	9	236	97
	"	1955/56	1	77	14	223	125
	"	1954/55	...	...	...	...	...
	"	1953/54	...	...	...	...	...
General and technical	National University						
	Total	**1957/58**	**1**	**248**	**...**	**1 336**	**...**
	"	1956/57	1	272	14	1 525	190
	"	1955/56	1	200	10	1 126	173
	"	1954/55	1	194	5	1 008	131
	"	1953/54	1	242	2	1 016	117
Adult	Literacy courses						
	Total	**1957/58**	**...**	**...**	**...**	**31 741**	**7 768**
	"	1956/57	430	430	265	24 404	6 744
	"	1955/56	411	411	240	25 307	7 521
	"	1954/55	406	406	236	28 433	7 582
	"	1953/54	401	401	226	17 935	6 720

1. Not including part-time teachers numbering 453 in 1957/58.
2. Including teachers for commercial schools and secondary teacher training.
3. Included in secondary general education.
4. Not including schools of fine arts.

ETHIOPIA

THE EDUCATIONAL SYSTEM

The Imperial Ethiopian Government maintains a system of primary and secondary education throughout the country. Its schools are open to Ethiopian children without distinction of race, sex, or religion. They form part of a comprehensive system which includes higher education in an increasing number of fields, both academic and technical.

The present system provides for 8 years of primary education in elementary schools, and 4 years of secondary schooling. However, a revised pattern, with 6 years of primary schooling followed by 5 of secondary, is now under consideration and is being tried experimentally in certain selected schools.

The national language, Amharic, with its own script and literature, is used as the language of instruction in the beginning grades of the primary school. English is introduced in the elementary schools and becomes the language of instruction in most subjects, but as more materials are produced it is intended that Amharic should be used at progressively higher levels in the system.

Overall responsibility for the entire school system in the 12 provinces of Ethiopia is entrusted to the Ministry of Education and Fine Arts, but some schools, particularly at the secondary level, are administered by other branches of the Imperial Government. Under the Act of 1950 federating Eritrea with Ethiopia jurisdiction in educational matters affecting Eritrea was reserved to the Eritrean Government.

Mention should also be made of the role of the Ethiopian Church and of various other bodies engaged in educational work. For very many centuries the Ethiopian Church has maintained a vital interest in education, and today it is responsible for an extensive network of schools, mostly at the primary level. Mission effort is largely concentrated on primary education, though there is some activity in the secondary field. Finally, a limited number of private schools provide educational opportunities for Ethiopian as well as foreign children.

Elementary schools maintained by the Ethiopian Government are financed from the proceeds of a local land tax in the provinces and from central treasury funds in Addis Ababa. For secondary and higher education, funds are provided from the National Treasury.

The rapid development of the Ethiopian school system since the liberation of the country in 1941 has been considerably aided by various forms of technical assistance from international organizations and from friendly governments, and by the employment of foreign personnel. With the increasing number of Ethiopian teachers who are becoming available from training schools and colleges within the country and from abroad, foreign teaching personnel are now concentrated mainly in the secondary schools and colleges.

The current structure of the Ethiopian government school system is shown in the diagram on page 453.

THE DEVELOPMENT OF SECONDARY EDUCATION

When Western-type education was formally introduced into Ethiopia some fifty-five years ago, the curriculum was intended to supplement the traditional instruction given in the church schools. The programme was designed to provide selected groups of students with the linguistic and other skills which were necessary to enable Ethiopia to maintain satisfactory relations with other countries. The new schools were largely staffed by foreign personnel, and the curriculum presupposed a thorough grounding in the national tongue and culture. Priority was given to French, while English, Italian and Arabic were optional subjects.

Thus, the first modern schools were of a secondary rather than a primary nature, but their programme was gradually expanded until it covered the key subjects of mathematics, science, history and geography as well as language, and the level of instruction was divided into primary and secondary grades.

In 1935 the development of education was violently interrupted by the Fascist invasion, and since the liberation of the country in 1941 it has been necessary to rebuild the government school system, as an entity, from the earliest grades. There is still close co-operation with church and other schools, and the co-ordination of programmes enables church, mission and private students to enter government schools at a level appropriate to the work they have already done.

In the early days of the introduction of Western schooling and until quite recently, secondary schools were largely concentrated in the capital, the boarding system predominated, and students were automatically eligible to receive full maintenance as well as tuition from state resources.

Today, with the decentralization of schooling, secondary education is provided in the provinces and the boarding establishments are being converted as far as possible to day schools. Needy students and students leaving their homes to enter secondary schools are, however, eligible to receive stipends or maintenance allowances, and these allowances continue to represent a considerable charge upon national funds.

Legal basis

The Act of 1950 federating Eritrea with Ethiopia under the sovereignty of the Ethiopian Crown guarantees the right to education and reserves to the Eritrean Government local jurisdiction in educational matters.

Proclamations, decrees and orders, legal and general notices, are published in Amharic and English in the

official *Negarit Gazeta*. The following is a summary of the main legislation relating to educational matters.

Order No. 1 of 1943. An Order to define Powers and Duties of Ministers. Articles 26–28 relate to the Minister of Education and Fine Arts. Among his functions are: to develop education and the arts; to define the nature of and the curriculum for schools; to issue certificates for the higher standards; to control private educational institutions; to establish an academy, libraries and museums.

Legal Notice No. 103 of 1947, Customs Revised Import and Export Tariff Regulations. Item 350 reads: 'All goods, wares and merchandise imported, whether paying duties, or classed as duty free, shall pay an additional tax of 3 per cent *ad valorem*, for the promotion of education and public health in Ethiopia.' Legal Notice No. 162 of 1952, Revised Import and Export Tariff (Amendment No. 1) Regulations, adds 1 per cent to this tax, making a total of 4 per cent.

Order No. 3 of 1947 established the (central) Board of Education and Fine Arts.

Proclamation No. 93 of 1947 established a tax for education, levied on all lands, and collected as one with taxes provided for by the Land Tax Proclamation of 1944.

Proclamation No. 94 of 1947 constituted a local education board in each province, under the presidency of the Governor-General, and with the senior education officer and the headmaster of the principal school in the provincial capital as *ex officio* members. It provided that the Local Education Tax should be used for expenses in connexion with elementary schools in the province.

General Notice No. 185 of 1954 is the Charter of the University College of Addis Ababa.

Secondary schools are administered in accordance with the regulations which are laid down from time to time by the Ministry of Education and Fine Arts.

Administration

Secondary education is planned and developed by the Ministry of Education and Fine Arts working through its administrative, programming and advisory departments, and under the general direction of the Board of Education appointed by the Emperor.

The control and administration of general secondary education is centralized in the Ministry of Education. Co-ordination with other Ministries and Departments responsible for special schools, and with public authorities and private agencies, is achieved at the working level through the appropriate departments of the Ministry, and on policy matters through the Board of Education.

Supervision and inspection of the general secondary schools is carried out through the Inspections Branch of the Ministry's Department of School Administration. A regular schedule is maintained, and the inspectors' reports cover all aspects of school administration and operation. They are discussed with headmasters and Ministry officials as well as with individual teachers, and they form the basis for necessary directives and guidance.

Headmasters are encouraged to enlist the support of parents in school matters, and this support takes practical form through the activities of parent-teacher associations.

Finance. Secondary education is financed from the National Treasury. Comprehensive budgets, taking into account the needs of each school, are prepared each year by the Accounts Departments of the Ministry of Education and of the other Ministries and Departments which are responsible for the operation of special schools. These budgets are submitted to the Ministry of Finance.

Provincial Education Officers, who are responsible for the supervision and budgetary administration of provincial elementary schools, act also as the Ministry's representatives

GLOSSARY

NOTE. Not shown are the theological secondary, naval and air cadet training schools, all of which prepare candidates for the secondary school certificate. There is provision for in-service technical training in Ethiopia, and study abroad, at both secondary and higher education levels. Official age of entry to primary school is 6 to 7 years.

agricultural school: vocational secondary school of agriculture.

building trades school: vocational training school for carpenters, masons, etc.

civil aviation school: vocational training school for all aspects of civil aviation administration and related technical services (meteorology, aircraft maintenance, communications, etc.).

commercial school: vocational secondary school with course offering academic, secretarial and commercial subjects.

community school teacher training: training course for teachers in schools offering basic education to adults and children.

elementary teacher training: teacher training schools for teachers in *primary* and *middle* schools; in addition to the full 4-year course accelerated 2-year courses are provided.

middle school: upper primary school (grades 5–8).

nurses' training school: training courses at various levels for nurses, dressers, and other auxiliary medical personnel.

primary school: lower primary school (grades 1–4).

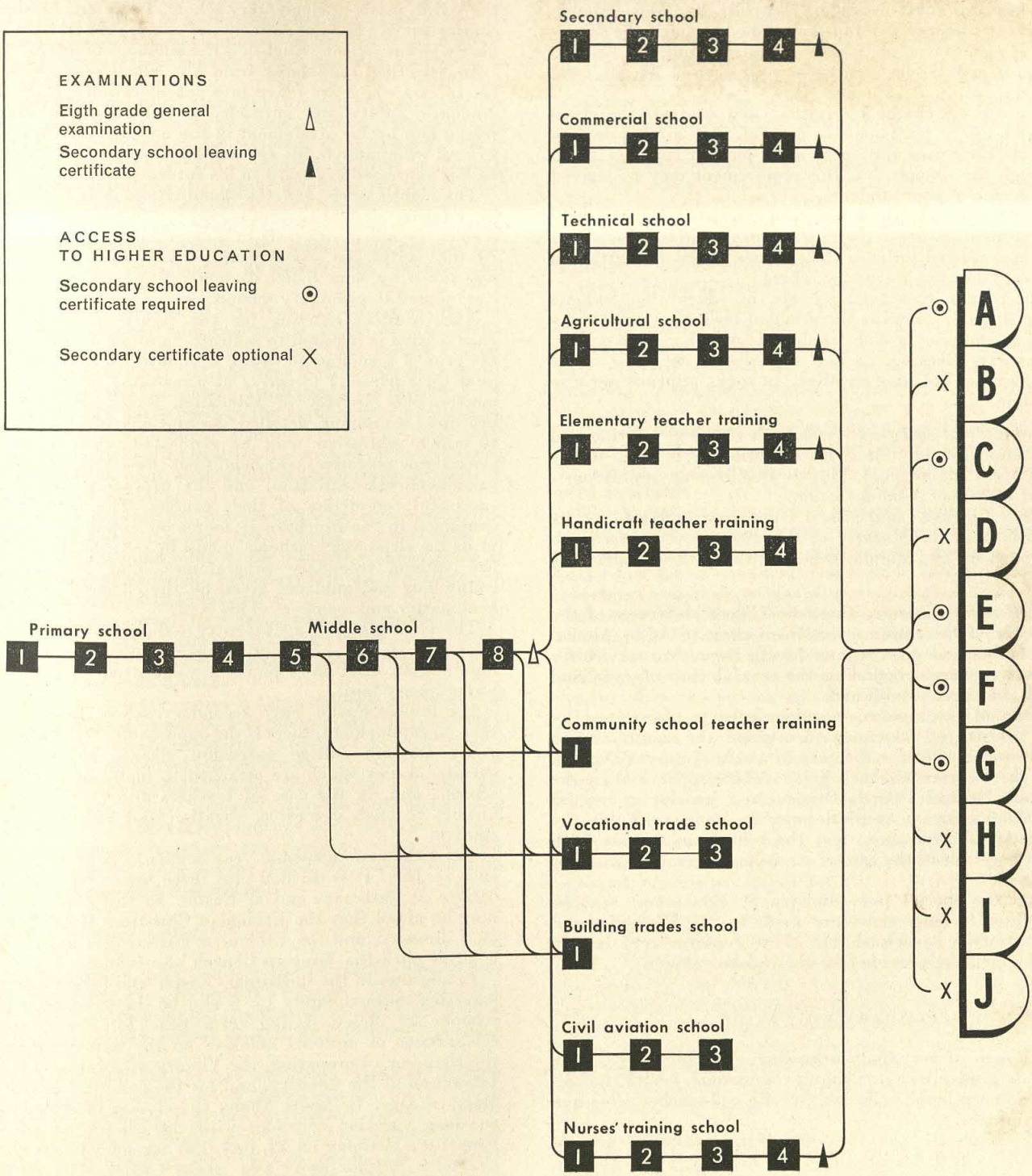
secondary school: general secondary school.

technical school: vocational secondary school training technicians for industrial activities.

vocational trades school: vocational training school for various industrial occupations.

HIGHER EDUCATION

A. Arts and Science College.
B. Agricultural College.
C. Engineering College.
D. Secondary teacher education.
E. Law College.
F. Extension College (courses in various general and professional subjects—accountancy, administration, engineering, English, etc.).
G. Public health officers' course.
H. Theological College.
I. Colleges training officers for the various armed forces and police.
J. Building Institute.


EXAMINATIONS
Eigth grade general examination
Secondary school leaving certificate
ACCESS TO HIGHER EDUCATION
Secondary school leaving certificate required
Secondary certificate optional
Primary school
1 2 3 4
Middle school
5 6 7 8
Secondary school
1 2 3 4
Commercial school
1 2 3 4
Technical school
1 2 3 4
Agricultural school
1 2 3 4
Elementary teacher training
1 2 3 4
Handicraft teacher training
1 2 3 4
Community school teacher training
1
Vocational trade school
1 2 3
Building trades school
1
Civil aviation school
1 2 3
Nurses' training school
1 2 3 4
A
B
C
D
E
F
G
H
I
J

in regard to local secondary schools. In Addis Ababa, schools are supervised and maintained through the Ministry's Department of School Administration; in Eritrea, as explained above, education is supervised by the local government.

There is no charge for tuition, and students are given the free use of textbooks. In general, they are required to provide their own stationery or to pay for supplies issued through the schools, but this requirement may be waived in the case of poor students.

Under current regulations, stipends are paid to needy day students living in their home towns, and to all students who are obliged to leave their homes in order to attend a centrally-located secondary school.

Specialized vocational schools, in which the students undertakes to serve the Government for a number of years after graduation, provide free board and lodging, textbooks, stationery, clothing, medical and dental care and travel expenses for the long vacation. In some, stipends are also payable.

Buildings and equipment. Standards of space, lighting and sanitation are prescribed by the Ministry of Education's Architects Department, Health Department and Department of School Administration.

Class furniture and school equipment is issued to its schools from the Ministry of Education, and conforms to the patterns and standards laid down by the departments concerned.

School welfare services. The School Medical Service of the Ministry of Education maintains a clinic in Addis Ababa, and the nucleus of a regular health inspection service for Ministry schools, including the special care of eyes and teeth, has been established.

Each of the regular secondary schools maintained by the Ministry of Education throughout the country has a clinic which is under the care of a school nurse (dresser), and these clinics and their personnel are supervised by the Schools Medical Officer. Dressers are trained at regular vacation courses; medical supplies are issued by the Ministry of Education, and the schools co-operate with local hospitals in the care of students suffering from major illnesses.

For the special (non-Ministry of Education) schools, individual arrangements are made by the Ministries and Departments concerned, but these conform very largely to the facilities provided for the regular schools.

TYPES OF SECONDARY EDUCATION

The types of secondary schooling available in Ethiopia include academic, agricultural, commercial, health, technical and vocational, police and service and teacher education programmes.

The academic and the agricultural secondary schools prepare students for admission to college (higher education); opportunities for college training are also open to outstanding students from other schools, whose programmes are not specifically directed to this end.

Most secondary programmes cover 4 years (grades 9 to 12), and the main selection of candidates is made from the eighth grade of elementary school. There are, however, shorter courses in some branches of specialized training. In nearly all the schools, English is the language of instruction.

In selecting candidates from the elementary schools, the factors which are taken into consideration include the student's ability and aptitude, as shown in his school record and by his attainment in the national eighth grade general examination, his age and physique, and the choice he has expressed in regard to his future career.

The eighth grade general examination includes papers in English, Amharic, mathematics, science and social studies, together with tests in mental and special abilities. At the end of the school year 1958/59, the examination was taken by some 5,469 students, 40 per cent of whom were placed in secondary schools.

Each student entering for the eighth grade general examination is required to indicate, in order of preference, the type of schooling he wishes to follow. To help students (and their parents) to arrive at a reasoned choice in this matter, the Ministry of Education issues each year a brochure containing detailed descriptions of the schools to which admission may be requested, their location, programme objectives, the conditions prescribed for entry, extra-curricular activities, and the prospects opened by successful completion of their courses. The information contained in the brochure is moreover supplemented by visits to elementary schools made by representatives of the various secondary programmes, and by personal counselling and guidance given by the elementary school headmaster and members of his staff.

The usual minimum age for entry to the various vocational schools is 16 years, and for many a medical certificate is required. In most cases pupils are admitted on a strictly probationary basis.

For students who leave secondary school in order to take up employment, there is the opportunity for continued study through college extension classes, through the evening classes which are attached to many of the larger schools, and, in the case of teachers and of some technicians, through in-service, vacation and correspondence courses.

The Ethiopian academic year begins in September and ends in July. It is divided into three terms by short vacations at Christmas and at Easter. In this connexion it may be noted that the Ethiopian Christmas is celebrated on 7 January, and the Ethiopian Easter does not always coincide with the Western Church observance.

In addition to the Christmas, Easter and long vacations (covering approximately 14, 9 and 66 days respectively), schools are closed during term time for the one-day celebrations of national holidays on the anniversaries of the Emperor's Coronation, the Victory of Adowa, and the Liberation of the Country, and for the commemoration of Martyrs' Day. In Addis Ababa the closing of schools for the long vacation coincides with the celebration of the Emperor's birthday on 23 July, but for schools elsewhere the term finishes some two weeks earlier. The normal school week consists of 5 days (Monday to Friday); in some cases, schools are closed on a week-day afternoon and opened on Saturday morning. In most secondary schools, the day is divided into 7 teaching periods of 45 minutes each.

In the organization and administration of most secondary schools, including the prescription of teaching methods, the grouping or streaming of pupils and the testing of achievement, a considerable measure of discretion is entrusted to the headmaster.

There are, however, standard curricula laid down by the Ministry of Education for its schools, and in many instances students are prepared for external examinations. These examinations have served a valuable purpose in relating Ethiopian standards to those obtaining elsewhere, and in facilitating the admission of Ethiopian students to foreign colleges, but with the development of higher education in the country the school programmes and curricula are increasingly reflecting local culture and conditions.

A large proportion of the teaching staff in Ethiopian secondary schools and colleges is made up of foreign personnel employed under contract and recruited from many different lands. It has been found that the variety of cultural and academic backgrounds represented by these teachers has tended to the enrichment of the school programme and, taken together with the traditional elements in Ethiopian culture, has helped in the evolving of a system of education which is particularly adapted to the needs of Ethiopia.

It will be appreciated, however, that the cost of importing highly qualified teachers from abroad is very high in relation to the total budget, and priority is being given to the training of Ethiopian personnel to work at all levels in the government school system.

Foreign employees who are engaged from abroad are employed under contract for fixed terms of 3 years' duration; others, already resident in Ethiopia, are employed locally on an annual basis.

Ethiopian teachers enjoy a large measure of security of tenure. They are paid in accordance with the Ministry's salary scale, which recognizes experience as well as academic and professional qualifications.

Facilities are available for the professional and academic upgrading of teachers through extension programmes and through in-service, correspondence and vacation courses, and experienced teachers are recruited each year for admission to full-time 4-year degree courses at the University College of Addis Ababa.

General secondary schools

For the present, and pending the projected introduction of comprehensive secondary schools with academic, technical and professional streams, the place of the general secondary school is largely filled by the academic secondary schools.

The principal aim of the academic secondary schools is to prepare students for admission to the different college programmes, but they serve also to furnish recruits to various special training courses, and a proportion of the students completing the twelfth grade are absorbed directly into business and government employment each year.

In 1958/59 there were 24 government academic secondary schools established in Ethiopia. Nine of these schools were located in Addis Ababa, two in Asmara (Eritrea), and the remainder were distributed throughout the Empire. Most of the schools were co-educational, but three in Addis Ababa were reserved for boys and one for girls.

The academic secondary school at present has a 4-year programme. The subjects offered include Amharic, English, French, history, geography, mathematics (geometry, algebra, arithmetic), and general science, together with such non-academic subjects as moral instruction, music, domestic science and physical education.

At the completion of the twelfth grade, students are eligible to sit for the Ethiopian School Leaving Certificate and the London General Certificate of Education examinations. To be eligible to receive an Ethiopian School Leaving Certificate, students are required to pass in Amharic, English, mathematics and any other two subjects. Candidates who satisfy college entrance requirements may continue their education at the University College of Addis Ababa, the Haile Selassie I Public Health College and Training Centre, the College of Engineering, the Building College, the College of Agricultural and Mechanical Arts, or one of the Defence colleges.

The 24 secondary schools mentioned above do not include the Theological Academy and the Lycée Franco-Ethiopien Gabre Mariam in Addis Ababa, and certain private schools.

The Theological Academy is sponsored by the Ethiopian Church in conjunction with the Ministry of Education and Fine Arts. The programme follows very closely that prescribed for the academic secondary schools, but with a certain emphasis upon the special theological and cultural interests of the Church. Students are recruited mainly from the elementary sections of church schools, but the Academy is also open to candidates from government schools.

The Lycéee Franco-Ethiopien Gabre Mariam is jointly sponsored by the French and Ethiopian authorities. It has a large enrolment in the primary section and a substantial secondary section which prepares students for the *baccalauréat* examination. Instruction is in French, and Amharic and English are taught as subjects.

Among private institutions mention may be made of the English School, the German School, St. Joseph's School and the Nazareth School, which also enrol Ethiopian students in their secondary grades, and the Evangelical Secondary School at Debre Zeit.

Agricultural schools

At the secondary level there are two schools which are operated by the Ministry of Agriculture—the Jimma Agricultural Technical School in Kaffa Province, and the Agricultural School at Ambo in Shoa Province.

The programme covers a period of 4 years. First year (ninth grade) subjects include Amharic, English, general science, arithmetic, agriculture and hygiene. Biology and world history are added in the tenth grade and chemistry and algebra in the eleventh. Additional courses in the twelfth grade include Ethiopian history, economic geography, farming practice, physics and geometry.

In addition to the general course, which is designed to prepare students for college work in agriculture, there is a special 2-year course in forestry. Candidates successfully completing this course are awarded the forest ranger

diploma; those who are particularly highly qualified may be allowed to continue their studies for two more years and to receive the forestry engineer diploma at the end of the fourth year.

All students are boarders and receive free maintenance, including medical care. Vacation travel expenses are also paid, together with a *per diem* allowance for trips undertaken as part of the school programme. There are opportunities for paid employment for students at both schools.

Superior graduates from the agricultural schools are eligible for admission to the degree course at the Imperial Ethiopian College of Agriculture and Mechanical Arts; there are also occasional scholarships available for study abroad in specialized subjects.

The Commercial School

Commercial education is provided by the Ministry of Education through the Commercial School in Addis Ababa. The programme is designed to prepare clerks and secretaries for government and business employment. The courses have previously covered 4 years, but according to the revised programme which is being introduced in 1959/60, the regular course for candidates who have completed the eighth grade of elementary school will cover 3 years. The first year (grade 9) of this programme is devoted to academic and general subjects including Amharic, English, French, morals and current affairs. During the second and third years the students will specialize as clerks or as secretaries. The secretarial section provides training in English shorthand, Amharic typewriting, English typewriting, and general office practice. The clerical section offers courses in book-keeping and accounting, Amharic typewriting, English typewriting and general office practice.

In addition to the regular programme, the school now offers special concentrated 1-year and 2-year courses in commercial subjects. These courses are open to selected students from the tenth grade and above who will be admitted directly to the second year of technical training.

The school operates evening classes as well as day courses, and the Ministry of Education proposes to include commercial streams in its projected comprehensive secondary schools.

Health training courses

Technical and professional courses at the secondary level, which are sponsored by the Ministry of Public Health in collaboration with international and national organizations and technical assistance programmes, include malaria eradication, community nurses and sanitarians, and regular nurses' training.

The Malaria Eradication Training School. The programme is a 6-month course for male students only. Students receive monthly stipends of 50 Ethiopian dollars and are responsible for their own keep and clothing. Candidates must have completed at least the ninth grade in secondary school, have passed the special entrance examination and be between 18 and 25 years of age. They undertake to work in the Nazareth Malaria Pilot Project (Shoa Province) for a minimum period of 5 years and to accept placement in any part of the country.

The Haile Selassie I Public Health College and Training Centre. This institution, situated at Gondar (Begemdir Province) trains sanitarians (men) and community nurses (women).

The course for sanitarians comprises 1 year of school plus 1 year of supervised field work with a public health team. The subjects studied include sanitation, insect control and public health education, together with English, mathematics, physics, chemistry, anatomy and statistics.

For community nurses, the course of study includes 2 years at the school plus 1 year of supervised field work with a public health team. In addition to nursing, students study English, psychology, sociology, anatomy, physiology, microbiology, drugs, diseases, nutrition, hygiene, midwifery, infant and child care and related subjects.

For both courses, candidates must be between 17 and 25 years of age, and have passed the eighth grade general examination and a special medical examination. Students undertake to work for the Ministry of Public Health as members of health teams serving rural communities throughout the Empire.

Teaching hospitals. Regular nurses' training is provided in five teaching hospitals, three of which are located in Addis Ababa, one in Lekempti and one in Asmara. These courses cover up to 4 years, and the students in Lekempti and Addis Ababa are normally recruited from the higher grades of academic secondary school. All students are required to take courses in English, mathematics and chemistry, as well as professional subjects.

Technical and trade schools

Secondary level instruction in technical and vocational skills is provided by the Technical School in Addis Ababa, the Vocational Trade School in Asmara and the Vocational Building Trades School in Addis Ababa.

The Technical School is operated by the Ministry of Education, and the Vocational Trade Schools are co-operative projects with the United States Operations Mission to Ethiopia.

Other specialized programmes are taught at schools operated by the Department of Civil Aviation and the Imperial Board of Telecommunications in collaboration with the United Nations, and there are several service institutions.

The Government is aware of the importance of increasing the number of skilled technicians, and it is intended that additional facilities shall be provided and vocational streams added to existing secondary schools.

The Technical School. The objective of the Technical School in Addis Ababa is to produce well-trained technicians for industry who will be capable of advancing to supervisory positions. The school offers a course in teacher training and provides a general education designed to prepare all its graduates for participation in civic and community activities.

The programme extends for 4 years beyond the eighth grade. The first year (grade 9) is devoted to basic skills in woodwork, metalwork and electricity. During the remaining 3 years the students specialize in one particular trade shop. At present there are 11 trades—foundry, forging and welding, machines, sheet metal work, auto-mechanics, electricity, radio, arts and crafts, cabinet making, drafting (mechanical and architectural), surveying.

The working day is divided into two sessions—morning shop and afternoon academic studies, or vice versa. Academic subjects include Amharic, English, mathematics, science, morals, and mechanical drawing. Shop management and teacher training are introduced as additional subjects in the fourth year. As far as possible, academic subjects are related to the practical work in the different shops.

As stated above, students are prepared for employment by government departments or by business and industrial firms in Ethiopia. There is also the opportunity for outstanding graduates to continue their education at the College of Engineering or the Building College.

The Vocational Trade School. The programme covers 3 years. All students are required to study English, Amharic, mathematics, science, mechanical drawing, health and physical education.

During the first year all students take general work shop practice; during the second and third years each student must specialize in one of the following courses: auto shop, machine shop, electrical shop, woodwork and masonry shop, forging, welding and sheet metal shop.

Admission is restricted to Ethiopian nationals between the ages of 16 and 22 years and preference is given to candidates who have passed the eighth-grade general examination. It is the policy of the school to attempt to have each beginning class composed of an equal number of students from each of the eight divisions of Eritrea, and further preference is given to applicants from rural areas. All candidates are required to take aptitude tests given by the school.

The Building Trades School. The school trains semi-skilled workmen in the building trades and also prepares future teachers of building skills. The course lasts 1 year and students are assigned to one of the following divisions: electrical installation, carpentry, plumbing, or brick and stone masonry. In addition to practical instruction, related shop mathematics and mechanical drawing are taught for 1 hour each day. Instruction is in Amharic.

Applicants for admission to the school must be at least 16 years old. Any student who has completed the fourth grade of elementary school may be admitted if he passes the special entrance examination. Candidates who have passed the eighth grade general examination are exempted from the special test.

The Civil Aviation School. The school offers 3-year courses in radio, electronics, meteorology and aircraft maintenance. Students are selected from the higher grades of academic secondary school and are paid special allowances for the period of their training. Upon completion, they are eligible for regular government employment.

The Imperial Board of Telecommunications training courses. The Board provides various specialized training opportunities for graduates from the eighth grade of elementary school and from the higher grades of secondary education. Students taking these courses are paid salaries for the period of their training and are admitted directly into the Boards' employment.

Service institutions. The service institutions recruiting students for instruction at the secondary level include the Aba Dina Imperial Police Staff College (Addis Ababa), the Imperial Naval Petty Officer School at Massawa (Eritrea), the Imperial Ethiopian Air Force Ground School (Debra Zeit), and the Debra Zeit Technical High School.

The Debra Zeit Technical High School, which was established in 1958, provides technical training in engineering science, technical drawing, woodwork and metalwork; mathematics, English, Amharic, geography and history are also taught, together with physical education and religious instruction.

Candidates for admission must be boys between 12 and 15 years of age, of excellent physique, who have achieved an above-average score in the eighth grade general examination.

Students who have successfully completed the 5-year course of study may sit for the Cambridge Oversea School Certificate examination. Graduates of the Debra Zeit Technical High School are qualified for technical posts in government agencies and the armed forces; they are also eligible for admission into the Imperial Ethiopian Air Force Flying School.

Teacher training schools

In addition to the college-level degree courses provided at the University College of Addis Ababa, and to the advanced studies undertaken abroad by graduates of the University College, there are several teacher education programmes conducted as part of the secondary school system in Ethiopia. These courses are intended to prepare recruits for the teaching service in elementary schools (grades 1 to 4, and grades 5 to 8), and also for certain specialized branches such as community education and arts and crafts.

The Harar Teacher Training School prepares students in academic and professional subjects, so that they may become teachers of grades 1 to 8, and also take the examination for the Ethiopian School Leaving Certificate.

The programme covers a period of 4 years, and the course includes the regular academic secondary school subjects—Amharic, English, mathematics, science and social studies—together with psychology, teaching methods, principles of education, student teaching, visual aids and co-curricular activities. Practice teaching is done in neighbouring government schools and at the model school attached to the training school.

The school is open to both boys and girls. Preference is given to more mature students and to persons who have had one or more years of practical teaching experience. In 1959/60 applicants were required to have completed the ninth grade of secondary school, but in future places will again be provided for recruits from the eighth grade. All applicants are required to present health certificates.

Graduates of the Harar Teaching Training School are assigned to schools throughout the Empire. After 2 years' teaching experience, they are eligible to take the special examination for admission to a 4-year degree course at the University College of Addis Ababa.

The Haile Selassie I Day School in Addis Ababa offers two secondary-level teacher training programmes in addition to in-service courses for directors and inspectors.

The 1-year teacher training programme concentrates on training students in methods of teaching elementary school subjects. Courses include Amharic, English, mathematics, science, social studies, psychology, education, shop work, physical education, music, art, health, practice teaching, and co-curricular activities.

The 4-year programme enables students to take the examinations for the Ethiopian School Leaving Certificate and the London University General Certificate of Education and also to enter the teaching profession. The course of study includes the regular academic secondary school subjects (Amharic, English, mathematics, science, social studies) plus psychology, teaching methods, history of education, statistics, practice teaching and co-curricular activities.

All applicants must have passed the eighth grade general examination and hold the Ministry of Education health certificate. Both girls and boys are accepted; some preference is given to girls, and in the 1-year programme to older and more mature students, some of whom are drawn from the higher grades of secondary schools.

Under special circumstances, students completing the 1-year programme may continue to study in secondary school. Outstanding graduates from the 4-year programme are eligible for admission to the University College of Addis Ababa or to other college-level institutions in Ethiopia.

The Empress Menen Girls' School in Addis Ababa has a special teacher training programme for girls, similar to the 4-year course at the Haile Selassi I Day School, in addition to a regular 4-year academic programme. There is also a domestic science course available for interested students.

At the end of the 4 years, students are eligible to sit for the Ethiopian School Leaving Certificate examination and the London University General Certificate of Education, and those who have taken the special course are awarded a Teachers' Training Certificate as having completed the equivalent of 1 year's full-time teacher training.

The Majite Community Development Workers' Training Centre was established by the Ministry of Education in collaboration with Unesco. The programme is designed to cover 1 year, and the required subjects include literacy methods, teaching methods, arts and crafts, audio-visual aids, agriculture, health and recreation. Optional courses are offered in gardening, chicken breeding and sports.

Candidates for admission must be between 19 and 30 years of age, and have passed the eighth grade general examination; admission is also made from the higher grades in other secondary programmes.

Graduates from the Majite Community Development Workers' Training Centre are eligible for employment by the Government to conduct literacy campaigns and community development programmes throughout the Empire.

The Debra Berhan Community Education Teacher Training School was established by the Ministry of Education in collaboration with the United States Operations Mission to Ethiopia. The programme has recently been extended to cover a second year and includes the following subjects and activities: mathematics, science, health and sanitation, social studies, agriculture, school administration, blacksmithing, carpentry, morals, literacy methods, methods of teaching, brickmaking, pottery, arts and crafts, sports and recreations, supervised field experience (teaching in village schools).

Applicants must be males between the ages of 20 and 30 who are of robust physique. Experienced teachers who have completed the sixth or seventh grade of primary education may be accepted at the school, but all student applicants must have completed the eighth grade.

Graduates of the Debra Berhan Community Education Teacher Training School are employed by the Government to work in rural primary schools.

The Handicraft Teacher Training School. The school is housed in the Technical School compound, Addis Ababa. The course covers 4 years. The first year is devoted to developing basic skills in woodwork, metalwork and the use of electric tools, together with general education courses in Amharic, English, mathematics, science, morals, mechanical drawing, shop management, teaching methods. During the last 3 years students attend arts and crafts classes, and the required courses include weaving, fibrework and rug weaving, basketry, leathercrafts, ceramics, carving, drawing, painting, sculpture, puppetry and dramatics, classroom art and art history, together with educational psychology, methods of teaching arts and crafts, and practical teaching.

Candidates for admission must undertake to teach in government schools for a period of at least 3 years following completion of their studies.

The Eritrean Teacher Training School is located in the city of Asmara and offers a 2-year programme. All students are required to study English, Amharic, psychology, mathematics, social studies, physical education, hygiene, principles of teaching, audio-visual aids and practice teaching.

All candidates must have completed the eighth grade, but preference is given to students with higher academic levels of achievement. The course of study is open to both men and women between the ages of 17 and 22. Applicants must pass an aptitude entrance examination and a special physical examination. All candidates admitted to the school undertake to serve the Eritrean Government as teachers for at least 2 years following graduation.

Other specialized schools

The Art School offers a 4-year course. Compulsory subjects include history of art, psychology of art, figure drawing, life painting, anatomy, modelling, composition, etching and lithography, and students may specialize in painting,

sculpture or commercial art. Candidates must have passed the eighth grade general examination and be not more than 25 years of age. Before any student is admitted, he is required to submit a specimen of his work. Graduates are eligible for employment by the Ministry of Education as teachers of art, or for employment as artists or illustrators.

The Music School, which is also maintained by the Ministry of Education, provides part-time instruction for students selected from elementary and secondary schools in Addis Ababa, and from college and other programmes.

Out-of-class activities

Secondary schools are encouraged to take an active part in community life, to present dramatic and other entertainments, to organize sports days, and to participate in competitive games with local teams. School magazines are published. Scout and Guide troops are maintained by many schools, and the interest of parents is solicited for school projects.

Clubs and societies reflecting student interests—drama, debating, music, gardening, handicrafts, photography, etc. —are to be found in most of the schools, and the students gain much practical experience from their organization and management.

TRENDS AND PROBLEMS

Reference has been made in the preceding sections to some of the recent trends in secondary education, and to proposed changes in its organization. The more important of these may now be summarized as including: the projected introduction of comprehensive secondary schooling, with technical, vocational and academic streams; the revision of curricula, the production of locally designed materials in both Amharic and English, and an increase in the length of secondary schooling; the gradual abolition of free boarding facilities for boys in certain types of schooling and the conversion of boarding to day schools; increasing emphasis upon student counselling and guidance, the training of technicians and teacher education; and the decentralization of schools with the consequent assumption of increased responsibility by local communities.

It may be helpful to recall that 35 years ago the Emperor, as Regent, laid down two principles which have served as guiding lines in the development of modern education in this country: first, that the nation as a whole must co-operate in the development of schools, and second, that the introduction of new ideas from other countries must never be allowed to obscure the traditional Ethiopian culture.

In the light of these principles, the trends listed above will be seen to have a special significance.

According to the proposed new programme, instruction in the 6-year elementary schools will be given mainly in Amharic, with English taught as a subject, and it is thought that by using the national language as the medium of instruction students will be able to attain the same overall standard as at present, in spite of the reduced length of time for this level of schooling.

The projected 5-year secondary programme will be taught in two parts. In the first 2 years, stress will be laid upon general education, including the concentrated study of English, and upon a programme of counselling and guidance. For the second 3 years, students will undertake specialized academic, professional, technical and vocational courses. As in the case of the elementary grades, it is believed that the current standards of achievement at the secondary level will be at least maintained, and it is hoped that they may be improved upon.

The new programme calls for revised curricula, and these are now being tried out on an experimental basis in selected schools. It calls also for the greatly increased production of teaching materials in Amharic and in English, and for an enlarged programme of teacher education to ensure the preparation in sufficient numbers of Ethiopian teachers who will be skilled and competent in applying the new curricula. Accordingly, steps are being taken to meet these needs.

Again, in order to prepare personnel who are qualified to contribute towards the growing industrialization of Ethiopia, particular stress is being placed upon training in commercial, technical and vocational subjects. New programmes have been set up, and it has been decided that a ratio in favour of the non-academic types of education should be aimed at in selecting candidates to enter secondary schooling.

Another important factor in the emerging pattern of secondary education is the decentralization of schooling and the gradual abolition of free boarding facilities. The establishment of new academic secondary day schools in provincial centres throughout the Empire and the planned location of vocational and special schools has greatly stimulated popular interest in and support for the different types of post-elementary and higher education.

For certain kinds of schooling, boarding facilities for boys have now been entirely withdrawn, but it has been found that a significant proportion of parents are prepared to pay the fees required for their sons to attend one of the older-established academic secondary schools as boarding students.

The Government is concerned to encourage the enrolment of girls at all levels of the system: to this end, special boarding privileges continue to be offered to them in secondary schools and it is not foreseen that any early change will be possible in these arrangements.

As a means of transition from the system whereby free boarding and maintenance were granted to all official secondary school students, the Government is now paying stipends to needy boys and to those who are obliged to leave their homes in order to attend a centrally-located school. There are obvious difficulties inherent in this arrangement, but the withdrawal of boarding facilities makes it possible to extend the opportunity for schooling to a much greater number of worthy candidates than before and the stipend system has therefore been adopted as an interim measure.

In many areas of activity connected with secondary education substantial progress has been made and invaluable help has been received in every aspect of educational development from national and international organizations and programmes of technical assistance.

But although much has been accomplished, much remains to be done. Today, the factors which are impeding the Government in the full implementation of its educational policies may be summarized under two heads—finance and personnel.

Upon the liberation of Ethiopia in 1941, the Government was confronted with the need to restore the elementary schools and to recreate as rapidly as possible a system of higher education that would help to replace the grievous losses suffered during five years of resistance to foreign domination. Much use has been made of opportunities for Ethiopian students to study abroad, but emphasis has naturally been placed upon the erection, equipment and staffing of schools and colleges in the country itself. The success that has attended this effort is indicated by the outstanding results achieved by Ethiopian candidates both here and overseas, and by the fact the Government has been able to offer hospitality and college education to students from other African countries.

The priority given to higher levels of education has, however, absorbed a very considerable proportion of the funds available for the overall programme. There is a great and ever-growing demand for formal schooling in Ethiopia, and among the problems confronting the administration, one of the most urgent is the need to increase the facilities for elementary education while maintaining the present secondary and college programmes and developing them as new needs arise.

In regard to personnel, the preparation of Ethiopian teachers to replace a proportion of the present foreign staff and to serve in the new schools and projects has important implications both for the budget and for the programme. Naturally, the accomplishment of this aim forms a major objective in the development of secondary and higher education, and a good start has been made, through training schools, in-service programmes and degree courses here and abroad, to prepare sufficient teachers to undertake responsibility for Ethiopia's expanding schools and colleges.

Ethiopia continues, however, to attach the greatest importance to her cultural ties and relations with other countries, and the administration is fully aware of the importance of maintaining internationally recognized standards of achievement throughout the whole range of its educational system.

[*Text prepared by the Ministry of Education and Fine Arts, Addis Ababa, in April 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 21,600,000.
Area: 457,267 square miles; 1,184,320 square kilometres.
Population density: 47 per square mile; 18 per square kilometre.

Summary of school statistics, 1953–57. Excluding adult education courses enrolling 246 women, enrolment at educational institutions of all levels was about 182,000 in 1957/58, representing less than 1 per cent of the total estimated population. Enrolment data are, however, incomplete for schools administered by the Ethiopian Church, private and mission institutions. Of the total reported enrolment, 96 per cent were pupils in kindergartens, primary schools and special educational institutions; over 2 per cent in general secondary schools; 1 per cent in vocational education, 0.4 per cent in secondary and higher teacher training; and the remainder, about 0.3 per cent, at university and other higher educational institutions. In 1957/58 some 5,000 teachers were reported in primary schools (excluding a few private schools in Eritrea), of whom 15 per cent were women. The average pupil-teacher ratio in primary schools was about 34 compared with 36 in 1953/54. Data on teaching staff at other levels of education are incomplete. In 1957/58 girls made up about 20 per cent of the enrolment in primary schools, 13 per cent in general secondary schools, 26 per cent in vocational education, and about 5 per cent at the higher education level. Compared with 1953/54, enrolment had more than doubled in primary schools and in general secondary schools and in secondary teacher training courses had increased by 90 per cent. The number of students at higher educational institutions rose from 142 in 1953/54 to 531 in 1957/58. (See Table 1.)

Examination results in secondary education, 1953–57. The number of general secondary school leaving certificates

granted in Ethiopia in 1957/58 was 468, representing an increase of 170 per cent over those awarded in 1953/54. Teacher training certificates increased from 159 to 290 over the corresponding period. No data are available on the proportion of women candidates receiving these certificates.

Educational finance, 1958/59. Estimated budgetary expenditure on education in 1958/59, fiscal year beginning September, was 27,087,538 Ethiopian dollars, representing about 1.3 Ethiopian dollars per inhabitant. Some 13 per cent of the total spent was for capital expenditure. (See Table 2.)

Source. Ethiopia: Ministry of Education and Fine Arts, Bureau of Educational Research and Statistics, reply to Unesco questionnaire.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools, public	1957/58	1	[1] ...	[1] ...	67	25
	Nursery schools, private	1957/58	5	[1] ...	[1] ...	290	131
	Total	**1957/58**	**6**	[1] ...	[1] ...	**357**	**156**
	,,	1956/57	6	[1] ...	[1] ...	301	141
	,,	1955/56	6	[1] ...	[1] ...	316	138
	,,	1954/55	3	[1] ...	[1] ...	191	88
	,,	1953/54	3	[1] ...	[1] ...	133	55
Primary	Elementary schools, public	1957/58	627	4 168	500	150 756	29 022
	Mission elementary schools, private	1957/58	[2] 92	572	176	[2] 13 190	[2] 3 397
	Church elementary schools, private	1957/58	61	128	1	4 047	646
	Other elementary schools, private	1957/58	[2] 36	[2] 209	[2] 71	[2] 5 820	[2] 1 942
	Total	**1957/58**	**[2] 816**	**[2] 5 077**	**[2] 748**	**[2] 173 813**	**[2] 35 007**
	,,	1956/57	[2] 909	[2] 4 856	[2] 717	174 041	32 732
	,,	1955/56	[2] 841	[2] 4 088	[2] 613	[2] 144 954	[2] 25 021
	,,	1954/55	[2] 602	[2] 3 102	[2] 418	[2] 95 905	[2] 15 470
	,,	1953/54	[2] 592	[2] 2 299	[2] 265	[2] 81 719	[2] 12 163
Secondary *General*	Secondary schools, public	1957/58	18	81	14	3 492	276
	Mission secondary schools, private	1957/58	2	[1] ...	[1] ...	59	—
	Secondary schools, private	1957/58	2	[1] ...	[1] ...	521	233
	Total	**1957/58**	**22**	**[2] 81**	**[2] 14**	**4 072**	**509**
	,,	1956/57	[2] 15	[2] 60	[2] 6	[2] 2 904	[2] 303
	,,	1955/56	[2] 14	[2] 54	[2] 7	[2] 2 699	[2] 281
	,,	1954/55	[2] 12	...	...	[2] 1 882	[2] 210
	,,	1953/54	[2] 10	...	...	[2] 1 708	[2] 184
Vocational	Technical schools	1957/58	4	[2] 58	[2] 3	561	21
	Vocational schools	1957/58	3	[2] 10	—	538	230
	Commercial schools	1957/58	1	21	—	311	69
	Agricultural schools	1957/58	2	13	2	313	—
	Public health schools	1957/58	5	22	3	215	186
	Total	**1957/58**	**15**	**[2] 124**	**[2] 8**	**1 938**	**506**
	,,	1956/57	15	[2] 125	[2] 23	[2] 1 620	[2] 405
	,,	1955/56	10	[2] 91	[2] 19	[2] 1 017	[2] 285
	,,	1954/55	[2] 5	[2] 39	[2] 2	[2] 794	[2] 242
	,,	1953/54	[2] 3	...	...	[2] 656	[2] 244
Teacher training	Teacher training schools, public						
	Total	**1957/58**	**5**	**16**	**2**	**772**	**30**
	,,	1956/57	4	21	2	621	23
	,,	1955/56	4	34	6	718	30
	,,	1954/55	4	...	...	490	21
	,,	1953/54	4	...	...	407	6
Higher *Trainer training*	Higher teacher training course						
	Total	**1957/58**	**1**	**[3] ...**	**[3] ...**	**47**	**3**
	,,	1956/57	1	[3] ...	[3] ...	46	3
	,,	1955/56	1	[3] ...	[3] ...	25	—
	,,	1954/55	—	—	—	—	—
	,,	1953/54	—	—	—	—	—

Note. In primary and secondary education coverage varies slightly from year to year, owing to incomplete data for schools administered by the Ethiopian Church, private and mission institutions.

1. Included in primary schools.
2. Incomplete figures.
3. Included in higher general and technical education.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
General and technical	University	1957/58	1	42	5	210	27
	Engineering College	1957/58	1	18	—	95	—
	Building College	1957/58	1	9	—	53	—
	Agricultural College	1957/58	1	22	2	107	—
	Public Health training College	1957/58	1	...	...	66	—
	Total	**1957/58**	**5**	[2]**91**	[2]**27**	**531**	**27**
	,,	1956/57	6	[2]68	[2]5	489	44
	,,	1955/56	6	[2]35	...	381	10
	,,	1954/55	2	...	...	167	5
	,,	1953/54	2	...	...	142	6
Special	Schools for handicapped children	1957/58	2	...	...	119	51
	Orphanage schools	1957/58	2	...	...	125	55
	Total	**1957/58**	**4**	**...**	**...**	**244**	**106**
	,,	1956/57	3	...	...	180	96
	,,	1955/56	3	...	...	124	67
	,,	1954/55	3	...	...	135	82
	,,	1953/54	3	...	...	124	82
Adult	Women's education						
	Total	**1957/58**	**1**	**...**	**...**	**246**	**246**
	,,	1956/57	1	7	5	181	181
	,,	1955/56	—	—	—	—	—
	,,	1954/55	—	—	—	—	—
	,,	1953/54	—	—	—	—	—

2. Incomplete figures.

2. EDUCATIONAL FINANCE, 1958/59 (in Ethiopian dollars)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**27 087 538**
Central government	22 387 538
Provincial governments	4 700 000

B. EXPENDITURE BY PURPOSE

		Amount
Total expenditure[2]		**27 087 538**
Recurring expenditure		23 600 768
For central administration	5 835 027	
For instruction[3]		
Salaries to teachers, etc.[3]	7 926 152	
Other instructional expenditure[4]	4 700 000	
Other recurring expenditure[3]	5 139 589	
Capital expenditure		3 486 770

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**23 600 768**		**100.0**
Central administration		5 835 027		24.7
Instruction		14 855 752		63.0
Primary education	4 700 000		19.9	
Secondary education[5]	7 926 152		33.6	
Higher education[6]	2 229 600		9.5	
Other recurring expenditure		2 909 989		12.3
Students abroad	2 265 904		9.6	
Archæology Department	143 842		0.6	
H.S.I. scholarships for African students	100 000		0.4	
Contribution to Unesco, Unicef, and public administration	400 243		1.7	

1. Official exchange rate: 1 Ethiopian dollar = 0.40 U.S. dollar.
2. Budget estimate.
3. Includes some expenditure for higher education.
4. For provincial elementary schools.
5. Includes salaries for elementary school teachers in Addis Ababa and recurring expenditure for the Engineering College (higher education).
6. Includes only the expenditure for the University College (1,527,610 dollars) and the Building College (701,990 dollars). In addition, the Agricultural College has a budget of approximately 609,745 dollars and the Public Health College approximately 1,067,910 dollars. The total budget for the Engineering College amounted to approximately 1,100,000 dollars of which the recurring expenditure is included with expenditure for secondary education (see footnote[5]).

FINLAND

THE EDUCATIONAL SYSTEM

The Finnish school system comprises three main types of school—primary, secondary and vocational. The function of the primary school, at which attendance is compulsory, is to give every child a basic education. It also serves to prepare for secondary education and training in various kinds of vocational school.

Secondary education is usually divided into two stages: the junior secondary school, designed to give young people general training in citizenship to supplement the primary school course, and the senior secondary school, which mainly prepares pupils for study at the university level. The various types of vocational school, again, impart the knowledge and skills needed to acquire professional competence. Outside the scope of the school system proper lie the folk high schools and workers' institutes, as well as the institutions of higher learning.

Administratively, the primary and secondary schools come under the jurisdiction of the Ministry of Education and, under it, the Central Board of Schools. The vocational schools are under the jurisdiction of different Ministries, according to their purpose. Thus, for example, the technical, commercial and maritime institutes as well as the trade schools proper in the fields of industry, handicrafts and economics are supervised by the Vocational Training Department of the Ministry of Trade and Industry. The schools of agriculture, household economy and domestic arts and crafts are under the supervision of the Board of Agriculture of the Ministry of Agriculture. Certain trade schools for the handicapped and special schools for the training of personnel in the social services are under the jurisdiction of the Ministry of Social Affairs.

The most important laws and decrees governing the school system are the following: Primary Education Act, 1 July 1957; Primary School Decree, 23 July 1958; Education Act, 26 August 1872; Act concerning State Aid to Private Secondary Schools, 6 October 1950; Private Secondary School Decree, 19 January 1951; Vocational Education Act, 25 April 1958; Vocational Education Decree, 16 January 1959; Technical Education Act, 26 May 1939; Commercial Education Act, 26 May 1939; Agricultural Education Act, 1 July 1927; Act Governing Schools of Household Economy, 18 May 1929; Act Governing Schools of Domestic Arts and Crafts, 23 May 1929; Act Governing Primary School Teacher Training Colleges, 9 January 1958; Decree concerning Primary School Teacher Training Colleges, 23 July 1958; Decree concerning State Aid to Workers' Institutes, 28 April 1938; Act concerning State Aid to Folk High Schools, 7 July 1950; Decree concerning the Central Board of Schools, 1 February 1957.

According to the Primary Education Act, school attendance is compulsory for all children from 7 to 16 years of age. The duty is ordinarily fulfilled in primary school, although a substantial part (about one-third) of the pupils move on, before they are past the age of compulsory attendance, from primary school to secondary school or some other type of educational institution.

The primary schools are established and run by local authorities (communes) but the latter receive financial aid from the State. The amount of the subsidy varies according to the type of commune and, in some degree, to its economic situation also. Municipalities receive state aid amounting to about 15–20 per cent of the total expenditure for education and the rural communes about 70 per cent.

The state secondary schools are under the direct jurisdiction of the Central Board of Schools, which must however submit certain important matters, primarily of an economic or administrative nature, to the Ministry of Education or the Council of State for decision. The private secondary schools are institutions founded and maintained by private citizens, communes or foundations, and their operations are managed by boards of directors set up by the persons or organizations maintaining them. These schools are under the supervision of the Central Board of Schools if they receive assistance from the State. Such assistance covers nearly 70 per cent of maintenance costs.

The vocational schools—preparing for industrial pursuits, trades, etc.—are defined by the Act which came into force at the beginning of 1959 as: (a) ordinary vocational schools; (b) apprenticeship schools; (c) vocational institutes; and (d) normal trade schools. The ordinary vocational schools are either general vocational schools, which the local authorities are bound by law to establish and maintain, or specialized trade schools, which are generally privately maintained. There are still at present some preparatory vocational schools but under the new Act these will be converted by 1970 into general vocational schools, which are based on the curriculum of the branch of the primary school known as the 'citizens' school'.

The function of ordinary vocational schools is to give pupils the knowledge required to master a trade and a sufficiently varied programme of instruction in the schools' own workshops to lay the basis for acquiring professional skill after a prescribed period of practical experience. Schools of this kind are the central vocational schools of the State, but the new law requires that the communes, too, establish general vocational schools. The purpose of the apprenticeship school is to give apprentices already at work training designed to enable them to master their trades. The vocational institutes give advanced specialized training in various trades as well as courses in foremanship and work organization. The task of the normal trade schools is to instruct pupils intending to become teachers in vocational schools in practical teaching skills.

The technical schools are divided into institutions training technicians and institutions at the college level, offering engineering courses. The commercial institutes train office and sales personnel and also give advanced

courses in economics and business administration. In addition, there are many kinds of agricultural, domestic arts and crafts, household economy, handicrafts and similar vocational schools.

The structure of the school system is shown in the diagram on page 465.

THE DEVELOPMENT OF SECONDARY EDUCATION

The history of secondary education in Finland goes back many centuries: the first regulations governing education were included in the Canonical Law promulgated in 1571. The most important legislative measures affecting the development of the school system have been the educational laws of 1649, 1724, 1843 and 1872. The last-mentioned still forms the basis of the legislation governing secondary education proper; it has, however, been supplemented and amended in numerous respects to meet the new conditions created by the evolution of the school system.

Finland's political union for centuries with the Kingdom of Sweden brought it about that Swedish became the language of official affairs and of the ruling class. The situation did not change in this respect even after Finland in 1809 was established as an autonomous Grand Duchy under the Tsar of Russia. As late as the middle of last century, all secondary schools, both state and private, used Swedish as the language of instruction. It was not until 1858 that the first Finnish-language state secondary school was founded. In order to gain the benefits of secondary education, the linguistic majority was forced to establish private secondary schools. Since the 1870's a large number have been founded, most of them being co-educational. The private secondary schools, both Finnish and Swedish, whether maintained by a patrons' association or school corporation organized for this express purpose, by some private citizen or by a commune, are usually organized along the same lines as the government schools. The position of the private secondary schools has been largely stabilized by the Private Secondary School Act and Decree, which contains provisions relating to the establishment, administration, teaching staffs, diploma-granting rights, state subsidies, etc., of these schools. Numerous private secondary schools have in the course of time been converted into state secondary schools.

Since the majority of the state secondary schools are situated in cities, towns and boroughs, private secondary schools have been founded particularly in rural communities. There are 278 private secondary schools, over twice the number of state schools; but as the latter are above average in size, the enrolment in the private secondary schools is only some 20 per cent greater than that of the state schools. It is noteworthy that many of the private secondary schools (137) have only junior grades, whereas nearly all the state secondary schools, of which there are a total of 120, lead up to the university. Twelve per cent of all the secondary schools are Swedish (17 belonging to the State and 33 being private).

GLOSSARY

apukoulu: special school for backward children.
erikoisammattikoulut: specialized vocational training schools.
erikoiskoulut (kuurot ja sokeat): special schools (for the deaf and blind).
kansakoulu: see *varsinainen k.*
kansakoulun 3 v. keskikoulu: 3-year lower secondary school attached to a primary school.
kansakoulun 5 v. keskikoulu: 5-year lower secondary school attached to a primary school.
kansalaiskoulu: primary continuation school, called 'citizens' school, with 1-year (*1 v.*) or 2-year (*2 v.*) course.
kansankorkeakoulu: free adult education institute providing advanced courses.
kansanopisto: free adult education institute.
kauppakoulu: commercial school.
koulunkäyntinsä päättäneiden jatkoopiskelu: out-of-school study courses.
lastentarha ja päiväkoti: pre-primary institutions (kindergarten and day-nursery).
lukio: upper general secondary school.
oppikoulu: general secondary school.
teknillinen koulu: technical school.
työväenopisto: workers' institute.
varsinaiset ammattikoulut: regular vocational training schools.
varsinainen kansakoulu: regular primary school.

DEGREE-GRANTING INSTITUTIONS OF HIGHER EDUCATION

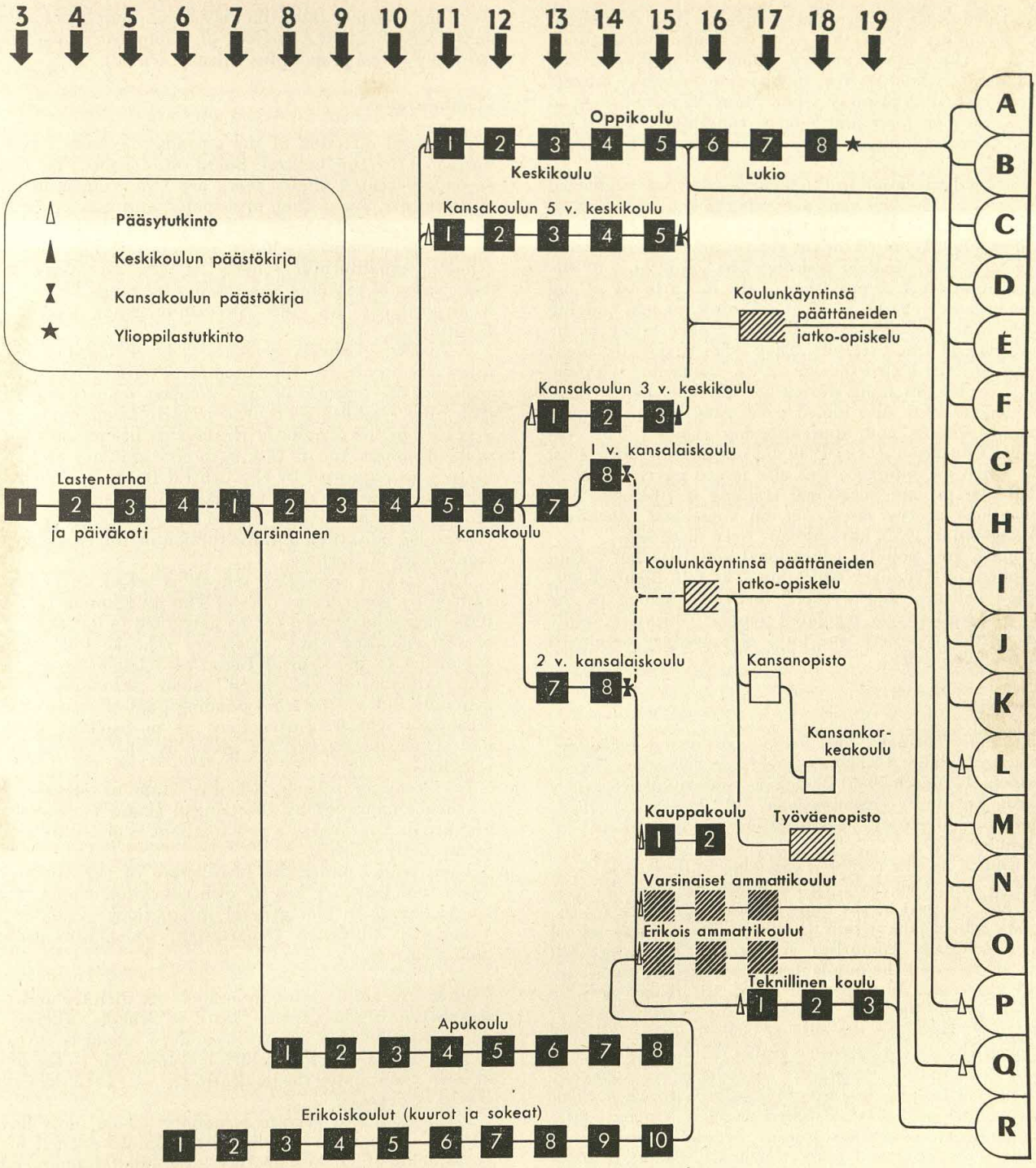
A. *Jumaluusopillinen tiedekunta:* faculty of theology.
B. *Lainopillinen tiedekunta:* faculty of law.
C. *Lääketieteellinen tiedekunta:* faculty of medicine.
D. *Farmaseuttinen laitos:* institute of pharmacy.
E. *Historiallis-kielitieteellinen tiedekunta:* faculty of history and philology.
F. *Valtiotieteellinen tiedekunta:* faculty of political science.
G. *Matemaattis-luonnontieteellinen tiedekunta:* mathematics and natural science section of the faculty of philosophy.
H. *Maatalous-metsätieteellinen tiedekunta:* faculty of agriculture and forestry.
I. *Voimistelulaitos:* institute of gymnastics.
J. *Teknillinen korkeakoulu:* engineering and architecture (college of technology).
K. *Eläinlääketieteellinen korkeakoulu:* veterinary science.
L. *Opettajakorkeakoulu:* education.
M. *Kauppakorkeakoulu:* commerce.
N. *Yhteiskunnallinen korkeakoulu:* social sciences.
O. *Sibelius-Akatemia:* Sibelius academy of music.

NON-DEGREE-GRANTING INSTITUTIONS OF HIGHER EDUCATION

P. *4 v. seminaari:* teacher training college with 4-year course.
Q. *5 v. seminaari:* teacher training college with 5-year course.
R. *ylemmat ammattikoulut:* advanced vocational and professional schools.

EXAMINATIONS

kansakoulun päästökirja: primary school certificate.
keskikoulun päästökirja: lower secondary school certificate.
pääsytutkinto: entrance examination.
ylioppilastutkinto: matriculation examination.


3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Pääsytutkinto
Keskikoulun päästökirja
Kansakoulun päästökirja
Ylioppilastutkinto
Oppikoulu
1 2 3 4 5 6 7 8
Keskikoulu
Lukio
Kansakoulun 5 v. keskikoulu
1 2 3 4 5
Koulunkäyntinsä päättäneiden jatko-opiskelu
Kansakoulun 3 v. keskikoulu
1 2 3
1 v. kansalaiskoulu
8
Lastentarha
1 2 3 4 1 2 3 4 5 6 7
ja päiväkoti
Varsinainen
kansakoulu
Koulunkäyntinsä päättäneiden jatko-opiskelu
2 v. kansalaiskoulu
7 8
Kansanopisto
Kansankorkeakoulu
Kauppakoulu
1 2
Työväenopisto
Varsinaiset ammattikoulut
Erikois ammattikoulut
Teknillinen koulu
1 2 3
Apukoulu
1 2 3 4 5 6 7 8
Erikoiskoulut (kuurot ja sokeat)
1 2 3 4 5 6 7 8 9 10
A B C D E F G H I J K L M N O P Q R

The third form of secondary school is the communal junior secondary school, though its curriculum corresponds to that of the state secondary schools. According to the new Primary School Decree, such junior secondary schools as are attached to primary schools may be established, in general, only in poor and remote communes. There are now 38 communal junior secondary schools, of which 2 are Swedish.

Vocational education in the modern sense was organized in Finland for the first time according to the provisions of an edict passed in 1885 and supplemented by a manifesto issued in 1900. It called for the establishment of lower and upper schools of manual training. The significance of the former diminished as provision of the full primary school course became general. In 1920 the lower manual training schools were abolished and the upper ones began to be called general trade schools. They were frequently night schools and the instruction given was connected with the work done by the pupils during the daytime. In the same year decrees were also issued concerning vocational preparatory schools and apprenticeship schools. The Vocational Education Act of 1939 did not go into effect until 1942, when an ordinance was also issued governing communal and private vocational training institutions. The implications of the latest Act on vocational education, promulgated in 1959, have already been discussed.

In part, free popular educational activities fall within the sphere of secondary education. The folk high schools, people's colleges, and workers' institutes belong to the sphere of legislatively regulated popular education, while study circles represent one form of voluntary organized educational activity.

Legal basis

Other important laws and decrees governing secondary education include: Ordinance governing Secondary School Curricula, 12 March 1948; Ordinance concerning Secondary School Entrance Examinations, 17 December 1954; Ordinance governing Matriculation Examinations, 26 September 1947.

Inasmuch as this review is intended to deal with every phase of education designed for pupils between the ages of 12 and 18, part of the basic schooling provided by the primary school falls within its sphere. The primary school proper generally comprises six grades—in exceptional cases, seven—and the pupils in the two highest grades are 12–13 years old. In respect of them, the reader may be referred to the previous volume of the *World Survey of Education*[1]. However, the citizens' school, created in 1958 to replace the former extension grades (i.e. beyond grade 6) but still covered by compulsory attendance requirements, lies totally within the bounds of secondary education. Since the secondary school is not based on the complete course of compulsory education (pupils generally proceed to secondary school after 4 years of primary school), primary grades 5 and 6 plus the citizens' school and the lower stages of secondary school are parallel educational institutions. The same applies also to the communal junior secondary school, which likewise admits pupils before they have completed the period of compulsory attendance (primary school proper plus citizens' school).

Administration

The general direction of the secondary schools has been entrusted to the Central Board of Schools. To handle secondary school affairs there are two Finnish-language departments, one dealing principally with matters relating to state secondary schools, and the other with those relating to private secondary schools, foreign-language secondary schools, experimental schools at the secondary level, supervision of teaching and teacher training. There is also a department for the Swedish-language educational institutions.

A Teachers' Council serves the Central Board of Schools as an advisory body. Appointed for a term of four years to represent the teachers in the secondary schools and public education establishments, the council meets every other year for a period of at most five days. It has no authority to make decisions, for its task is to give opinions on various matters as requested by the Central Board of Schools. In addition, it has the right to make proposals to the Council of State or the Central Board of Schools on questions concerning education and instruction or the economic and legal status of teachers.

The work of secondary schools is based on syllabuses ratified by government decree. The programmes of study in private schools need not be patterned in detail on those of corresponding state secondary schools, but must be submitted to the Central Board of Schools for approval. The syllabus of communal junior secondary schools generally follows the corresponding plan of study of state secondary schools. Instructions as to teaching methods and scholastic records are given by the Central Board of Schools.

In secondary schools, whether state or private, only textbooks approved by the Central Board of Schools are permitted. Approval of a new textbook is generally applied for by the publisher.

Each school under the jurisdiction of the Ministry of Trade and Industry has its own educational plan, drawn up according to the general instructions given by the Vocational Education Department, which also confirms each plan.

Control. The state secondary schools are directly under the jurisdiction of the Central Board of Schools, whereas the administration of a private secondary school is entrusted to its board of directors, which is responsible to the person or body maintaining the institution as well as to the Central Board of Schools.

Each state and private secondary school must have a parents' council, to which the communal council of the commune in which the school is located appoints five members for a term of three years at a time. The task of the parents' council is to maintain contact between the school and the home. It must carefully follow the activities of the school and, if any cause for complaint arises, call the attention of the principal to the matter. In case of need, the parents' council is entitled, as is the Central Board of Schools, to

1. *World Survey of Education: II–Primary Education*, Paris, Unesco, 1958, 1387pp.

take action to correct the situation. The parents' council is also under the obligation to respond to requests for reports to the Central Board of Schools on matters concerning the school.

The communal junior secondary schools are directly under the jurisdiction of the primary school board in rural communes and boroughs. In municipalities the junior secondary school is superintended by the primary school directorate. In addition, the primary school supervisor is entrusted with certain duties connected with the administration of communal junior secondary schools.

The internal administration of a state secondary school is mainly the task of the principal, who draws up the forms setting out the detailed plan of organization of the class work and sends them on to the Central Board of Schools. Each month he has to send to the Central Board of Schools a statement on funds spent, and at the end of the school year an annual report.

Principals of state secondary schools are appointed for periods of five years; the appointments are made by the Central Board of Schools from among the school's regular teaching staff after receiving reports on the matter from the staff and from the parents' council.

Although the board of directors of a private secondary school is entrusted with a large number of the duties that in the case of the state institutions are concentrated in the hands of the Central Board of Schools, it is obliged to present the Central Board of Schools with required information on the administration, curriculum, teachers, pupils and operative conditions of the school. The most important data are contained in the autumn communication, which is drawn up according to an accepted formula, and the annual report. Each private secondary school must also have a set of regulations approved by the Central Board of Schools.

The communal secondary school is governed by the same statutes as private secondary schools, but the communal junior secondary schools attached to primary schools are administratively under the superintendence of the primary school authorities.

The vocational schools are administratively under various Ministries—the Ministry of Communications and Public Works, the Ministry of Agriculture, the Ministry of Trade and Industry and the Ministry of Social Affairs.

The principal of a vocational school is appointed from among the teaching staff to serve as executive and administrative officer, or is directly engaged to take on teaching and executive duties. Each vocational school has its board of directors, which is responsible for the operation of the institution, as well as a duly ratified syllabus and set of regulations. If the commune or the private owner has more than one vocational school in the same locality, a joint principal may be appointed to take charge. Central vocational schools belonging to the State have a vocational school council for the purpose of localizing the operations of the institution in the province where it is situated and of guiding its development in general; each commune located in the central vocational school district appoints a representative for membership of the council.

Supervision and inspection. The inspection of both state and private secondary schools is carried out under the direction of the Central Board of Schools. There is an office of supervision under the board for this purpose, headed by an educational adviser. For general supervision and supervision of the individual subjects in the curriculum there are four chief inspectors who represent the following areas of instruction: Finnish language and literature; foreign languages; mathematics, physics and chemistry; natural science and geography. The other inspectors belonging to the office of supervision operate only within their particular subject field, supervising girls' and boys' gymnastics, household economy, girls' handicrafts and music; the inspector responsible for school meal programmes, the teaching of nutrition and social welfare activities in school, likewise confines himself to supervision and guidance within his own special domain.

Inspectors and chief inspectors are required to have passed a final examination at university level in the subject they are called upon to supervise, to possess a good practical and theoretical knowledge of the field of instruction, competence in teaching and a familiarity with educational questions.

In addition to the regular inspectors on the staff of the Central Board of Schools, experienced educators, mainly school principals, are invited each year to serve in a supervisory capacity for shorter terms.

In connexion with an inspection, a teachers' meeting is held to consider some general educational problem, as well as a conference for the teachers of the subject represented by the inspector concerned. In addition to the regular inspection, attention is focused on teacher guidance, pursuant to which the inspector may himself give lessons. There is also a final meeting at which the parents' council, principal and teaching staff (in private secondary schools, the board of directors, too) must be present. The inspection reports are dealt with at a session of the Central Board of Schools, which decides on whatever measures need to be taken.

It is aimed to carry out a general inspection of all the secondary schools at intervals of not more than five years. The grants awarded private secondary schools (see below) depend on the extent to which these schools fulfil the requirements for such state subsidies. As there are considerably more private than state secondary schools in the country and as many of them are of recent foundation or do not fulfil the conditions for continuous support from the Government, inspections are carried out in them far more frequently than, in particular, in the old state secondary schools.

As mentioned above, the parents' council is obliged to keep an eye on school operations. Members of the council are therefore entitled to free access to the school premises and are at liberty to inspect the school archives, correspondence and book-keeping. The parents' council thus lends the Central Board of Schools assistance in supervising the school.

The communal junior secondary school is mainly under the supervision of the primary school inspector. The rural communes and small towns are divided into 40 supervisory districts, in each of which there is one primary school inspector. However, members of the Central Board of Schools, councillors of education, chief inspectors and supervisors are also authorized to conduct inspections in them. If the

question of granting a communal junior secondary school the right to award junior secondary school certificates or diplomas arises, a general inspection must be carried out by the Central Board of Schools.

The inspection of vocational schools is the responsibility of the supervisors and other officials on the staffs of the government bureaux in charge of them.

In the field of popular educational activities, the supervisory duties are assumed by the counsellors of education concerned.

Finance. The proposals regarding appropriations to be set aside in the state budget for state secondary schools are made by the Central Board of Schools, which serves also as accounting office for state schools and superintends the use of funds awarded them. Moreover, it has been prescribed that the parents' council should from time to time inspect the balance sheets. During the scholastic year 1956/57 the net cost per pupil in state secondary schools was 40,000 Finnish marks.

Private secondary schools receive state aid provided they fulfil the prescribed conditions. Such financial assistance from the Government is either continuous or restricted to stipulated periods. The state grants are nowadays 943,000 to 1,006,000 Fmks. annually per regular class and 655,000 to 733,000 Fmks. per parallel form. In addition, the schools receive state grants for teachers meeting certain conditions and 40–60 per cent of the interest on mortgage loans on school buildings and grounds, of rental costs, heating and lighting expenses and the regular wages paid employees. In the scholastic year 1956/57 each pupil in private secondary schools cost the State a total of 37,000 Fmks. Private secondary schools also receive grants from the communes whose secondary educational needs they serve. The size of such grants, which are not prescribed by law, varies greatly among the different communities, being on the average 3,000 Fmks. per pupil each year. In the scholastic year 1956/57 state grants sufficed to cover an average of 66.7 per cent of the expenses of private secondary schools, while tuition fees covered 25.4 per cent and communal grants 5.8 per cent.

The communal junior secondary schools are subject to the legislation governing primary schools in regard to their economic position. In the scholastic year 1956/57 the total cost per pupil in these schools was 54,450 Fmks., of which the share of the State came to 37,900 Fmks., the communes paying the balance.

According to the new Vocational Education Act, the communes receive state aid to cover 65 per cent of the actual vocational school costs provided for by law. Other vocational schools are likewise supported by grants from the Government, provided certain conditions are satisfied. The State also assists in the building of vocational schools and associated pupils' dormitories and teachers' residences, according to principles confirmed by the Council of State. The expenses entailed in establishing central vocational schools belonging to the State are shared by the State and the participating communes in proportions prescribed by law. Appropriations are set aside each year in the state budget to pay out special grants to the poorest communes in the land to help cover the establishment and maintenance costs of general vocational schools.

Costs of classrooms and equipment. The building and enlargement of state secondary schools depend on the appropriations set aside for the purpose in the state budget. The great increase since the war in the need for secondary schools, which has been a consequence of the large age-groups reaching secondary school age, together with a desire to raise the general educational level, has made it imperative to augment the secondary school building programme. Since 1954 about half the state secondary schools have received a new building or an extra wing. The revision of the curriculum to include practical subjects has necessitated the acquisition of special premises for their instruction. Special premises have also been needed for club activities and the serving of school meals.

Building activity has also been lively in the private sector, being financed through loans, which the Government has been able to provide to a limited extent. The schools have therefore been obliged to turn to many different creditors, and in order to meet interest and amortization charges, they have had to raise tuition fees. To help private secondary schools in outlying districts which have been confronted with the worst difficulties, the sum of 150 million Fmks. was included in the 1959 state budget, to be paid as extra scholastic grants. So far it has not been possible for the Government to give aid toward augmenting the school facilities, classroom equipment and libraries of private secondary schools.

The costs of the building projects of communal junior secondary schools are shared by the State and the communes in accordance with the provisions of the laws governing the primary school system.

Teachers' salaries. Teachers are paid according to the same scale in both state and state-subsidized private secondary schools. There are varying stipulations regarding the salaries of regular, special and hourly teachers.

The highest category of teachers in state secondary schools—posts maintained only in normal lyceums, which train teachers for secondary schools—belong in the 31st wage class (basic salary 76,775 Fmks. and final salary 108,575 Fmks. a month), their teaching duties involving 18 class hours a week. The next category, who are required to teach for 24 class hours a week, are in the 29th wage class if on the staff of a senior secondary school (69,775 Fmks. a month and final wage 95,850 Fmks.), and in other secondary schools the 27th (63,550 to 85,450 Fmks. a month). The junior teachers in a normal lyceum are in the 28th wage class (66,600 to 90,425 Fmks. a month), in other schools in the 25th (57,750 to 76,775 Fmks. a month), the teaching duties involving 26 class hours weekly. After 10 regular years of service, the wage class rises one step. The teachers of practical subjects belong to different wage classes: for example, a gymnastics teacher in a co-education senior secondary school is in the 21st wage class (basic salary 47,600 to 63,550 Fmks. a month) and his duties involve 21 hours a week, while the teacher of drawing in an intermediate school is in the 10th wage class (29,600 to 38,400 Fmks. a month) and has 12 hours' teaching a week. In addition, the remuneration paid to all teachers includes so-called 'expensive locality allowances'. A principal receives a basic salary three stages higher than he would receive as a teacher. Teachers are also entitled to claim compensation for work done outside class, the correction

of note-books and the care of collections. Where the sum of regular class hours and hours of work at home exceeds the basic number of hours involved in teaching duties, teachers are paid for overtime.

The salaries of communal junior secondary school teachers are based on the same scale as those of teachers in state junior secondary schools.

The salaries and teaching duties of teachers in vocational schools differ according to the type of school, but on the whole their salaries correspond to those of teachers in general secondary schools.

Tuition fees. The costs borne by parents to educate their children vary considerably, depending on what secondary school is attended. There is room for choice only in large communities. In the most favourable position are the pupils of communal junior secondary schools which, like the primary schools to which they are attached, charge no tuition fees. The pupils of communal junior secondary schools enjoy other substantial social advantages, too, as will be explained further on. Under the present regulations, however, such schools can generally be founded only in poor and remotely situated communes.

The secondary school proper is not free of charge to pupils. State secondary schools charged a tuition fee of 10,000 Fmks. a school year in 1958/59, while in private secondary schools the fee ranged from 10,000 to 40,000 Fmks. Brothers and sisters are granted reduced fees in both state and private secondary schools. Exemptions from fees are also granted; in state secondary schools the number of exemptions is decided by the parents' council, in private ones the figure is at least 10 per cent of the total enrolment.

Vocational education maintained by the State is financed out of government funds, though in special cases tuition fees are charged. The following are some figures relating to the net costs per pupil in 1956 as borne by the various types of vocational training institutions (state and private schools combined): vocational schools, 74,288 Fmks.; technical schools and institutes, 68,019 Fmks.; commercial schools and institutes, 33,169 Fmks.; schools of navigation, 123,632 Fmks.; agricultural schools, 132,288 Fmks.; cattle-breeding and dairy schools, 75,376 Fmks.; gardening schools, 159,040 Fmks.; household economy schools, 81,343 Fmks.; schools for domestic arts and crafts, 76,190 Fmks.

Scholarships. Each year the State distributes grants for aiding gifted, industrious and poor pupils. These scholarship grants are given mostly to pupils in the senior secondary grades, but pupils in the two upper grades of junior secondary school are also eligible. The size of a grant depends on whether the recipient lives at home or has to board in the locality of the school. The State distributes scholarships and makes available loans without interest to pupils of limited means who attend school for the purpose of training for some vocation.

Buildings and equipment. The building projects of state secondary schools are submitted to the Central Board of Schools for approval from the educational point of view, while the Central Board of Building is responsible for the technical side—drawing up the plans and carrying out the construction work. The Central Board of Schools also issues instructions regarding planning and furnishing for private secondary schools. In order to save space, numerous schools have adopted the so-called subject class system. The average classroom measures 63 square metres in area and 226 cubic metres in volume, the gymnasium measuring 13 by 26 metres or 14 by 28. Where the subject class system has not been applied, an attempt has been made to reserve the necessary special rooms for gymnastics, household economy, natural history and natural science as well as for the pupils' library and dining room.

School welfare services. A special annual appropriation is reserved for the health services of state secondary schools. It enables the pupils of the lowest, the fifth and the highest grades to be examined each year. Also, private secondary schools have a school physician and the health service is organized on the same lines as in state schools.

In the majority of secondary schools a meal is served daily. Efforts are made to keep the price low, 20 to 50 Fmks. a meal.

Pupils travelling to and from school by train or bus are generally granted reduced fares.

Numerous schools have scholarship funds for distribution according to the wishes of their donors, usually to assist gifted and under-privileged pupils.

TYPES OF SECONDARY EDUCATION

Children who have not sought to be admitted to secondary school after being promoted from the fourth grade of primary school receive a second stage of education by attending the citizens' school. This comprises a 2-year course based on a 6-year ordinary primary school curriculum, but it may, if conditions so require, be confined to a 1-year course when the primary school has covered a 7-year course.

A primary school may, on certain conditions, include junior secondary grades; these correspond, as regards their curricula, to the state junior secondary school. Communal junior secondary schools consist of 5, 4 or 3 grades and are based correspondingly on courses of 4, 5 or 6 years at the primary school level. Pupils enrolled in communal junior secondary schools are charged no tuition fees, and in addition they enjoy all the social advantages possessed by primary school pupils: free textbooks and other school supplies, allowances for travel and lodgings, school meals, etc.

It is the duty of the primary school also to encourage and assist school leavers in obtaining further education and in pursuing their cultural interests. Toward this end, clubs and study circles may be organized and courses held for the benefit of these young people. (See section 'Out-of-class activities' below.)

The majority of the secondary schools are based on a 4-grade primary school course, although some begin after a 6-grade primary course, their junior stage consisting of 4 grades. The so-called 'new type' secondary schools founded earlier for experimental purposes and based on a 6-year primary school curriculum had a 3-grade junior secondary stage. Pupils studying in these schools had difficulties, particularly as regards foreign languages, and they have by and large been converted into 8-grade secondary schools with a junior secondary stage of 5 grades.

Instead of continuing his studies in a citizens' school or a junior secondary school, a primary school pupil may also transfer to a preparatory vocational school with a 2- or 3-year course. As already mentioned, the Vocational Education Act which came into force at the beginning of 1959 provides for the conversion of these preparatory schools into general vocational schools, based on the curriculum of the citizens' school. A graduate of a citizens' school may also enter a technical school or a commercial school or a lower trade school in the fields of agriculture, domestic arts and crafts or household economy. Graduation from junior secondary school is a requirement for admission to a commercial institute, technical institute or other vocational institute, but in many cases these institutes will also admit graduates of a vocational school at a lower level.

Guidance. Since a pupil usually enters secondary school at the age of 11, he and his parents must make the decision regarding this step primarily on the basis of his success in primary school. The primary school teacher gives the pupil who wishes to enter secondary school not only the standard certificate but also a special statement indicating his standing in class and the teacher's estimate of his chances of succeeding in secondary school work. Since secondary school pupils pay tuition fees and lack the social benefits enjoyed by primary school children, the decision to seek admission to secondary school depends also on whether the child's parents have the financial means. However, gifted pupils of limited material resources are given the opportunity of gaining exemption from tuition fees or at least having the charges reduced.

Regular vocational guidance is given in citizens' schools only but in numerous secondary schools some advice on choosing a vocation is given to pupils in the highest junior secondary grade.

The school year. The school year of the citizens' school consists of 200 working days between 1 August and 31 July, and is divided into autumn and spring terms. Classes begin on 1 September and end on the last weekday of May. The working week is 6 days and each day has 5 or 6 class hours; the number of class hours a week is thus 30 to 36.

The secondary school year opens on 1 September and ends on 31 August. There are two terms, the autumn term beginning on 1 September and ending on 31 December, the spring term running from 9 January to 31 May. The number of class hours devoted weekly to compulsory subjects varies, according to the classes and type of school, between 31 and 35. There is a summer vacation of 3 months, 20 days at Christmas and 'skiing holidays' of 7 weekdays. The number of workdays a year in secondary schools is around 190.

Other schools at secondary level

In addition to these types of schools, mention should be made of night secondary schools, the study circles of primary schools, correspondence schools, folk high schools and workers' institutes.

The night schools observe the curricula of other secondary schools, except that their number of class hours is smaller, 2–3 hours each evening, and that part of the instruction is carried out in the form of tests. Admission to night secondary school requires that the pupil be 15 years of age or more.

Correspondence schools offer very many different courses, covering both general and vocational subjects. Recently steps have also been taken to experiment with collaboration between correspondence schools and secondary schools in order to enhance the study opportunities of young people living in remote communities.

Folk high schools (66 of which use Finnish as the medium of instruction and 17 Swedish) are 1-year boarding schools, which provide young people, particularly in rural areas, with an opportunity to enlarge and deepen the knowledge acquired in primary school. The period of work is usually from the beginning of November to the end of April. Pupils are charged a fee for board and lodging, but study grants are awarded to pupils of limited means. Graduates of folk high schools may pursue further studies in people's colleges, which are also boarding schools.

The workers' institutes are educational institutions holding classes in the evenings and on Sundays. While programmes vary greatly according to local conditions and needs, the curricula cover both general and vocational-type subjects, and endeavour always to include social studies. Workers' institutes, which are maintained by communes and various associations, do not award certificates or diplomas except in special cases, and do not hold entrance examinations. The tuition fees are small and it is possible to gain exemption.

The folk high schools and workers' institutes, however, largely fall outside the sphere of secondary education, properly understood, as the minimum age limit for admission is 18 years.

Vocational and technical education

A summary of the various types of vocational and technical institutions has been given above in the description of the educational system as a whole. These institutions are grouped below according to the nature of the training given. Within each group the institutions are at two levels: 'schools', based on completion of the citizens' school, and 'institutes', based on junior secondary or on the corresponding vocational school.

Vocational schools of industries and trades. The ordinary vocational schools (general vocational schools and special trade schools) and the apprenticeship schools admit pupils aged 15 and offer courses of 2 to 4 years (2 to 3 for general vocational schools). The Industrial Arts Institute (3-year course) requires entrants to be at least 16 years of age. Various courses are available at the Institute for the Promotion of Vocational Skills, where the age of entry is 18.

Technical education. Technical schools offer 3-year courses to entrants aged 17. Technical institutes, with 4-year courses, admit pupils who are 18 years of age.

Commercial education. The part-time schools for sales personnel (night school) and the commercial schools offer

2-year courses for pupils aged 15. Commercial institutes have a 2-year course for entrants from junior secondary or commercial school and a 1-year course for students who have matriculated from senior secondary school.

Schools of navigation. A 3-year course for entrants aged 17. There are also schools with a 6-month course which prepare for the master's certificate.

Agricultural, forestry and fishery schools. Lower agricultural schools include schools for farmers and small-holders, and stockbreeding, dairy and horticultural schools. Entrants must be 17 or 18 years old. Length of course varies from 5 months to 2 years according to type of school.

Courses at the various agricultural institutes last 2 years (1 year for cattle-breeding institute).

Forestry and sawmilling schools have 2- and 1-year courses respectively; entrance age is 18.

Fishermen's schools have a 6-month course; entrance age 17.

Home economics. Institutions at the lower level include domestic science schools (1 year), schools of household economy (5 to 7 months) and schools with courses in home-making (4½ months); entrance age is 17.

Teacher training institutes in home economics have a 2-year course for entrants, aged 19, who have passed their matriculation examination, and a 1-year course for those, aged 20, who have completed junior secondary or domestic science school.

Arts and crafts. The Helsinki Institute of Arts and Crafts admits to its weaving school (1 year), handicraft school (1 year) and vocational departments (2 years), pupils aged 16. There is also a teachers' department (2-year course), entrance to which is based on matriculation or 1 year of handicraft school.

There are men's and women's schools of domestic arts and crafts, both kinds admitting pupils from age 16. Courses in 'stationary' schools last 1 or 2 years; in 'mobile' schools 7 months. Institutes of domestic arts and crafts admit pupils aged 18 and have a 3-year course.

Teacher training schools

Primary school teachers in Finland are trained in teacher training colleges (*seminaari*). For primary school graduates the period of training, including the preparatory course, is one of 6 years, and for graduates of junior secondary school, 4 years. Matriculated students are given the opportunity to finish the course in 2 years at the Jyväskylä Institute of Pedagogics and at teachers' colleges. The colleges include in their curriculum primary school administration, music, librarianship, as well as, on a compulsory basis, a second language and, on an optional basis, a third language. The curriculum in higher institutions includes pedagogical subjects, primary school administration, music, fine arts, librarianship, as well as enlarged and deepened study of subjects in the primary school curriculum not generally included in the senior secondary school syllabus. A notable portion of the preparatory period is devoted in all the institutions to practice teaching.

Teachers of household economy, girls' handicrafts and domestic arts and crafts, are trained in specialized institutes or schools, teachers of drawing and writing by the Teachers' Department of the Industrial Arts Institute, and teachers of music by the School Music Department of the Sibelius Academy. Vocational school teachers are trained at the vocational teacher training institutes.

Other specialized schools

Musical instruction on the highest level is concentrated in the Sibelius Academy, which has an elementary school, a conservatorium, an advanced school, and departments of school music, church music and military music. The elementary school is intended exclusively for children between the ages of 7 and 15; applicants for admission to the department of church music or the conservatorium are required to have a junior secondary school certificate or a corresponding education, ability to play some instrument and a knowledge of the fundamentals of the theory of music. Admission to the conservatorium also depends on an entrance examination.

For the study of the fine arts there are the Drawing School of the Finnish Art Society and the Institute of Industrial Arts, which has a department of vocational training and one of industrial arts.

Out-of-class activities

The extra-curricular activities of primary school pupils usually lead to the establishment of various clubs under the direction of the teachers. After receiving their certificates of graduation old pupils may continue to attend school club meetings and festivals as well as to participate in courses organized expressly for their benefit. They are also offered the opportunity of making use, after leaving school, of the school library and reading room.

The extra-curricular activities of pupils supplement in an important way the educational programme of secondary schools. The most conspicuous expression of such activities is given by fraternal associations which endeavour, through their meetings, clubs, excursions and festivals to foster the social development of members, to accustom them to co-operative effort, give them experience in appearing in public and afford them opportunities to pursue their special interests. The fraternal association of each school elects its officers each year. The associations of the different schools have banded together nationally as the *Teiniliitto* of Finland, which each year holds meetings, courses and competitions, e.g., in music, elocution and dramatics. The fraternal associations of the Swedish-language schools have a corresponding national federation.

There are many different kinds of school clubs, such as athletics clubs, Bible circles, language clubs, mathematics, physics and chemistry clubs, literature, music, art, drama, hiking, camera and chess clubs. Most secondary schools have a temperance society.

TRENDS AND PROBLEMS

The expansion of citizens' schools, required as a result of recent legislation, demands considerable work by both

communal and state educational authorities. A total of 150 communes (about 27 per cent of all the communes in the country) at present have a citizens' school operating as a day school. The most serious obstacle to developing the citizens' school is the expense, mostly incurred in procuring the necessary premises. Lively building activity, however, is now going on. Satisfying the need for teachers in the citizens' school is also an immediate task, and one requiring special measures. Two possibilities have appeared: to provide primary school teachers with special training to assume the duties of teaching in the citizens' school, or to prepare specially qualified personnel for such duties by arranging to give them teacher training courses. Both methods have in fact been used.

The steady growth of secondary education, which is due not only to the entry into secondary schools of the large age-groups born after the war but even more, perhaps, to the generally felt need to raise educational standards, has compelled the school authorities to focus their attention on the provision of more accommodation. Although the establishment of new secondary schools and the expansion of old ones continues at a brisk pace, the maximum number of pupils per class has had to be provisionally raised as high as 44. However, the hope is to lower this limit, which used to be 40, and to divide classes into smaller groups for intensified study in more subjects than ever.

Steps have been taken to make teacher training more effective, especially in respect to general pedagogical training. Toward this end a preparatory course and college activities have been joined to practice teaching. It is planned to extend practice teaching over three terms, one of which would be carried out outside a normal lyceum.

Internal reform of the secondary school has been slower. Revision of the curricula is under way and in certain respects has already been realized. Progress has been such that practical subjects now have a firm place in the curriculum of the junior secondary grades. On the part of private secondary schools a tendency has been perceived to draw up syllabuses to meet the requirements of the economic life of the vicinity of the school as far as possible. Thus a division of courses has been brought about as early as the upper grade of junior secondary school, and in certain cases even at grades 2 or 3. The demarcation line falls expressly in the sector of practical type subjects. Thus, in the commercial course book-keeping and typing are among the subjects taught; in the technical course, mathematical and technical subjects are given particular emphasis; and in the agricultural course elementary instruction in farming is given. The purpose of these special courses is to give pupils basic knowledge of the particular subject matter, in addition to the regular junior secondary school subjects, and thereby to prepare them for entry into vocational schools in various fields. On the senior secondary level, a division into language and mathematics courses has been carried out in state secondary schools and in all the larger private secondary schools. Pupils following either course are obliged to study the second national language, in addition to their mother tongue (Finnish or Swedish), and two foreign languages, not counting the extra language imposed as a compulsory subject on pupils following the linguistic course.

Experimentation aimed at developing teaching methods is carried on especially in a few private secondary schools. The first state experimental secondary school was scheduled to open in the autumn of 1959. Questions to be investigated will include the co-ordination of instruction of different subjects, the regulation of the work of pupils and the fitting of club activities into the school programme of study and instruction.

Vocational guidance is gaining a firm place in school study programmes. Since 1958, in about fifty state secondary schools one hour a week of vocational guidance has been given experimentally to the pupils in the highest grade of junior secondary school. A vocational guidance liaison instructor has worked in close collaboration with the personnel of the communal vocational guidance office. The favourable experiences gained so far promise to establish this type of instruction on a permanent footing in the curricula of secondary schools.

The question of secondary school examinations has stimulated considerable discussion. The secondary school entrance examination is drawn up according to the edict issued in 1954, whereby the factors affecting the chances of the applicant for admission include the success achieved in primary school, the results he scores in the entrance examination and the estimate of his qualifications made by his primary school teacher. The aim is to devise a system whereby such pupils might be admitted as possess the qualities necessary to succeed in scholastic work. Reform of at least certain parts of the matriculation examination has also become a topical issue. Strengthening the position of mathematics in this examination is especially being demanded. The question of holding a new examination between the junior and senior secondary school grades has been under consideration. This has been regarded as necessary because it would give pupils enrolled in schools with only the junior stage the same opportunity to continue their studies at the senior secondary level as the pupils in schools where the transfer from junior level to higher grades is made under the same roof. It is also hoped that by means of such an examination it would be possible to steer into the senior secondary stage pupils capable of grasping relatively theoretical studies, while pupils displaying practical talents could be guided into vocational schools.

There are not nearly enough vocational training institutions to meet current needs. This in part explains the large number of applications for admission to secondary schools. The law relating to vocational training institutions, which came into force at the beginning of 1959, imposes on municipalities and boroughs the obligation to establish vocational schools or to reserve a stipulated number of places for pupils in a state central vocational school. The communes are bound to undertake these measures in such a way that the vocational schools might begin operations at the latest by 1962.

Reform of the school system has been a topic of discussion in Finland throughout her period of national independence. In 1956 the Council of State appointed a committee composed partly of educators and partly of representatives of the various political parties to draw up an educational policy for the near future and to co-ordinate the different reform plans. This Educational Programme Committee

completed its report in the summer of 1959. It comprises three parts:

Part I deals with the present Finnish school system, and includes abundant statistical data.

Part II outlines a new school system, organized in the main along uniform lines, which would consist of a 9-year compulsory school combining the present primary school, the citizens' school and the junior secondary grades, and introducing a differentiation of courses in the upper stage, a 3-year senior secondary school offering elective courses and various vocational training institutions.

In Part III the committee sets out the measures that need to be taken promptly in order to overcome present shortcomings and defects, but which would not hamper an eventual reform of the school system. Believing that it is not yet practicable to introduce a unified school ladder, the committee has made many recommendations within the present system of diversified school types. Thus it proposes that the communes be granted the right to expand the citizens' schools to a course of 3 years, whereby the period of attendance would lengthen out to 9 years; that more subjects be introduced into the curriculum of the citizens' school in order to raise the level of theoretical instruction; and that the establishment of communal junior secondary schools be permitted in other than poor and out-of-the-way communes. A broadening of the scope of instruction at the junior secondary stage is advocated by the committee, which also recommends a moderate division of courses in junior secondary schools, in particular to improve the quality of instruction given young people displaying practical talents and interests. Exempting junior secondary schools from tuition fees is regarded as an objective to be attained gradually, by expanding the communal junior secondary school and augmenting the social advantages offered by other junior secondary schools. A particular objective would be to obtain the benefits of junior secondary education for rural communities. Also the establishment of senior secondary schools in rural areas is a matter the committee considers of singular importance. The syllabus of senior secondary schools ought to be broadened by introducing more elective subjects, and toward this end the curriculum ought to be divided into core subjects compulsory to all and optional subjects. More vocational schools should be established and their curricula should be expanded to include the mother tongue, social studies and foreign languages, so that they might form a graded system leading up to the university level.

The committee draws particular attention to the need to improve educational work, and it stresses the necessity of enhancing the pedagogical and didactic training of teachers. It is proposed that faculties of education be established in the universities for the pedagogic training of secondary school teachers and the teachers of special subjects in primary school. It is also proposed that the administration of schools be improved by establishing in the Central Board of Schools a department of planning and experimentation and a department of teacher training, that regional school administration be developed and that the local administration of schools be centralized.

[*Text prepared by Olli Sampola and Voitto Kallio, Central Board of Schools, Helsinki, in October 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 4,376,000.
Area: 130,120 square miles; 337,009 square kilometres.
Population density: 34 per square mile; 13 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment was about 850,000, not including adult education. This represents a school-going population equal to 20 per cent of the total population. Of these pupils 73 per cent

were in primary schools; 19 per cent in general secondary schools; 5 per cent in vocational secondary schools; 0.4 per cent in secondary and higher teacher training schools; 2 per cent in general and technical institutions of higher education.

The proportion of girls was the highest in secondary education—52 per cent as against 48 per cent in primary education. On the other hand, the proportion of girls in higher education was 41 per cent.

The proportion of women on the total teaching staff was high: 62 per cent of teachers in primary schools, 61 per cent in general secondary schools, 52 per cent in secondary teacher training schools, 46 per cent in higher teacher training institutions. (See Table 1.)

Enrolment trends in secondary education, 1930–57. The secondary enrolment ratio, obtained by relating the average enrolment to the estimated population 15–19 years old, was 59 for 1955–57 as compared with 21 for 1930–34. This increase comes mainly from enrolment in general secondary education which is expanding more rapidly than other types of secondary education. Thus, enrolment for 1957 in general secondary schools represented 77 per cent of the total secondary enrolment, as compared with 72 per cent for 1930; in vocational schools the proportions were 22 per cent in 1957 and 26 per cent in 1930; and in teacher training schools 1 per cent in 1957 and 2 per cent in 1930. (See Table 3.)

Examination results in secondary education, 1953–57. The diversity of vocational schools examinations and the fact that their preparation requires less time than those of general secondary schools explain the big difference between the data concerning these two types of education. By relating the number of certificates granted to the number of children enrolled in schools, we obtain a rate of 4 per cent in general schools and of 44 per cent in vocational schools.

In teacher training schools, the proportion of girls enrolled and the proportion of girls receiving certificates decreased from 1953/54 to 1957/58. This period is too short for any conclusions to be drawn. (See Table 2.)

Educational finance, 1957. In the fiscal year beginning in January 1957, total current expenditure on education amounted to 29,585 million Finnish marks. This amount represents an average expenditure of 6,820 Fmks. per inhabitant. (See Table 4.)

Source. Finland: Central Statistical Office, replies to Unesco questionnaires.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary[1]	Primary schools						
	Total	**1957/58**	**6 610**	[2]**25 212**	[2]**15 742**	**622 331**	**298 286**
	„	1956/57	6 584	[2]24 729	[2]15 584	604 603	289 105
	„	1955/56	6 545	[2]24 190	[2]15 294	591 040	282 664
	„	1954/55	6 488	[2]23 298	[2]14 818	564 807	270 162
	„	1953/54	6 417	[2]22 688	[2]14 424	540 601	258 545
Secondary							
General	State secondary schools	1957/58	118	1 676	978	71 809	39 277
	Local authority schools	1957/58	33	122	76	4 196	2 495
	Secondary schools, private	1957/58	271	2 186	1 357	85 876	49 263
	Total	**1957/58**	**422**	[3]**3 984**	[3]**2 411**	**161 881**	**91 035**
	„	1956/57	397	[3]3 648	[3]2 173	146 115	82 998
	„	1955/56	373	[3]3 389	[3]2 008	134 075	76 565
	„	1954/55	355	[3]3 183	[3]1 889	123 232	70 525
	„	1953/54	345	[3]3 092	[3]1 805	114 901	65 934
Vocational	Technical schools and institutes	1957/58	15	602	...	4 988	28
	Vocational schools and institutes	1957/58	120	1 877	...	22 379	6 507
	Commercial schools and institutes	1957/58	72	709	...	7 381	4 675
	Institutes of social sciences	1957/58	2	68	...	433	—
	Agricultural schools	1957/58	106	755	...	4 244	1 599
	Domestic science schools	1957/58	201	644	...	5 675	4 722
	Schools of navigation	1957/58	4	34	...	222	—
	Total	**1957/58**	**520**	[2]**4 689**	...	[4]**45 322**	[4]**17 531**
	„	1956/57	507	[2]4 312	...	[4]41 155	[4]15 113
	„	1955/56	482	[2]3 896	...	[4]*39 500	...
	„	1954/55	477	[2]3 620	...	[4]*36 000	...
	„	1953/54	477	[2]3 340	...	[4]*32 000	...

1. Special schools and classes for handicapped children in rural districts are included under 'Primary'.
2. Including part-time teachers.
3. Not including part-time teachers who numbered 4,184 (F. 2,245) in 1957/58, 3,934 (F. 2,178) in 1956/57, 3,474 (F. 1,970) in 1955/56, 3,276 (F. 1,858) in 1954/55 and 3,001 (F. 1,719) in 1953/54.
4. Including part-time pupils.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Second. [cont.] *Teacher training*	Teacher training schools, public						
	Total	**1957/58**	**11**	**186**	**97**	**2 044**	**839**
	,,	1956/57	11	187	98	2 179	889
	,,	1955/56	11	181	...	2 262	896
	,,	1954/55	11	184	97	2 344	949
	,,	1953/54	11	181	95	2 315	1 018
Higher *Teacher training*	Teacher training colleges, public	1957/58	3	134	63	688	291
	Institute of Education, private[5]	1957/58	1	36	15	490	253
	Total	**1957/58**	**4**	**170**	**78**	**1 178**	**544**
	,,	1956/57	4	185	74	1 035	538
	,,	1955/56	4	126	...	1 183	589
	,,	1954/55	4	125	...	1 260	746
	,,	1953/54	4	131	...	1 117	681
General and technical	University of Helsinki, public	1957/58	1	751	...	9 877	5 279
	Institute of Technology, public	1957/58	1	410	18	2 258	151
	Veterinary College, public	1957/58	1	20	3	156	12
	Finnish University of Turku, private	1957/58	1	236	29	1 801	886
	Swedish University of Turku, private	1957/58	1	81	5	502	149
	School of Social Sciences, Helsinki, private	1957/58	1	59	14	201	129
	Schools of economics, private	1957/58	4	154	19	2 113	691
	Total	**1957/58**	**10**	**1 711**	**...**	**16 908**	**7 297**
	,,	1956/57	10	1 699	...	15 884	6 719
	,,	1955/56	10	1 587	...	15 445	6 356
	,,	1954/55	10	1 345	...	14 725	5 815
	,,	1953/54	10	1 285	...	14 238	5 483
Special[1]	Schools for deaf-mute children, public	1956/57	6	91	68	529	257
	Schools for blind children, public	1956/57	2	44	26	126	57
	Reformatories, public	1956/57	20	54	21	1 161	237
	Classes for backward children in auxiliary schools	1956/57	205	170	122	1 919	746
	Total[6]	**1957/58**	**8**	**136**	**101**	**658**	**299**
	,,	1956/57	[7]28	359	237	3 735	1 297
	,,	1955/56	[7]28	356	236	3 607	1 237
	,,	1954/55	[7]28	352	226	3 363	1 137
	,,	1953/54	[7]28	341	216	3 338	1 118
Adult	People's high schools	1957/58	83	842	436	6 638	4 713
	Workers' academies	1957/58	109	148	31	65 140	44 340
	Study circles run by primary schools	1957/58	5 161	4 863	2 445	70 905	32 572
	Other study circles	1957/58	3 172	...	...	34 472	...
	Total[8]	**1957/58**	**5 353**	**5 853**	**2 912**	**142 683**	**81 625**
	,, [8]	1956/57	5 116	5 610	2 895	132 644	77 084
	,, [8]	1955/56	5 264	5 862	3 085	128 039	74 463
	,, [8]	1954/55	5 231	5 854	3 199	124 904	72 486
	,, [8]	1953/54	4 797	5 351	2 977	115 021	67 349

5. Including academic department for primary school teachers graduated from senior secondary schools.
6. Not including data on classes for backward children in auxiliary schools and on reformatories.
7. Not including classes for backward children in auxiliary schools.
8. Not including data on study circles run by ideological organizations.

2. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Matriculation examination	4 481	2 379	4 687	2 525	5 010	2 751	5 552	2 985	6 183	3 510
Examinations in vocational schools	...	...	...	...	...	...	18 700	...	20 097	...
Teacher training certificate	627	349	547	292	668	362	523	240	667	240

3. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	49 589	55	17 844	...	1 627	57			
1931	49 836	54	18 813	...	1 554	58			
1932	49 613	53	19 364	...	1 479	59	70	329	*21*
1933	49 667	53	18 349	...	1 421	60			
1934	49 621	53	19 200	...	1 374	60			
1935	50 332	53	20 102	...	1 287	61			
1936	50 635	53	20 912	...	1 246	62			
1937	52 306	53	20 769	...	1 203	63	74	341	*22*
1938	53 783	54	22 170	...	1 217	64			
1939	53 872	...	18 839	...	1 249	63			
1940	56 302	55	20 141	...	1 162	65			
1941	57 114	56	12 782	...	543	100			
1942	61 855	56	12 169	...	948	92	81	349	*23*
1943	68 761	56	15 738	...	1 323	76			
1944	72 849	57	19 657	...	1 171	62			
1945	77 486	58	24 162	...	1 160	55			
1946	81 155	58	25 864	...	1 299	53			
1947	84 845	58	26 121	...	1 470	54	110	320	*34*
1948	87 740	58	20 172	...	1 536	55			
1949	91 677	57	21 383	...	1 597	52			
1950	94 971	57	28 406	...	1 730	53			
1951	99 899	57	28 980	...	1 925	49			
1952	106 714	57	29 676	...	2 097	48	141	316	*45*
1953	114 901	57	*32 000	...	2 315	44			
1954	123 232	57	*36 000	...	2 344	40			
1955	134 075	57	*39 500	...	2 262	40			
1956	146 115	57	41 155	37	2 179	41	192	327	*59*
1957	161 881	56	45 322	39	2 044	41			

4. EDUCATIONAL FINANCE, 1957 (in million markkaa)[1]

Expenditure by purpose	Amount		Per cent	
Total recurring expenditure[2]		**29 585.4**		**100.0**
Central administration		111.1		0.4
Instruction		21 806.2		73.7
Pre-primary education	265.7		0.9	
Primary education	10 407.3		35.2	
Secondary education	8 310.2		28.1	
General	5 122.1		17.3	
Vocational	2 879.8		9.7	
Teacher training	308.3		1.1	
Higher education	1 487.1		5.0	
Special education	308.9		1.0	
Adult education	1 027.0		3.5	
Other recurring expenditure not specified		7 668.1		25.9

1. Official exchange rate: 1 markka = 0.003 U.S. dollar.

2. Closed account. Data refer to state expenditure only.

FRANCE

THE EDUCATIONAL SYSTEM

The Preamble to the Constitution of 27 October 1946, which is confirmed by the Preamble to the Constitution of 4 October 1958, declares: 'The nation guarantees to children and adults equal access to education, professional training and culture. The establishment of free, secular, public education at all levels is a duty of the State.'

In conformity with this declaration, only public educational institutions are under the authority of the Ministry of National Education; however, private schools belonging to individuals, organizations or religious communities are subject to supervision by the inspectors-general of public education.

Role of public authorities

The services responsible for schools and, in more general terms, for all cultural activities (arts, literature, science, popular culture and sport) are organized in accordance with the system of centralization common to all branches of French public administration; they are subordinate to a minister, whose department comprises a certain number of offices or bodies which constitute the central administration, that is, the Ministry of National Education.

The Minister, who holds political office, is responsible for planning the organization of the schools and studies and takes decisions in the last resort on all matters affecting the national educational system.

Ministerial authority is more or less extensively delegated to regional and local officials, who transmit and execute the instructions of the central body.

For purposes of school administration, France is divided into 17 regions (*académies*), at the head of each of which there is a regional director of education (*Recteur*) who is at the same time the chairman of the University Advisory Council for Higher Education (*Conseil de l'Université*) and the representative of the Ministry in his region; the *Recteur* is a university professor. The Minister and the regional director are represented in the head town of each *département* by a chief education officer (*Inspecteur d'Académie*), who is in charge of all the services of the Ministry of National Education in his *département*.

This close centralization is tempered by the intervention at all levels, of partly elected bodies (councils, committees and commissions), which are consulted by the Minister or by senior officials acting on his behalf before any important decision is made in regard either to the regulations or to matters affecting the individual.

The diagram on page 479 shows the structure of the school system.

THE DEVELOPMENT OF SECONDARY EDUCATION

The present structure of French education is the result of its historical development. Just as the civil power gradually replaced the religious authority in the political field, so too it tended to replace the Church in education, where the Church formerly had a *de facto* monopoly. The notion of 'education as a function of the State' was proclaimed in the eighteenth century by the Philosophes, and the law-makers of the French Revolution, in laying down the organization of 'public education for all citizens' decreed, that this should be 'free as regards the educational subjects essential to all' and should be 'divided into three progressive stages'.

To replace the *collèges* of the Jesuits, which had provided secondary education before the Revolution, the Convention set up *écoles centrales* (central schools). In 1802 the Consulat replaced these *écoles centrales* by *lycées* (state secondary schools). The terms *lycée* and *collège* are still used to denote establishments which provide a classical secondary education. Vocational and technical secondary education is provided by the technical sections of the *collèges* and *lycées*, the technical secondary schools (*collèges techniques*) and the vocational schools (*écoles professionnelles*).

The term 'secondary education' can be taken either in a broad or a limited sense. The broad sense is that which was intended by the pre-war reformers who wished to substitute for the traditional 'orders' of education (*ordres d'enseignement*), in which the primary, secondary and technical 'orders' formed parallel and partly concurrent ladders, a system of progressive levels of education (*degrés d'enseignement*), in which secondary education, or rather instruction at secondary level, is given in schools which admit children at the end of their basic or primary education (at about the age of 11 years) and keep them until the beginning of higher education (that is, until the age of 18 years).

In 1937 the Directorate of Secondary Education (*Direction de l'Enseignement Secondaire*), which had traditionally administered the public schools belonging to the secondary 'order' (*lycées* and *collèges*) and supervised the private secondary schools of similar type, was renamed the *Direction de l'Enseignement du Second Degré;* the upper primary schools (*écoles primaires supérieures*), which had formerly come under the Directorate of Primary Education, were now brought under the Directorate of Secondary Education and later converted into *collèges modernes* (Act of 15 August 1941).

It remained customary, however to keep the term 'secondary school' (*établissement d'enseignement du second degré*) for establishments which came under the Directorate of Secondary Education: that is, the *lycées* and *collèges classiques* (traditional secondary education) and now the *collèges modernes*. The present trend, embodied in the educational reform, is to extend the broad use of the term

'secondary' to cover establishments which in fact provide instruction at secondary level but belong to another Directorate: that is, the complementary schools (*cours complémentaires*) (Directorate of Primary Education) which will henceforth be known as *collèges d'enseignement général*, and the vocational and technical schools (Directorate of Technical Education).

Legal basis

The secondary education system in France was established by three principal Acts: the Act of 15 March 1850 (*loi Falloux*) which gives the legal definition of *lycées* and *collèges* and prescribes the share in their management to be taken by town and state authorities; the Act of 20 December 1880, which established modern secondary education and secondary education for girls; and the Act of 25 July 1919 (*loi Astier*), which established technical secondary education. After the promulgation of this Act, technical secondary education, which had previously been within the province of the Ministry of Commerce and Industry, became an integral part of the national education system.

Other official measures respecting secondary education

GLOSSARY

NOTE. The accompanying diagram does not record changes in nomenclature under the 1959 reform; these are referred to in the body of the text. For the secondary schools (*lycées* and *collèges*) the numbering of the classes follows the traditional French system, beginning at the eleventh class and going up to the first, which is followed by a terminal class, shown as T, in which the pupil prepares for the second part of the *baccalauréat* (university entrance).

centre d'apprentissage (*collège d'enseignement technique*): vocational training school for apprentices.

classes préparatoires aux grandes écoles: post-secondary classes attached to certain *lycées* and *collèges* for students preparing for the competitive entrance examinations to the *grandes écoles* (see below).

classes primaires: primary classes attached to a *lycée* or *collège*.

collèges: general secondary schools, sometimes with primary classes attached, which are established and partly maintained by local authorities at the level of the *commune*, and which are variously organized to provide classical courses (*enseignement classique*) or modern (*enseignement moderne*) or both.

collège technique: vocational secondary school; 4-year course trains workers who may become foremen, supervisors, etc., 6–7-year course leads to higher technical education.

cours complémentaire (*collège d'enseignement général*): complementary course provided at certain primary schools and corresponding to the lower cycle (first four years) of the *enseignement moderne*.

école d'enseignement moyen agricole: vocational secondary school of agriculture.

école maternelle: pre-primary school, or pre-primary classes attached to a primary school.

école municipale de beaux-arts (*. . . de musique*): municipal vocational training school of fine arts or music.

école nationale de beaux-arts (*. . . de musique*): state vocational training school of fine arts or music.

école nationale professionnelle: vocational secondary school; 5-year course trains skilled technicians, 7-year course leads to higher technical education.

école normale: teacher training college for primary teachers (separate institutions for men and women).

école primaire élémentaire: complete primary school covering the period of compulsory education.

enseignement classique: general secondary course with Latin and optional Greek.

enseignement moderne: general secondary course without Latin.

enseignement moderne court: the lower cycle (first 4 years) of the *enseignement moderne*.

grandes écoles: state higher professional colleges, attached to various ministries, the graduates of which become eligible for the more responsible posts in administration, education, science, technology, the armed forces, etc.

lycées: general secondary schools, sometimes with primary classes attached, which are established and maintained by the central authorities with the assistance of departmental or municipal authorities, and which are organized to provide the classical course (*enseignement classique*), the modern course (*enseignement moderne*) or both.

HIGHER EDUCATION

A. *Études juridiques:* law.
B. *Études littéraires:* arts and letters.
C. *École normale supérieure:* institute of education training secondary school teachers.
D. *Études médicales:* medicine and dentistry.
E. *Études de pharmacie:* pharmacy.
F. *Écoles militaires:* colleges preparing for professional careers in the armed forces.
G. *Études scientifiques:* science.
H. *Grandes écoles scientifiques et techniques —écoles d'ingénieurs:* colleges of science, technology and engineering.
I. *Grandes écoles agricoles ou vétérinaires:* agricultural and veterinary colleges.
J. *Grandes écoles artistiques:* colleges of fine arts and music.

EXAMINATIONS

Agrégation: a competitive examination for recruitment to the higher posts in secondary and higher education.

Baccalauréat: university entrance examination, which is taken in two parts (*1re partie* and *2e partie*) at the end of the sixth and seventh years respectively of secondary education.

Brevet d'enseignement commercial, industriel, hôtelier, social: diploma awarded on the successful completion of studies in commerce, industrial arts, hotel management, social welfare.

Brevet d'études du premier cycle: lower secondary school certificate.

Certificat d'aptitude pédagogique: primary teacher's certificate.

Certificat d'aptitude professionnelle: vocational proficiency certificate.

Certificat d'études primaires: primary school certificate.

Concours d'entrée à l'école normale: competitive entrance examination for teachers training college.

Concours d'entreé dans les grandes écoles: competitive entrance examinations for the *grandes écoles* (see above).

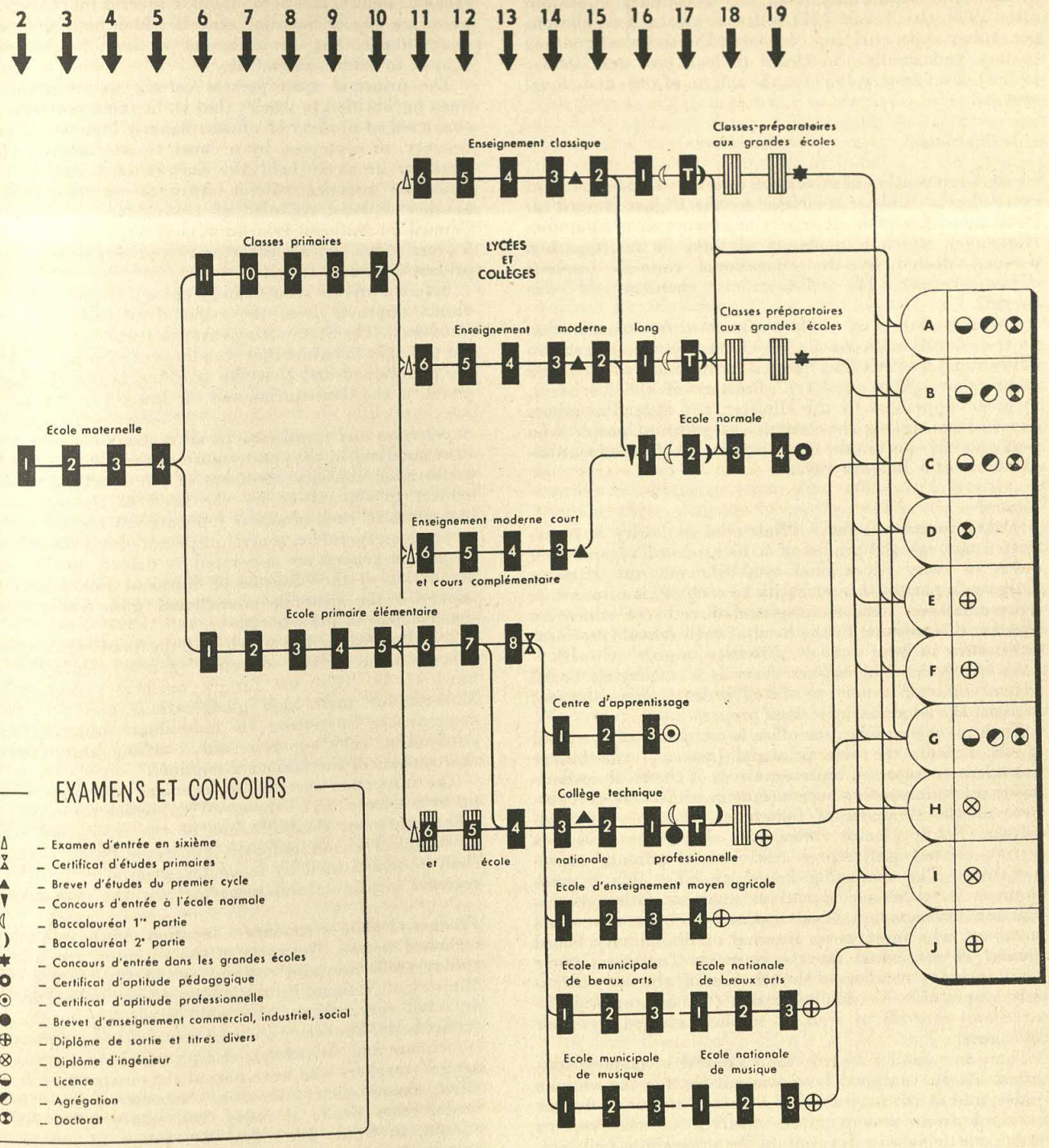
Diplôme de sortie et titres divers: leaving diploma and various qualifications.

Diplôme d'ingénieur: engineering diploma.

Doctorat: doctorate.

Examen d'entrée en sixième: secondary school entrance examination. Pupils in public schools with sufficiently high average mark during primary course are exempt.

Licence: licentiate.


2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Enseignement classique
Classes-préparatoires aux grandes écoles
Classes primaires
LYCÉES ET COLLÈGES
Enseignement moderne long
Classes préparatoires aux grandes écoles
Ecole maternelle
Ecole normale
Enseignement moderne court
et cours complémentaire
Ecole primaire élémentaire
Centre d'apprentissage
Collège technique
et école
nationale
professionnelle
Ecole d'enseignement moyen agricole
Ecole municipale de beaux arts
Ecole nationale de beaux arts
Ecole municipale de musique
Ecole nationale de musique
A
B
C
D
E
F
G
H
I
J
EXAMENS ET CONCOURS
Examen d'entrée en sixième
Certificat d'études primaires
Brevet d'études du premier cycle
Concours d'entrée à l'école normale
Baccalauréat 1re partie
Baccalauréat 2e partie
Concours d'entrée dans les grandes écoles
Certificat d'aptitude pédagogique
Certificat d'aptitude professionnelle
Brevet d'enseignement commercial, industriel, social
Diplôme de sortie et titres divers
Diplôme d'ingénieur
Licence
Agrégation
Doctorat

include the establishment of free secondary education after 1930, the Act of 1949 to issue rules and regulations governing apprenticeship centres in the technical training system and finally the Order (*ordonnance*) and Decree (*décret*) of 6 January 1959 for the reform of the educational system.

Administration

In the organization of education and the establishment of curricula the Minister is advised by the Higher Council for National Education (*Conseil Supérieur de l'Education Nationale*), which is made up of some 30 distinguished persons elected by the educational councils (*conseils d'enseignement*). The Minister is chairman of this council.

Decisions, however, are first submitted for consideration by the educational councils, which have great authority in educational matters. The Council for Secondary Education includes *ex officio* members (directors of the Ministry), members appointed by the Minister, and elected members chosen from among the various categories of people who took an active part in the final preparation of the educational reform of 6 January 1959.

Control

Public secondary schools. Ministerial authority is transmitted through the grades of a hierarchical organization down to every educational establishment; the Minister delegates a part of this authority to each of his responsible representatives, from the regional director of education (*Recteur d'Académie*) to the head of each school (*proviseur* or *directeur* in boys' schools, *directrice* in girls' schools).

In the *lycées* and *collèges* there is a managing board (*conseil d'administration*) or office (*bureau d'administration*) to assist the administrative staff proper.

Each managing board or office is composed of the head of the school, the vice principal (*censeur*), the bursar (*intendant* or *économe*), representatives of the local authorities and administrative bodies (mayor, prefect, representatives of the Chamber of Commerce, Chamber of Agriculture, Public Health Office, and chambers of various crafts), elected staff representatives and parents' representatives. The managing board or office can express opinions or wishes on educational matters, although this function has come to devolve primarily on a few of its members, who meet as an internal or disciplinary board (*conseil de discipline*) for the purpose. The disciplinary board includes members of the school staff who are particularly responsible for administration (the *censeur* and the *surveillant général*) as well as teachers elected by their colleagues.

There are similar boards for technical secondary education. At the national level committees for the various trades, and at the local level of technical training advisers recruited from among representatives of the various trades, participate in drawing up the programmes of work and examine the expediency of any decisions made.

Parents' Associations for Public Education maintain permanent liaison with the school authorities.

Private secondary schools. These vary greatly in size. In addition to the large schools, which belong mostly to religious bodies, and accommodate several hundred pupils, there are day or boarding schools which have only a few dozen pupils. The establishment of such institutions is subject to certain formalities.

The principal must possess certain qualifications. He must be 'entitled to teach', that is, he must not have been convicted of a crime or offence against honesty or public decency, or sentenced by a court to loss of civic rights. Further, he must hold the *baccalauréat*, which is the minimum requirement for entrance to university, or another diploma regarded as equivalent by the Higher Council for National Education, and must have completed 5 years' service as a teacher or vice principal in a state or private secondary school.

Before a private school can be opened the principal must obtain approval from the regional education authority (*académie*). The State acting through its inspection services has the right to ensure that standards of hygiene and health are maintained and that the teaching is not contrary to morality, the Constitution and the law.

Supervision and inspection. In all matters connected with their assiduity in the performance of their duties and their professional capacity members of the teaching staff are subject to supervision by the head of the school, the inspectors of each *académie* (educational region) and the inspectors-general i.e. central inspectors from the Ministry. Inspectors-general are appointed by decree, on the recommendation of the Minister of National Education; they supervise the general, educational and administrative management of the schools.

By a Decree dated 12 March 1920 the number of inspectors general of secondary education (general education) was fixed at 49. They are former teachers chosen by the Minister for their high qualifications and professional competence. Specialists in individual subjects of the curriculum, they supervise the teaching and report on the teachers of the various disciplines.

The inspection system for technical education was set up by a Decree of 17 February 1921, which prescribes that 'the permanent establishment of the inspection service for technical schools under the Minister of Public Education shall be constituted by inspectors-general of both sexes, regional inspectors and inspectors for the *départements*'.

Finance. Public secondary education, both general and technical is free. The costs of the teaching and administrative staffs are paid entirely out of the budget of the Ministry of National Education. Secondary school teachers are civil servants and are paid according to the civil service scale. The salary scale for men and women principals (*proviseurs* and *directrices*), vice principals and *professeurs agrégés* (teachers who have passed the competitive recruitment examination known as '*agrégation*'—see below) ranges from Grade 1, index 390, salary 8,930 NF per annum, to Grade 10, index 950, salary 21,760 NF per annum. In the case of teachers who hold the '*licence*' (a degree conferred after two or three years' university study) or a teacher's certificate the corresponding figures are: Grade 1, index 300, salary 6,870 NF per annum; Grade 10, index 705, salary 16,140 NF per annum.

There are certain differences between the various

establishments with respect to their material and financial organization. In theory, public secondary schools are housed in buildings belonging to towns or, very exceptionally, to the *départements*, which are responsible for their maintenance. In practice the State subsidizes the costs of any considerable repairs as well as of new buildings in a proportion varying between 50 and 75 per cent of the expenditure.

The *lycées* are national schools and have their own budgets the income of which is derived from receipts from the boarding school fees (*internat*) and from subsidies, mainly from the State.

The *collèges* do not have their own budgets. Their management expenses form part of the budget of the town or, where necessary, the *département*. Decree No. 55–644 of 20 May 1955, however, permitted the conversion of *collèges* into *collèges nationaux*, or public establishments with the legal status of a corporate body and enjoying financial autonomy. These schools are therefore administratively and financially on an equal footing with the *lycées*, but the *départements* or towns are still responsible for a part of the expenses of management.

The public technical schools are national establishments if maintained by the State and establishments of the *départements* or *communes* if maintained by one or more *départements* or *communes*. Private technical schools may be recognized by the State.

Boarding schools. An original feature of French secondary education is to be found in the existence of large boarding schools (*internats*), sometimes accommodating several hundred pupils. Unless they hold scholarships pupils pay boarding fees, but there are no tuition fees in public schools.

The *externat* (day school) is the teaching establishment proper where the pupils receive class instruction or are accepted for supervised studies. The *internat* is the boarding school, to which are admitted pupils away from their families.

In boys' *lycées* the *internat* is as much part of the state-run establishment as the *externat*. The same applies to the national *collèges*. In the other *collèges* the boarding school section is administratively and financially independent of the day school and may be managed as an undertaking of the municipality (on behalf of and at the expense of the town), or as an undertaking of the *département* (on behalf of and at the expense of the *département*) or of the State (on behalf of and at the expense of the State), or for the account of the principal (at his own risk).

In girls' *lycées* the *internats* were originally a municipal undertaking and remained so until the Act of 10 April 1954 made them state boarding schools.

Scholarships. A *règlement d'administration publique* (public administrative regulation) and a *décret d'application* (decree for the application of these regulations) respecting national scholarships in secondary schools were published in January 1959. These represent merely a first stage in the reform of the scholarship system, which was called for by the commission on democratization of education in 1956 to 1957. The next stages have already been initiated. The first stage introduced a major innovation, which with the tacit agreement of the Ministry of Finance was put into effect ahead of the due date, as from the opening of the schools in 1958: the former boarding, half-board and maintenance grants were abolished and replaced by what is known as the 'equal shares' (*parts unitaires*) system. The purpose of this measure is to distribute state financial aid more equitably in accordance with the resources and expenses of the families, including in the family expenses the additional costs that may be entailed if the children attend a particular school. The 'shares' system was put into operation in October 1958 for pupils entering the 6th class (first year of secondary schooling) and will be extended year by year to the higher classes.

Buildings and equipment. Owing to the constantly growing demand for secondary school premises caused partly by demographic pressure and partly by the extension of school education, the Ministry of National Education has been obliged, in order to keep within its budget, to look for ways of simplifying school buildings and reducing space standards.

Precise standards have therefore been laid down for all the elements of school buildings—day school (*externat*) and boarding school (*internat*) accommodation, administrative services and living quarters. This will make it possible to combine these elements by putting them one on top of another or side by side in various ways without imposing architectural and constructional limitations that would create insuperable difficulties.

A uniform width of 8.75 metres has been adopted for the buildings. For *externats* this means a classroom width of 7 metres and a corridor width of 1.75 metres, the length of the classrooms depending on their purpose. The height of the buildings has been restricted to four storeys above the ground floor, which generally includes the playgrounds, sanitary installations and service quarters, so as to obviate the need for mechanical equipment (lifts and hoists), which for reasons of safety it is inadvisable for children to use.

The Ministry is also investigating the possibility of reducing the amount of floor space per pupil so as to cut down the capital investment required for building the necessary schools. In addition to the urgent necessity for reducing costs there is the further imperative need for rapid building. This requirement is best met by progressively abandoning traditional methods in favour of prefabrication or of the methods used in industrial construction.

School welfare services. A school and university health service attends to the health of all school-age children and of pupils and staff at teaching and educational establishments of all kinds.

The functions of this service include supervision of the further steps to be taken after the school medical inspection, and liaison with all the social services of the administrative departments; control and supervision of hygiene in regard to food and buildings in educational establishments belonging to the Ministry of National Education, Youth and Sport; control and co-ordination of preventive medical services in higher education; and finally, all matters connected with the health of young people at school or university which may be entrusted to this service by the Minister of National Education.

Two inspectors-general, who are medical practitioners, maintain permanent liaison between the Director of Education and the education services of the *académies* and *départements*. In addition, there are school health centres for medical consultation and examination in the chief town of every *département* or *arrondissement*, in every *commune* with more than 5,000 inhabitants and in such other *communes* as may be designated for that purpose by ministerial decree.

Within each secondary school there is a sickroom equipped to give urgent medical attention to any pupil in the school, and with a certain number of beds for sick boarders. The sickroom is under the supervision of a qualified nurse. Every secondary school equipped with boarding accommodation has a school medical examiner and a school medical officer.

TYPES OF SECONDARY EDUCATION

The essential purpose of the educational reform promulgated by the Order and Decree of 6 January 1959 was to bring the different types of secondary education into a unified system and develop the arrangements for giving guidance to pupils, so that on the one hand children would not waste time in studies for which they were not fitted, and on the other hand children who showed aptitudes at a later stage could move from one type of education to another. Guidance councils and 'bridge classes' (*passerelles*) are the original features of this reform.

The character of secondary education will be greatly changed in 1967, since in accordance with the Order of 6 January 1959 it will then become compulsory. The revision of the programmes of study has already been begun.

After the 'elementary education' which will enable all children from the age of 6 to acquire a fund of elementary knowledge and mastery of the basic tool subjects, pupils will enter on an observation period (*cycle d'observation*) lasting 2 years, during which their aptitudes will be observed while they pursue their studies in the normal way.

During the observation period the guidance council (*conseil d'orientation*) will from time to time report its views to the parents. The first term will be devoted to a review of the pupil's knowledge, and at the end of this term a report containing advice which will not be affirmative or negative except in the most obvious cases, may be sent to the parents. At the end of the second term, during which a choice will be made between classical and modern courses, a second report will be submitted. It is at the end of the second year of the observation period that the action of the council will be most decisive for it is then that the child will be really guided towards a specialized form of training, and it is most desirable that the grounds for the parents' choice should not be mere social considerations or prejudices but the true interests of the child.

At the end of this observation period the pupils will be helped in the choice of a course; they may take one of the following: a terminal course arranged with the help of various trades which will last until the end of the compulsory school period; a short technical course at an apprenticeship centre; a short general course at a *cours complémentaire* (to be renamed *collège d'enseignement général*); a long course of technical training at a technical secondary school or a national vocational school (*collège technique* or *école nationale professionnelle*); a long classical or modern course in a classical or modern *lycée*.

Terminal courses. Adolescents who wish to enter an occupation at the age of 16 will be offered several types of terminal course. In the rural districts the commonest type will be an agricultural course (*enseignement agricole*) for boys and a rural domestic economy course (*agricole-ménager*) for girls. These courses will be mainly practical, designed for those who will work on the land. For the benefit of other rural pupils the terminal courses will provide artisan training. In the towns there will be courses offering a similar combination of general instruction and vocational preparation for urban artisans or skilled industrial workers.

Short technical courses. These courses, which must always be organized in such a way that young persons who possess the necessary ability may still have the possibility of transferring to a long technical course, will continue to be given by the apprenticeship centres. In preparing the programmes of work, which will be constantly adapted to the demands of the national economy, account will be taken of the comments and forecasts submitted in the reports of the *Commissariat au Plan d'Équipement et de Modernisation* (Office of the Commissioner for Planning and the Modernization of Industry).

Long technical courses. The long technical courses, which have already been organized with the agreement and help of the various trades, provide a progressive training from the level of an elementary trade qualification to the advanced qualifications required of technicians and engineers. A compulsory period in an undertaking will conclude this training and bring it into line with up-to-date practice. No adolescent, therefore, need stop his training at a point which for the best students can be no more than a half-way stage.

One of the main concerns of the educators has been to provide special sections to act as 'bridges' (*passerelles*) and enable pupils who have completed a general education to receive a vocational training at the level of their previous studies.

Short courses of general education. The purpose of these courses is still to prepare adolescents for employment in one of the numerous medium-level posts of a non-technical or only slightly technical kind in the rapidly expanding 'third level' sector of the economy, and of course for entry to teacher training schools (*écoles normales d'instituteurs*). With the double purpose of simplifying and up grading educational nomenclature, the *cours complémentaires* at which such instruction used to be given will in future be called *collèges d'enseignement général*. The courses will be extended over an extra year to enable students of either sex to reach the minimum age at which they may become candidates for a civil service post or take up employment.

Long course of general education. The pupil can choose between different sections, which are described below. One

of the main changes introduced by the reform is the rearrangement and strengthening of the present 'Classical B' section (Latin and languages). The importance of modern languages in the world of today is obvious but a knowledge of foreign languages is not in itself sufficient—except for the rather limited number of professional interpreters—and the student's linguistic equipment must be supplemented by a knowledge of other subjects.

Organization of secondary school year. The school year starts on 15 September. It is divided into three terms, separated by the Christmas holidays (from 23 December to 3 January) and the Easter holidays (15 days in all). The length of the summer holidays is fixed at two and a half months: 1 July to 15 September. Promotion and leaving examinations must be held during July and finished by 14 July at the latest.

General secondary schools

'Lycées' and 'collèges'. There are 367 *lycées*, of which 23 are in Algeria and 6 in the overseas *départements* (*départements d'outre-mer*), and 548 *collèges*, of which 24 are in Algeria.

The only difference between a *lycée* and a *collège* lies in the way in which they are administered. The *lycées* are national public establishments, founded and maintained by the State with the help of the *départements* and towns. The *collèges* are founded by the *communes*, although members of the staff holding university diplomas in these institutes are always paid by the State.

Lycées and *collèges* offer an increasingly differentiated programme, including technical sections in the upper cycle. The technical sections prepare pupils for the *baccalauréat technique*, which will be referred to at more length under the section 'Vocational and Technical Schools' below: the courses themselves are regarded as essentially part of general secondary education, and are included here so as to give a comprehensive picture of the types of course provided in *lycées* and *collèges*.

The course is organized as follows:

1. A 2-year observation cycle (6th and 5th classes)[1].
2. For the 2 years following this period (the first cycle, comprising the 4th and 3rd classes) there are 3 sections. Classical A section—main subjects: Greek, Latin and one modern language; Classical B section—main subjects: Latin and two modern languages; Modern section—main subjects: a more intensive teaching of French and two other modern languages.
3. For the first 2 years of the second cycle (2nd and 1st classes) there are 7 sections. Classical A section—main subjects: Greek, Latin and one modern language together with a partly optional complementary training (A′) intended to enable the student to proceed later to scientific studies; Classical B section—main subjects: Latin and two modern languages and a general formation tending towards the social sciences and their modern means of expression; Classical C section—main subjects: Latin, the sciences and one modern language; Modern section M—main subjects: the sciences and two modern languages; Modern section M′—main subjects: the physical and biological experimental sciences and intensive study of a modern language; Technical section T—main subjects: the sciences, one modern language and elementary industrial technology; Technical T′—main subjects: orientation of the various courses towards applied economics and two modern languages.

   In the seventh year (third year of the second cycle), a course of general education is given in five sections, including in each section an introduction to philosophy: a philosophy section, an experimental sciences section, a mathematics section, a mathematics and technology section, an economic and social sciences section.

The time-tables and curricula of the sections enumerated above are fixed for each class by an order of the Minister of National Education.

The long general education course concludes with the *baccalauréat*, which is a university degree conferred by the faculties of sciences, letters and social studies. The *baccalauréat* is divided into two parts, the examinations for which are taken at the end of the sixth and seventh years of secondary study. There is a separate 'series' of the *baccalauréat* for each of the sections listed above. In addition, in the first part there is a special series corresponding to the complementary subjects which may be taken in the A course.

The following tables show the distribution of the hours per week among the various subjects in the curricula of the observation cycle, the first cycle and the second cycle, including the final classes, for some of the sections.

Teaching staff. The teaching staff in *lycées* and *collèges* is composed of teachers (*professeurs*) and assistant teachers (*adjoints*). In addition to their teaching duties the assistant teachers are responsible for supervising studies. Special masters in boarding schools (*maîtres d'internat*) and supervisors in day schools (*surveillants d'externat*) superintend the studies, recreation and activities of the pupils.

Secondary school teachers are university graduates, the minimum academic qualification being the *licence d'enseignement*[2]. A young teacher who has obtained his *licence* can be appointed directly to a post as assistant teacher. In order to become a full teacher (*professeur*), however, he must first pass a competitive examination. There are two categories of competitive examination, at different levels: (a) The competitive examination for a certificate of proficiency in secondary teaching (*certificat d'aptitude au professorat de l'enseignement public du second degré*—CAPES) offers the easiest access to the profession. The candidates may sit for the examination in different subjects, which are the same as the subjects for the *licence d'enseignement*. Candidates who have passed the theoretical part of one of these examinations are admitted to a regional education centre (*centre pédagogique régional*) and spend

1. Classes in French secondary schools are numbered in inverse order, i.e. progressively from the 6th to the 1st, which is followed by a terminal class (see diagram).

2. A *licence* usually requires at least 2 years' study at a university. The student must obtain university certificates (*certificats d'études supérieures*) in a number of subjects (3 for science, 4 for letters); the only difference between a *licence d'enseignement* and an ordinary *licence* (*licence libre*) is that for the former the choice of subjects is strictly prescribed.

TIME-TABLE FOR GENERAL SECONDARY SCHOOLS
(in hours per week)

Subject	ORIENTATION CYCLE						FIRST CYCLE							
	Sixth class			Fifth class			Fourth class				Third class			
	Classical	Modern	New	Classical	Modern	New	Classical A	Classical B	Modern	New	Classical A	Classical B	Modern	New
French	4	6	$3+2^3$	3	5	$3+2^3$	3	3	5	$3+\frac{1}{2}^3$	3	3	5	$3+\frac{1}{2}^3$
Latin	5	—	$3+1^3$	5	—	$3+1^3$	4	4	—	1^3+3^4	4	4	—	1^3+3^4
Greek	—	—	—	—	—	—	3	—	—	3^4	3	—	—	3^4
Civics and moral instruction	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
Modern language I	3	5	$3+1^3$	3	5	$3+1^3$	3	3	3	$2+1^3$	3	3	3	$2+1^3$
Modern language II	—	—	—	—	—	—	—	3	4	1^3+3^4	—	3	4	1^3+3^4
History and geography	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$	3	3	3	$2\frac{1}{2}$
Mathematics	2	2	$2+1^3$	$2\frac{1}{2}$	$2\frac{1}{2}$	$2+1$	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$	$\left\{\begin{array}{c}2+1^3\\+1\frac{1}{2}^4\end{array}\right\}$	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$	$\left\{\begin{array}{c}2+\frac{1}{2}^3\\+1\frac{1}{2}^4\end{array}\right\}$
Observation sciences	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	1	1	1	$1\frac{1}{2}$	1
Physical sciences	—	—	—	—	—	—	—	—	—	$1\frac{1}{2}$	—	—	—	$1\frac{1}{2}$
Physical training	2	2	$\left\{\begin{array}{c}2+1\frac{1}{2}\\\text{per fortnight}\end{array}\right\}$	2	2	$\left\{\begin{array}{c}2+1\frac{1}{2}\\\text{per fortnight}\end{array}\right\}$	2	2	2	2	2	2	2	2
Plastic arts, drawing[1]	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	1	1	$1\frac{1}{2}$	1	1	1	$1\frac{1}{2}+3^4$	1	1	1	$1\frac{1}{2}+3^4$
Music	1	1	$\left\{\begin{array}{c}1\frac{1}{2}^2+1\frac{1}{2}\\\text{per fortnight}\end{array}\right\}$	1	1	$\left\{\begin{array}{c}1\frac{1}{2}^2+1\frac{1}{2}\\\text{per fortnight}\end{array}\right\}$	1	1	1	$1+3^4$	1	1	1	$1+3^4$
Handwork	1	1	$2\frac{1}{2}$	1	1	$2\frac{1}{2}$	1	1	1	$\left\{\begin{array}{c}2\text{ per }\frac{1}{2}\\\text{class}\end{array}\right\}$	1	1	1	$\left\{\begin{array}{c}2\text{ per}\\\frac{1}{2}\text{ class}\end{array}\right\}$
Local studies	—	—	2	—	—	$\left\{\begin{array}{c}2\text{ per }\frac{1}{2}\\\text{class}\end{array}\right\}$	—	—	—	2	—	—	—	2
Introduction to industrial technology	—	—	—	—	—	—	—	—	—	5^4	—	—	—	5^4
Introduction to economics	—	—	—	—	—	—	—	—	—	3^4	—	—	—	3^4
Introduction to agricultural sciences and technology	—	—	—	—	—	—	—	—	—	5^4	—	—	—	5^4

1. Drawing in the traditional classes, plastic arts in the new classes.
2. The additional hour and a half is spent discovering the pupils' artistic abilities. Each half of the class spends $1\frac{1}{2}$ hours in turn on plastic arts and $1\frac{1}{2}$ hours on music.
3. Directed work (new classes only) under the teacher in charge of the subject, by groups of half a class or at least 15 pupils in the case of Latin.
4. Options (new classes only). Each pupil may opt for one or two subjects. One option (Latin, modern language II, preliminary industrial technology) is sufficient qualification for admission to a class in the second period of general education or technical education, subject to the proficiency requirements laid down in the regulations in force at the time.

1 year in teaching practice. At the end of this year they take the practical part of the examination; if they succeed they become certificated teachers (*professeurs certifiés*). (b) Teachers who hold a chair in a *lycée* are selected by means of a competitive examination, called the *concours d'agrégation*, which is of a higher standard. The *concours d'agrégation* exist at present for the following subjects: mathematics (men), mathematics (women), physical sciences (men), physical sciences (women), natural sciences (men and women), philosophy (men and women), literature (men), literature (women), grammar (men), modern literature (men and women), history (men), geography (men and women), history and geography (women), German (men and women), English (men and women), Spanish (men and women), Italian (men and women), Russian (men and women), Arabic (men and women).

Every examination consists of a written and an oral test. The written papers are taken in the head town of each educational region (*académie*); the oral examination is held in Paris. In addition to their *licence d'enseignement* candidates must possess a diploma of higher studies or in place thereof a certificate of higher studies. They must also have completed a course of teaching practice at a *lycée*. The board of examiners, of which the chair is generally taken by an inspector-general of public education or a university professor, is composed of teachers in higher education and *lycée* teachers of outstanding qualifications.

A considerable part of the programme of study for the *agrégations* (above all, in the case of the *agrégations* in science) has, of necessity, a permanent character. The details of the programme, however, may vary from year to year, particularly for *agrégations* in literature, for which different authors may be set each year. For this reason the syllabus for each examination is published one year in advance, immediately after the results of the previous examination.

Teachers holding an *agrégation* (*professeurs agrégés*) make up about one third of all secondary school teachers. They are appointed directly to *lycées* by a Ministerial order. Unless specially exempt, they must undertake, when registering for the examination, to teach for at least five years.

In order to help recruitment for the teaching profession, facilities have been provided for students who are preparing for the proficiency certificate (CAPES) by the establishment of secondary education preparatory institutes (*Instituts de Préparation aux Enseignements du Second Degré—IPES*). The Decree of 27 February 1957 set up an IPES in every faculty of science and literature. Each of these institutes

TIME-TABLE FOR GENERAL SECONDARY SCHOOLS
(in hours per week)

Subject	SECOND CYCLE[1]															
	Second Class								First Class							
	A	A'[2]	B	C	C'[2]	M	M'[2]	Economic sciences	A	A[2]	B	C	C[2]	M	M[2]	Technical B
French	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Latin	3	3	3	3	3	—	—	—	3	3	3	3	3	—	—	—
Greek	4	3	—	—	—	—	—	—	4	3	—	—	—	—	—	—
Modern language I	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Modern language II	—	—	4	(2)	—	4	(2)	3½	—	—	4	(2)	—	4	(2)	3
History	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Geography	1½	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2	2
History and geography (taken as complementary subjects)	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	1
Mathematics	1½	4	1½ (+ 1½)	4	4	4	4	4	1½	4	1½ (½)	4	4	4	4	4
Physical sciences	2¼	3¼	2¼	4½	4½	4½	4½	2¾	2¼	3¼	2¼	4½	4½	4½	4½	2¾
Natural sciences	—	—	—	—	3	—	3	—	—	—	—	—	3	—	3	1
Introductory economics	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1½
Main products of the economy	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Physical training	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Drawing	1	1	1	1	1	1	1	1	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Music	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Handwork	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Shorthand	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	(1)
Typewriting	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	(1)
Total	26¼(2)	28¾(2)	27¾(3½)	29 (4)	30 (2)	28 (2)	29 (4)	31¾(2)	27¾(4)	30¼(4)	28¼(4½)	30½(6)	31½(4)	29½(4)	30½(6)	33¼(6)

1. The figures in parentheses are optional hours.

2. Section instituted as an experiment until the *baccalauréat* reform is completed.

SECOND CYCLE — *cont.*

Subject	Terminal Classes		
	Arts Philosophy	Experimental sciences	Mathematics
Philosophy	9	5	3
Literature	1	(1)	
Civics and moral instruction	(½)	(½)	(1½)
Modern language I	1½	1½	1½
Modern language II	(1½)	(1½)	(1½)
History	2	2	2
Geography	2	2	2
Mathematics	1½	4	9
Physical sciences	2	5	5½
Natural sciences	2	4	2
Physical training	2	2	2
Plastic arts, drawing	(2)	(2)	(2)
Music	(1)	(1)	(1)
Handwork	(1)	(1)	(1)
Total	29 (6)	32½ (7)	34 (7)

brings together the pupil-teachers training to be teachers in the *lycées*, classical or modern *collèges*, teacher training schools for primary education (*écoles normales primaires*), state vocational schools (*écoles nationales professionnelles*) and technical secondary schools (*collèges techniques*).

The institute gathers the pupil-teachers together in work sessions outside the courses they follow in the faculties, but does not provide teacher training; its task is to help the students to prepare for their *licence d'enseignement* under the best possible conditions.

Fully qualified teachers (*professeurs*) and in general all staff with teaching duties are required to teach in class for a certain number of hours weekly: 15 hours for a *professeur agrégé*, 18 hours for a *professeur certifié*, 20 hours for a teacher of art or special subject. In Paris these figures are less for a principal teacher in the post-*baccalauréat* classes which prepare pupils for the competitive entrance examinations to the *grandes écoles* (state higher professional colleges), in classes with more than 35 pupils, etc.

The weekly hours of duty of a teacher are calculated so as to give him sufficient free time to prepare his classes, correct exercises and keep abreast of literary and scientific affairs. For this reason the maximum number of teaching hours varies with the size of the class and school and the qualifications of the teacher.

Examinations for teaching appointments are based on specialization. Teaching duties, again, are organized on the basis of specialization. A teacher of literature is in general not qualified to teach anything except Latin, Greek, French literature and French grammar. A modern languages teacher in general teaches only one modern language, a mathematics teacher teaches only mathematics, a natural science teacher only natural sciences and a philosophy teacher only philosophy.

Complementary courses (*cours complémentaires*). These courses, which as their title indicates, were originally intended solely to provide the pupils with complementary instruction to that given in the primary schools, are classes attached to these schools. To this function, which still exists, has been added since the Liberation the further duty of providing a short modern course, similar to that given in the first four years of secondary schools (sixth, fifth, fourth and third classes) but complete in itself.

Admission to *cours complémentaires* is as a general rule subject to the same conditions as admission to *lycées* and *collèges*. The pupils must be between 11 and 12 years of age on 31 December of the year in which they are admitted. Exceptions can be made in favour of children one year below this age or one or more years over the age of 12. Further, pupils who are under 15 years of age and hold a certificate of primary education may be admitted directly into the fifth class (i.e. second year). Candidates admitted under these conditions are eligible for maintenance or full board grants.

Curricula and time-tables in the general education sections of the *cours complémentaires* are in conformity with those of the short modern classes in the *collèges;* they are shown in the following table:

TIME-TABLE FOR *COURS COMPLÉMENTAIRES*
(General education sections—Decree of 24 July 1947)
(in hours per week)

Subject	Class			
	VI	V	IV	III[1]
French	6	6	5	5
Civics	1	1	1	1
History and geography	3	3	3	3
Modern language	5	5	4	4
Mathematics and geometrical drawing	4	4	4	4
Handwork	2	2	1½	1½
Physical sciences	—	—	3	3
Natural sciences	—	—	1	1
Observation sciences	1½	1½		
Drawing	1½	1½	1½	1½
Music	1	1	1	1
Physical education	2	2	2	2
Total	27	27	27	27

1. Girls in class III take at least 1 hour of mathematics in the 2nd and 3rd terms, 2½ hours handwork (cutting) in the 2nd term and 2½ hours mothercraft in the 3rd term.

There are also technical sections (industry, commerce and agriculture), which have grown considerably since the Liberation, have syllabuses and time-tables adapted to local needs and are more in conformity with those at the technical secondary schools (*collèges techniques*). Some of the industrial and commercial sections have been approved by the Directorate-General of Technical Education (*Direction Générale de l'Enseignement Technique*), which assists them by providing teachers for technical subjects and teaching material. These courses prepare students for certificates (*brevets*) in industry and commerce.

Special attention has been paid to the sections for agricultural and rural domestic economy, designed to educate the young in the rural districts who have not received a general or technical secondary education but still wish to acquire the essential qualifications for middle level employment. In agricultural education, as in education for industry and commerce, vocational guidance starts in the fifth class (second year). The BEPC examination is taken at the end of the course, with a choice between agriculture and rural domestic economy.

Teaching staff. The teaching staff for the *cours complémentaires* is recruited from among men and women primary school teachers. Until recently the only qualification required was general professional competence, but in the last few years constant efforts have been made to provide special training for these teachers. Refresher courses have been organized so as to bring together for a few days every year the staff who teach certain special subjects (languages, science) in the *cours complémentaires* in the same educational region (*académie*). Courses of much longer duration have also been organized in certain teacher training schools, or under the auspices of certain university faculties, for teachers of the *cours complémentaires* who are engaged in or training for science teaching for agricultural purposes. Lastly, there are facilities to enable language teachers to spend periods abroad, either as scholarship holders or as assistant teachers.

Vocational and technical schools

I. Industry and commerce

Technical instruction was the last branch of education to be given a place in the school system. Its extension has been due to the growth of industry and the economy, with the changing demands of which, both qualitative and quantitative, it must keep pace. This constant necessity to keep technical education in touch with the demands of employers accounts for the very complicated and detailed nature of the technical branch.

Nevertheless, technical education is planned broadly along the same lines as general education. The structure of the national vocational secondary schools (*écoles nationales professionnelles*) and technical secondary schools (*collèges techniques*) is similar to that of the general secondary schools. They can include sixth and fifth classes which follow the same syllabuses as the sixth and fifth classes, modern section, of *lycées* and *collèges*. Technical education proper starts in the fourth class.

A special feature of technical education is the system of equivalent standards, which enables any pupil coming to a technical school from a general school or from another technical school to transfer to another class or to change to another section by taking special examinations or attending special classes to help him catch up with the work.

The vocational guidance services work in close collaboration with the technical education system. The function of the vocational guidance centres is to help children on reaching the end of the compulsory schooling period to choose a trade suitable to their own bent and abilities, their family circumstances and the exigencies of the labour market. There is complete freedom to follow or not follow the advice given. Vocational guidance centres have been

set up in all *départements*. More than 300,000 children are tested and given advice in these centres each year.

Apprenticeship centres (*centres d'apprentissage*). These schools train skilled manual and non-manual workers for industry and commerce. Pupils are admitted after the last year of compulsory schooling, that is at 14 years of age. The possession of a certificate of primary education is not compulsory. The normal course of studies is 3 years.

The theoretical and practical training given is both general and vocational. Girls are taught domestic science, whatever occupation they may have chosen. The range of trades taught is very wide: metallurgical work, timber construction, printing, electricity, radio, hides and skins, textiles, commerce and the like. At the end of the final year pupils take the examination for the vocational proficiency certificate (*certificat d'aptitude professionnelle—CAP*). This examination includes written, oral and practical tests. The CAP certifies merely that the holder is competent to start work in a trade for which he has completed the elementary apprenticeship but which he can learn thoroughly only through practice.

Technical secondary schools (*collèges techniques*). These schools train highly skilled manual and non-manual workers who, with age and experience, will be capable of becoming foremen and supervisors. Admission is to the sixth and fifth class in schools which have these classes. In order to be admitted to the fourth class the pupil must take an examination which includes dictation, composition, two problems in arithmetic and a subject test, which depends on the course chosen. The normal duration of studies in these schools is four years, starting from the fourth class.

The courses fall into three main categories: industry, economic and social studies, hotel management and catering trades. Some *collèges techniques*, however, also have preparatory classes jointly with the *écoles nationales professionnelles* (see below), and prepare students for the *baccalauréat technique A*, the competitive entrance examination to the state training schools for engineers (higher education) and the technical certificate (*brevet de technicien*).

Normally, the *collèges techniques* prepare students for one or other of the following diplomas:

The *brevet d'enseignement industriel* (industrial certificate), after a 4-year course in a *collège technique industriel*, consisting of two parts, a preliminary examination taken at the end of the second class (third year) and the certificate examination proper, which is taken at the end of the first class (final year). The preliminary examination is designed primarily to test the candidate's general education.

The *brevet d'enseignement commercial* (commercial certificate) is also in two parts. For the first part there is a choice of three subjects—shorthand-typing, commerce, book-keeping; certain tests are common to all three. In the second part there is again a choice between three subjects—secretarial work, commerce, book-keeping. Whatever the candidate's choice he must go through a 3 months' course in one of the business departments of a firm and submit a report on his course.

The *brevet d'enseignement social* (social welfare certificate) again has two parts the first of which does not lead to a diploma. The second part comprises three optional subjects—social secretariat work, medical-surgical secretariat work and social welfare supplies. Whatever the candidate's choice he must go through a 3 months' course in a social welfare or hospital service and submit a report.

In some *collèges techniques* there are special sections to enable students who wish to change their special subject, or who have come from a general school, to prepare for a certificate in industry or commerce.

Technical sections in 'lycées' and 'collèges'; vocational sections in the complementary courses. These have been referred to above under the section 'General secondary schools'. Conditions of entry and educational qualifications for admission are the same as for the technical schools. In most cases, however, the vocational sections in the *cours complémentaires* lead only the first part of the certificates in industry and commerce.

Craft schools (*écoles de métiers*). These establishments, which are also placed on the same footing as the *collèges techniques* as regards conditions of entry and educational qualifications, specialize in preparing students for a certain number of well defined occupations (photography and cinema, carpentry, weaving, building, boot and shoe manufacture, roofing, plumbing, etc.). Many of them were set up by trade organizations or chambers of commerce, which continue to manage them with the participation and under the direction of the technical education authorities.

City of Paris vocational schools. These have the legal status of *collèges techniques*, but their standard is comparable to that of the *écoles nationales professionnelles* (see below). Entrants are generally selected from the second class. The entry examination is open to holders of a BEPC (lower secondary school certificate). Some of these schools are really schools of applied arts, designed to train those who will work in crafts and designing.

National vocational schools (*écoles nationales professionnelles*). These are at a level intermediate between that of the *collèges techniques* and that of the *écoles nationales d'ingénieurs des arts et métiers* (national schools of engineering, which belong to higher education) and prepare students for middle level occupations—manufacturing agents, pattern-drawers, shop foremen, works foremen and technicians.

Candidates are usually selected for entry from the fourth class. They must pass an examination which consists of a dictation, a French composition, an arithmetic test and a geometry test. This examination can also be taken in classes above the fourth class, according to the qualifications or level of the candidates. The course normally lasts for 5 years. There are two optional courses—industrial technology and commercial technology—which lead to a 'certificated student's diploma' (*diplôme d'élève breveté*). Students also have a third choice, the 'technical mathematics' section which leads to the *baccalauréat* in technical mathematics or to the competitive entrance examination

for the National School of Engineering. Apart from practical studies, the curricula of the national vocational schools naturally accord an important place to technical theory as well as to science and mathematics.

In most of the *écoles nationales d'enseignement technique* and in some of the *collèges techniques* there are sections which prepare students for the technician's certificate (*brevet de technicien*). In the professional hierarchy the technician ranks immediately below the engineer. In order to reach the educational level required of him he must undergo a 2- or 3-year course of training over and above the period of his studies at an *école nationale professionnelle* or after he has obtained the *baccalauréat technique* or the *baccalauréat de l'enseignement secondaire* (technical or general *baccalauréat*) (first and second parts). The normal course of study in the sections which prepare students for the *brevet de technicien* is 2 years, but 1 preparatory year is sometimes needed.

The national vocational schools (*écoles nationales professionnelles*) prepare students for the following examinations and certificates:

Certificated student's diploma (*diplôme d'élève breveté*). This diploma is granted to students at these schools who have reached the required standard during their last two years. Special importance is attached to workshop practice and industrial draftsmanship, and a preliminary report is required on these two subjects. The diploma automatically entitles the holder to admission to certain higher educational establishments.

Higher diploma in commerce (*brevet supérieur d'études commerciales*). There are four optional courses for this examination: secretarial work, book-keeping, mechanographical book-keeping, commercial translator. Candidates must hold a certificate of commercial training (*brevet d'enseignement commercial*), for which they are prepared in the *collèges techniques*, or the first part of the *baccalauréat* in economics, for which some of the national vocational schools offer preparatory courses.

Technical certificate (*brevet de technicien*). Preparation for this examination is given in some of the vocational secondary schools (*collèges techniques*) and in the national vocational schools (*écoles nationales professionnelles*). The certificate is evidence of a practical and thorough knowledge of the technical work connected with various special subjects prescribed by ministerial orders. The examination includes practical tests and general educational tests. In certain cases candidates must go through a course in an industrial establishment or laboratory.

Technical baccalauréat (*baccalauréat technique*). There are two optional courses—technical mathematics and technical economics.

Technical baccalauréat in mathematics (*baccalauréat technique mathématique*). Although this is not strictly speaking a technological examination, students can prepare for it in the national vocational schools and in some of the technical secondary schools (*collèges techniques*). It is merely a particular series of the general *baccalauréat* (*baccalauréat de l'enseignement secondaire*), and forms part of the scheme for equivalent standards between general and technical education. It comprises two parts. The first part covers substantially the same syllabus as the modern series. The oral examination includes, in addition, a test in technology. The second part (technical and mathematical series) covers the same syllabus as the elementary mathematics papers, with the addition of a written test on technical drawing, a handwork test and a *viva voce* on technology. The *baccalauréat technique mathématique* gives exactly the same rights as the other *baccalauréats*.

Technical baccalauréat in economics (*baccalauréat technique économique*). Preparation for this examination is confined to a few schools. The examination is a test in intermediate economics, and qualifies the student who has thus acquired a knowledge of the essential economic processes for admission to a university or a state higher professional school (*grande école*).

Vocational courses. These courses are organized 'for apprentices, manual and non-manual workers in commerce and industry and all young persons of either sex, who are under the age of 18 years and are training for an industrial or commercial occupation' (Article 37 of the Act of 25 July 1919 called the *Loi Astier*). These courses lead to a proficiency certificate. The *Loi Astier* lays down that once such a course has been established in accordance with the law, it becomes compulsory.

In general the vocational courses are organized by the *communes* and subsidized by the State. They cannot be placed on the same footing as the vocational training schools. The instruction given is not at a level equivalent to that of secondary education, but is essentially designed to supplement the general and theoretical education of young persons who have left school at 14 years of age to enter an occupation immediately.

Teaching staff

1. *General subjects.* Teachers in public technical schools, with the exception of teachers in higher technical education and in apprenticeship centres, belong to one of two categories—*professeurs agrégés et assimilés* and *professeurs certifiés*.

The *professeurs agrégés*, and teachers placed on the same footing (*assimilés*) are recruited from candidates who have passed the competitive examination for higher posts in secondary education (*agrégation*) and also, but only for subjects peculiar to technical education, from holders of a (higher grade) technical teaching proficiency certificate who are not *agrégés*. For certain special subjects candidates must have spent a certain number of years in the appropriate occupation.

The *professeurs certifiés* are recruited under conditions laid down by the Decree of 9 February 1951: that is, they must hold a technical teaching proficiency certificate (CAPET). This proficiency certificate is granted to candidates who have passed an examination which includes a theoretical part (written papers and one or more oral tests) and a practical part, which need not be taken in the same year as the theoretical part. Candidates for the second part must have had 1 year's teacher training. The CAPET includes the following subjects: mathematics, physics, chemistry, physiological chemistry, applied domestic sciences, building and engineering (engineering industries), building and engineering (building industry), drawing and applied arts, economic sciences and technology (accoun-

tancy), economic sciences and technology (business organization), French, modern languages, history and geography.

Candidates must be of French nationality and must be at least 20 years of age by 31 December and not over 34 years of age on 1 January in the year in which the examination is taken. The upper age limit, however, can be extended under the usual conditions (pensionable civil occupations and national military service). Candidates must hold a teaching certificate or a combination of certificates[1] which meet the requirements for technical education and constitutes a kind of technical licentiate (*licence technique*). Students at the higher technical teacher training school (*Ecole Normale Supérieure de l'Enseignement Technique ENSET*) or institute for preparation in secondary education, as well as holders of certain engineering diplomas, may be exempted from certain tests.

Students are prepared for the certificate of proficiency in technical teaching at an ENSET, or at an institute for preparation for secondary teaching, or by taking a correspondence course with the National Correspondence School (*Centre National d'Enseignement par Correspondance*).

2. *Assistant technical teachers.* These are recruited by competitive examination. Candidates must have spent 5 years in a trade and possess certain diplomas such as a trade certificate (*brevet professionnel*), technician's certificate (*brevet de technicien*), diploma of a certificated student of a national vocational school (*diplôme d'élève breveté d'une école nationale professionnelle*), commercial education certificate (*brevet d'enseignement commercial*).

II. Agriculture

This branch of vocational education is developing as a result of the constant modernization of agriculture. There are three types of course, known as post-school, intermediate and higher training.

Post-school agricultural education. After leaving the primary school, young persons of either sex intending to enter agriculture without continuing other studies must, as a general rule, attend compulsory post-school agricultural courses from the age of 14 to 17 years for 120 hours per year from autumn to spring. The teaching is given at communal or intercommunal centres. Girls take a post-school course in rural domestic economy. The course leads to a certificate in post-school agricultural studies.

Post-school agricultural education comes under the Ministry of National Education but is under the technical supervision of the Ministry of Agriculture.

Agricultural apprenticeship proper is organized in various types of schools. Some of these are apprenticeship centres for agriculture, horticulture or rural domestic economy, and are open primarily to boys and girls from the towns who wish to acquire a practical knowledge of agriculture. The courses last for 2 or 3 years and the pupils live in. The usual qualification for entry is a certificate of primary education. Some of these schools are public but the majority were founded by private organizations and approved and subsequently subsidized by the Ministry of Agriculture.

Other apprenticeship schools are still conducted by private enterprise: these are seasonal schools of rural economy, open for four or five months during the winter, or else family establishments for apprenticeship in agriculture or rural domestic economy open one or two weeks a month for two or three winters.

Intermediate agricultural education. This also is given in various types of school, including seasonal schools and all the year round schools. The boys' schools are under the supervision of the Ministry of Agriculture.

Permanent winter agricultural schools are intended for young persons who have finished their primary studies. The curriculum covers not only agriculture and related subjects but also the more useful general subjects (French, arithmetic, book-keeping, elementary geometry); it also includes manual work (wood and metal). Courses usually last for 4 months each winter during two or three winters.

Travelling agricultural winter schools are intended for young persons who cannot leave their work and also for adults. In practice, these courses consist of successive sessions held in the main agricultural centres of a *département* at the request of the local authorities. The teaching covers the elementary technical outline of agricultural work. Lessons are given once or twice a week on fixed days for several months and deal in particular with agriculture, animal husbandry and livestock hygiene.

Special seasonal courses offer instruction of a mainly practical kind on various technical aspects of agriculture: dairy farming, horticulture, viticulture, sylviculture, orchard work and artificial insemination.

Practical agricultural schools are for young people from 14 to 18 years of age. The course generally lasts for 2 years, and covers both additional general training and a technical agricultural training (general agriculture, animal husbandry, horticulture, viticulture, rural engineering, agricultural technology, agricultural book-keeping and rural economy) and, lastly, a practical training. Most of these schools also have workshops at their disposal for handwork (iron and wood).

Regional agricultural schools are really agricultural secondary schools, which cover a wider and more thorough syllabus than the practical agricultural schools. They are intended primarily for farmers' sons who wish to obtain a full technical training and education at a level substantially equivalent to that of the *baccalauréat* (part one). The courses last for 3 years at the end of which successful pupils receive the diploma of the regional agricultural schools (*diplôme des écoles régionales d'agriculture*). These schools can also prepare their best pupils for the entrance examinations to certain higher educational establishments.

Specialized agricultural schools are agricultural schools in which a special subject takes priority over the general agricultural instruction.

Schools for rural domestic economy provide training in agriculture and domestic economy for girls and equip them for their later role of housewife on a farm or other agricultural establishment. Candidates are not usually required to produce a diploma on admission. They may be either fixed or travelling schools. Sessions last from 4 to

1. Conditions governing diplomas and examinations are laid down by the Orders of 30 September 1959.

9 months, and the instruction given includes the elements of family agriculture (horticulture, stock breeding, dairy work), domestic studies (cooking, cutting and dressmaking) and a general practical education (spelling, practical arithmetic).

Dairy schools (mixed) train students for managerial posts in agricultural dairy undertakings of a co-operative or industrial type. At present there are five of these schools. Courses vary from 1 to 3 years according to need. *A school of sheep breeding* and a *school of poultry-farming* are at present being conducted under the same conditions.

Teacher training schools

The primary teacher training schools (*écoles normales primaires*) train men and women primary school teachers. These schools which were established by the Act of 1833, as amended by the Act of 9 August 1879, are subordinated to the *départements;* in theory each *département* must have one such school for men and one for women. The schools were abolished during World War II, but have nearly all been reopened since the Liberation; in practice, some of them are now shared between *départements* and some are mixed schools.

Pupil-teachers are recruited by competitive examinations held at two levels. The more usual is the *concours normal* which is open to candidates of French nationality who are between the ages of 15 and 17 years on the first day of January preceding the examination and hold a BEPC (lower secondary school certificate). The other examination is reserved for candidates who hold the complete *baccalauréat* diploma (*bacheliers complets*, i.e., who have passed both parts of the *baccalauréat*) and are between 17 and 19 years of age on the same date. Exemptions in respect of the upper or lower age limit may be granted by the regional directors of education (*Recteurs*).

Students who enter at the lower level take a 4-year course. They begin by preparing for the *baccalauréat*, in 2 or 3 years, according to whether they entered direct into the first class (if they have already finished the second class) or whether they enter the second class. They are then required to undergo 1 or 2 years' professional training, as the case may be. The *normaliens* (students at an *école normale*) who already hold the *baccalauréat* do 2 years of professional training. The preparatory classes for the *baccalauréat* apply substantially the same syllabuses and time-tables as those for the long modern course and for the experimental science courses at *lycées* and *collèges*.

In the classes actually concerned with professional training, the syllabus has two essential parts: instruction in the theory of education, and child psychology which is given at the teacher training school itself, and teaching practice, which includes practical exercises and practice courses in class teaching and giving actual lessons.

The course leads to a teacher training certificate (*certificat de fin d'études normales*) which exempts holders from taking the written and oral examinations for the certificate of teaching proficiency (*certificat d'aptitude pédagogique*). The pupil-teachers take the practical tests for this certificate during the first term of the school year after they leave the teacher training school, and become qualified on 1 January in the following year.

Pupil-teachers who are particularly gifted in certain disciplines may be transferred to a training school in the head town of an educational region (*académie*) where special mixed courses in philosophy or mathematics have been established. These students enjoy a priority over their fellow students with respect to grants for the continuation of their studies for the purpose of preparing for the competitive entrance examination for the higher teacher training schools (*écoles normales supérieures*) at Saint-Cloud or Fontenay or the higher teacher training schools for technical education or physical education or for training as teachers of art or music.

Those who do not succeed in obtaining a grant or do not apply for one, may be assigned to the special sections for the training of teachers in the *cours complémentaires*.

Teaching staff. Principals are chosen from a list of candidates of special ability, who have performed the duties of a primary school inspector and of a teacher at an *école normale*, *lycée* or *collège*.

Teachers for the professional training classes are recruited from primary school inspectors who hold the teaching licentiate (*licenciés d'enseignement*). Teachers of special subjects may be recruited from candidates who hold an *agrégation* or a CAPES, or from secondary teachers of art and music, under the same conditions as teachers at a *lycée* or *collège*, or from candidates who hold the diplomas required from all teaching staff.

The following table shows the distribution of the weekly working hours among the subjects covered by the professional training curriculum.

Special schools

Classes have been organized in establishments of various kinds, which by their material, medical and pedagogical equipment are able to meet the special needs of various categories of children.

The less infirm children, who are the most numerous, are advised to attend open-air classes or schools—including schools for full-time or part-time boarders where they can be assured of living under specially favourable hygienic conditions and medical supervision.

More seriously ill children receive their schooling in classes attached to various types of establishment for the prevention, treatment or cure of disease, which come under the Ministry of Public Health: homes of a hospital type, open air sanatoria, preventoria, ordinary sanatoria, hospitals, centres for paralysed children and for functional re-education. The medical officer decides how much schooling shall be given and how much time each sick child shall spend on school work.

The *lycées climatiques* are public secondary schools, which take the local children as day scholars and children of delicate health from all parts of metropolitan France and Overseas France as boarders. At present there are *lycées climatiques* at Briançon, Arcachon, Argelès-Gazost, Embrun and Gérardmer; these schools can take a total of 1,860 pupils of both sexes. The *lycée climatique* is first and foremost a school. It does not take sick children and can in no sense be regarded as a medical establishment.

The National Correspondence School (*Centre National*

TIME-TABLE FOR TEACHER TRAINING SCHOOLS
(PROFESSIONAL TRAINING CLASSES)
(in hours per week)[1]

Subject	1-year training course	2-year training course	
		1st year	2nd year
Child psychology	3	3	3
Social studies	—	1	1
General pedagogics	—	1	1
Special pedagogics	6	2	2
Practice lessons	—	1	1
History of education	1	1	1
Professional ethics—legislation affecting education—school administration	1	—	1
French (literature and language)	2	2	2
Local history and geography	1	1	1
Arithmetic—the teaching of practical arithmetic	1	1	—
Natural and physical sciences—study of the natural environment—hygiene	2 (4)	1	1
Practical science teaching	—		1 (6)
Teaching of agricultural techniques, crafts and domestic economy	4 (4)	5 (5)	5
Handwork	2 (2)	1½ (2)	1½ (2)
Drawing—writing	1½	1½	1½
Music and singing	1½	1½	1½
Options: direction to be given to personal work	—	1	1
General culture, lectures	—	1	1
Physical education	3	3	3
Social or after-school activities	3	3	3
Total	32 (34)	31½ (31)	32½ (32)

1. Where the time-table differs for male and female pupils the hours for girls are shown in parentheses.

d'Enseignement par Correspondance). In 1939–40, when many children had been separated from their families because of the war, tuition by correspondence was established for them and this new institution was placed in the *Musée Pédagogique*. Although its establishment was due to temporary conditions, correspondence courses in reality fulfilled a permanent need. Children and young persons who find themselves isolated from a school or are unable to attend one regularly are in fact as numerous in peace time as in time of war.

This is true in particular of disabled or sick children and young persons who cannot attend school either because they are receiving treatment at a curative institution or simply because the care which their state of health demands prevents them from leaving their families; children whose domicile is a long way from any French school, particularly the children of families resident abroad or in French territories overseas (the education of these children is particularly important in terms of producing overseas citizens with a French education, capable of filling responsible positions); young persons who are backward in their studies, wish to resume them, but cannot be admitted to a class of children or very young pupils; young persons who are obliged to earn their living on account of the lack of family resources—orphans, elder children of large families and so forth; lastly, a particularly numerous and important category, young persons who are already at work and wish to complete their general and technical training and prepare for examinations qualifying them to take up an occupation.

The principle of equality in education which is one of the fundamental rules of French democracy, requires that educational opportunities be provided for students in all these categories.

The National Correspondence School actually comprises four different establishments: classical secondary, modern secondary, technical secondary and primary. The first two provide instruction from the sixth class to the *baccalauréat*, for all the sections, and include further preparatory classes for the state higher professional colleges (*grandes écoles*). The third or technical correspondence school prepares students for a wide variety of examinations, including competitive examinations, ranging from proficiency certificates for shorthand-typists, assistant accountants, draftsmen and so forth, up to the competitive examination for qualification as an assistant teacher via the certificate for commercial studies (*brevet d'enseignement commercial*), the social studies certificate (*brevet d'enseignement social*) (parts 1 and 2), the secretariat certificate, and the preliminary and final examinations for accountancy certificates.

The National Correspondence School also coaches students for the qualifying examination for secondary teachers and for the proficiency certificate for teachers at vocational secondary schools (*collèges techniques* and *écoles nationales professionnelles*).

The centre now has more than 35,000 pupils. In the next few years it will be called upon to play an important part in social progress; with the help of radio and television, secondary education will be available through correspondence lessons to anyone who has been deprived of it because of ill-health, social position or inability to reach a school.

Out-of-class activities

The pupils' free time is spent on excursions to museums and the national parks.

In order to develop the personality of the pupil and make class instruction more alive, out-of-class and after-school activities have been established, particularly in the form of dramatic performances by the pupils. The organization Théâtre et Enseignement (Theatre and Education) receives funds from the national education budget. In addition, schoolchildren can obtain tickets at reduced prices, or even free, for performances of the great French and foreign classics.

The participation of secondary school students in sports events is facilitated by the school and university sports office (Office du Sport Scolaire et Universitaire—OSSU) founded in 1934. The functions of this organization are: to ensure that the rules governing sports associations and their management are in conformity with the law; to supervise admission to membership of university clubs; to encourage participation in sports contests open to students or schoolchildren; to organize regional, interregional and national sports competitions; to promote international relations in sport.

Pupils at French secondary schools take part in international correspondence between schools and exchange

visits with schoolchildren in a great many foreign countries.

Many French schools are 'associated' with schools abroad and exchange pupils with these schools.

TRENDS AND PROBLEMS

The growth of technology and science, and the changes which are taking place in the conditions of life, make it imperative that educational systems should be concerned with training the men of tomorrow. This is the aim which has guided recent educational reforms in France, where the authorities are trying to adapt the educational system to the realities of the modern world without turning away from the past and the humanist tradition.

The reform of 6 January 1959 was part of the plan to achieve this purpose. Educational guidance is taking its place securely alongside the actual teaching work. The guidance councils enable teachers to observe the children more thoroughly and find out which type of education is best suited to each child's character and abilities. They also allow more detailed and continuous parent-teacher co-operation.

An indispensable corollary to the regular and systematic educational guidance of children is the abolition of vertical partitions between different types of secondary education. It is essential in order to be able to give guidance to the children that the general and technical courses, both the long and the short courses, should be established in such a manner as to permit the passage of the child from one course to another. Consequently, the authorities in charge of primary, secondary and technical education must henceforward work in close liaison with one another in all relevant administrative matters.

The evolution of education must adapt itself to the social and scientific evolution. A modern country needs trained persons who can fill responsible posts, both of a general and of a specialized nature, and it needs technicians. All citizens must be in a position to receive the education which it is the state's duty to provide. This education must give every person the training he needs for the full exercise of his rights and duties as a citizen. The reforms already made and those that are in progress are intended to establish an intermediate level of education which will meet this double requirement.

[*Text prepared by the French National Commission for Unesco, in December 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 44,558,000.
Area: 212,822 square miles; 551,208 square kilometres.
Population density: 209 per square mile; 81 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, the total pupil enrolment of 9 million represented about one-fifth of the total population. This enrolment was distributed as follows: 15 per cent in pre-primary education, 62 per cent in primary education, 14 per cent in general secondary education, 6 per cent in vocational education, 0.3 per cent in teacher training, 2 per cent in higher education, about 0.6 per cent in special education. The proportion of girls was 49 per cent in primary schools, 52 per cent in secondary schools, 41 per cent in vocational schools, 52 per cent in teacher training schools, and 38 per cent in the public university faculties. The average number of pupils per teacher was 26 in public primary schools (including nursery schools, infant classes and *cours complémentaires*). Between 1953 and 1957, primary school enrolment increased by 21 per cent, and secondary school enrolment by 39 per cent. (See Table 2.)

Enrolment trends in secondary education, 1930–57. The most remarkable aspect of enrolment trends in public secondary education during this period was the rapid growth of enrolment in vocational schools, which multiplied 9 times between 1930 and 1957. During these 28 years, general secondary school enrolment more than tripled, while teacher training enrolment increased by only 43 per cent. Whereas boys were slightly more numerous than girls in general secondary schools at the beginning of the period, the situation was reversed at the end of the period. The average total enrolment in all types of public secondary education was nearly three times as high for the period 1955–57 as for 1930–34. The average total enrolment in public schools for the period 1955–57 represented 42 per cent of the estimated population 15–19 years old. (See Table 3.)

Examination results in secondary education, 1953–57. Table 4 shows an increase of 30 per cent in the number of those passing the *baccalauréat* examination between 1953 and 1957. In 1957/58, there were 46 per cent girls among these new bachelors. The number of vocational proficiency certificates (*CAP*) increased by 18 per cent, while that of certificates of vocational studies, lower stage (*brevets professionnels*) and the *brevets d'enseignement* increased by 49 per cent.

Educational finance, 1957. For the fiscal year beginning in January 1957, total expenditure of the Ministry of Education amounted to 453,499 million francs, averaging about 10,300 francs per inhabitant. Included in this total was an amount of 23,765 million francs for cultural activities, libraries, etc., and another 8,229 million francs for the National Centre for Scientific Research (CNRS). Capital expenditure accounted for 23 per cent of the total expenditure. (See Table 1.)

Source. France: Ministry of Education, reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1957 (in million francs)[1]

A. EXPENDITURE BY PURPOSE

	Amount		
Total expenditure[2]			**453 499**
Recurring expenditure			348 840
For administration or general control		5 341	
For salaries to teachers, etc.		273 678	
Other recurring expenditure		69 821	
Supplies, subsidies, etc.	47 442		
Cultural activities, National Centre for Scientific Research (CNRS), librairies	22 379		
Capital expenditure			104 659
Educational facilities		95 044	
Auxiliary facilities[3]			9 615

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**348 840**		**100.0**
Administration		5 341		1.5
Instruction		321 120		92.1
Pre-primary education (nursery schools)	15 100		4.3	
Primary education	152 754		43.8	
Secondary education	124 169		35.6	
General	[4]68 618		[4]19.7	
Vocational	47 740		13.7	
Teacher training	7 811		2.2	
Higher education	24 620		7.1	
Special education	270		0.1	
Other education[5]	4 207		1.2	
Other recurring expenditure		22 379		6.4
Scientific research (CNRS)	8 229		2.4	
Cultural activities, libraries	14 150		4.0	

1. Official exchange rate (1957): 100 francs = 0.24 U.S. dollar (approx.).
2. Expenditure of the Ministry of Education only. Closed account.
3. For cultural activities, libraries, etc.
4. Includes expenditure for youth and sports activities.
5. Includes pedagogical institute, school hygiene and other.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools, public	1957/58	5 107	...	...	724 600	351 700
	Infant classes, public	1957/58	...	...	...	372 600	180 400
	Nursery schools, private	1957/58	215	...	...	24 100	12 400
	Infant classes, private	1957/58	...	...	...	186 500	100 000
	Total	**1957/58**	[1]**5 322**	...	...	**1 307 800**	**644 500**
	,,	1956/57	[1]5 014	[2]20 900	[2]20 900	1 284 300	634 600
	,,	1955/56	[1]4 665	[2]19 300	[2]19 300	1 273 300	631 000
	,,	1954/55	[1]4 422	[2]17 900	[2]17 900	1 270 900	628 100
	,,	1953/54	[1]4 287	[2]16 600	[2]16 600	1 220 300	602 100
Primary	Primary schools, public	1957/58	73 000	[3]200 000	[3]131 000	4 515 900	2 159 700
	Primary classes in secondary school, public	1957/58	...	[4]...	[4]...	89 800	41 900
	Primary schools, private	1957/58	10 700	...	...	783 700	451 400
	Primary classes in secondary schools, private	1957/58	...	7 100	...	188 500	104 600
	Total	**1957/58**	[5]**83 700**	[3][6]**200 000**	[3][6]**131 000**	**5 577 900**	**2 757 600**
	,,	1956/57	[5]82 800	[3][6]193 000	[3][6]127 000	5 421 800	2 679 800
	,,	1955/56	[5]81 800	[3][6]182 000	[3][6]119 000	5 171 200	2 559 800
	,,	1954/55	[5]83 600	[3][6]173 000	[3][6]112 000	4 875 400	2 415 600
	,,	1953/54	[5]80 900	[3][6]167 000	[3][6]108 000	4 604 500	2 278 700
Secondary *General*	*Lycées* and *collèges*, public	1957/58	[7]834	24 080	12 187	570 000	287 000
	Cours complémentaires, public	1957/58	2 465	[8]...	[8]...	[9]351 000	[9]192 000
	Secondary schools, private	1957/58	1 647	19 443	...	242 000	115 000
	Cours complémentaires, private	1957/58	1 639	...	...	85 000	54 000
	Total	**1957/58**	**6 585**	[10]**43 523**	...	**1 248 000**	**648 000**
	,,	1956/57	6 465	[10]41 303	...	1 111 000	576 000
	,,	1955/56	6 710	[10]39 499	...	1 027 000	528 000
	,,	1954/55	6 293	[10]38 332	...	956 000	490 000
	,,	1953/54	[10]2 522	[10]37 271	...	898 000	458 000
Vocational	Technical schools, public	1957/58	371			120 500	43 200
	National vocational schools, public	1957/58	31	9 956	...	16 500	3 600
	Crafts schools, public	1957/58	20			5 339	139
	Apprenticeship centres, public	1957/58	901	12 020	...	158 900	60 300
	Part-time vocational training courses, public	1957/58	...	...	...	83 500	26 200
	Technical schools, private	1957/58	...	...	...	30 500	12 000
	Apprenticeship centres, private	1957/58	...	...	...	90 300	61 600
	Part-time vocational training courses, private	1957/58	...	...	...	80 000	33 000
	Total	**1957/58**	...	[11]**21 976**	...	**585 539**	**240 039**
	,,	1956/57	...	[11]20 775	...	[12]538 972	224 872
	,, [13]	1955/56	...	[11]19 879	...	547 889	230 389
	,, [13]	1954/55	...	[11]18 945	...	[14]281 000	[14]106 000
	,, [13]	1953/54	...	[11]17 778	...	[14]269 300	[14]102 200
Teacher training	Teacher training schools, public						
	Total	**1957/58**	**170**	**1 226**	**659**	**18 700**	**9 700**
	,,	1956/57	170	...	...	17 400	8 900
	,,	1955/56	170	...	...	16 300	8 400
	,,	1954/55	170	...	...	15 900	8 100
	,,	1953/54	170	1 064	578	15 600	8 300
Higher *Teacher training*	Teacher training colleges, public	1957/58	16	...	...	2 750	...
	Regional pedagogical centres, public	1957/58	...	...	...	2 010	1 050
	Institutes for secondary school teachers, public	1957/58	...	...	...	3 000	...
	Total	**1957/58**	[15]**16**	...	...	**7 760**	...
	,,	1956/57	[15]16	...	...	4 400	...
	,,	1955/56	[15]16	...	...	3 180	...
	,,	1954/55	[15]16	...	...	2 720	...
	,,	1953/54	[15]16	...	...	2 580	...

1. Nursery schools only.
2. Public nursery schools only.
3. Including teachers of nursery and kindergarten classes, and of *cours complémentaires*.
4. Teachers of primary classes attached to secondary schools are partly included with those of primary schools, and partly with those of secondary schools.
5. Primary schools only.
6. Public primary schools only.
7. Not including attached classes (*annexes*).
8. Included in primary schools.
9. Including specialized sections.
10. Not including *cours complémentaires*.
11. Public schools only, not including part-time vocational courses.
12. Incomplete data.
13. Not including vocational *écoles de perfectionnement*.
14. Public schools only.
15. Teacher training colleges only.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Higher [cont.]							
General and[16] *technical*	Faculties, public	1957/58	78	5 100	...	160 886	60 970
	Higher schools, public	1957/58	122	...	...	30 000	...
	Faculties, private	1957/58	12	...	...	10 398	...
	Higher schools, private	1957/58	53	...	...	7 835	...
	Total	**1957/58**	**265**	**...**	**...**	[17]**209 119**	[18]**60 970**
	,,	1956/57	265	...	...	[17]200 075	[18]59 143
	,,	1955/56	265	...	...	[17]181 050	[18]53 328
	,,	1954/55	265	...	...	[17]180 604	[18]52 228
	,,	1953/54	265	...	...	[18]135 298	[18]50 236
Special[19]							
	Schools for backward children (*Ecoles de perfectionnement*), public	1957/58	170	...	...	31 189	12 681
	Schools for backward children (*Ecoles de perfectionnement*), private	1957/58	42	...	...	2 861	1 298
	Total	**1957/58**	**212**	**...**	**...**	**34 050**	**13 979**
	,,	1956/57	215	...	...	30 570	12 729
	,,	1955/56	...	...	...	...	...
	,,	1954/55	...	...	...	...	...
	,,	1953/54	...	...	...	...	...

16. Excluding non-French students in public education.
17. Some students may have been double counted.
18. Public faculties only.
19. Not including public and private open-air schools; the number of pupils for the school year 1958/59 was 20,173 (F. 8,186) in public schools and 2,624 (F. 1,321) in private schools.

3. TRENDS IN SECONDARY EDUCATION: PUBLIC SCHOOLS ONLY, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational[1]		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	275 900	48	35 900	...	13 100	51			
1931	293 600	47	44 500	...	13 700	50			
1932	331 400	46	50 100	...	13 500	50	391	2 911	*13*
1933	359 500	46	52 900	...	13 100	50			
1934	386 600	47	58 600	...	11 700	50			
1935	406 800	47	61 400	...	10 000	49			
1936	421 400	47	63 300	...	9 500	49			
1937	446 200	47	64 400	...	10 500	50	515	2 459	*21*
1938	475 300	47	68 100	...	12 400	50			
1939	458 600	46	55 300	...	12 700	50			
1940	430 000	47	57 500	...	12 000	51			
1941	457 300	48	63 500	...	11 400	51			
1942	...	...	86 800	...	10 000	48	*568	2 801	**20*
1943	461 500	...	132 500	...	13 800	54			
1944	477 800	...	153 300	...	13 400	55			
1945	533 500	...	177 400	...	11 300	54			
1946	548 200	...	214 800	...	12 000	56			
1947	561 600	...	238 600	...	12 400	59	*790	3 208	**25*
1948	567 600	...	237 500	...	13 400	58			
1949	...	...	237 600	...	...	...			
1950	568 665	50	242 000	...	14 600	59			
1951	600 436	50	253 600	37	15 700	56			
1952	637 026	51	256 000	38	15 100	54	902	2 974	*30*
1953	638 000	51	269 300	38	15 600	53			
1954	685 000	51	281 000	38	15 900	51			
1955	740 000	51	293 489	37	16 300	52			
1956	809 000	52	302 972	37	17 400	51	1 148	2 731	*42*
1957	921 000	52	323 939	36	18 700	52			

1. Not including municipal part-time vocational courses.

4. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Baccalauréat	36 744	...	41 433	...	42 286	...	48 982	22 892	47 678	22 075
Certificates of vocational studies, lower stage (*brevets professionnels et brevets d'enseignement industriel, commercial, social et hotelier*.	18 557	...	23 900	...	27 124	...	27 522	...	27 669	...
Vocational proficiency certificates (*CAP*) (industrial and commercial)	89 595	...	95 594	...	96 854	...	99 127	...	105 958	...

FRANCE

Algeria and the overseas *départements*

In Algeria and the French overseas *départements*, all population groups attend the same schools in an atmosphere of complete equality. School attendance is compulsory and free of charge for all children between 6 and 14 years of age. Education is organized along the same lines as in metropolitan France, and the basic legislative provisions are applied; however, necessary adjustments have been made at the various levels of education. The language of instruction is French.

In the overseas *départements*, there are almost as many girls in school as boys, and the rate of school attendance is fairly normal. The percentage of adult illiterates remains rather high, owing to the rapid growth of population as a result of which there are still not enough schools. However, school building is being prosecuted with special energy and is gradually approaching the point at which the most urgent needs will be met.

[*Text prepared by the French National Commission for Unesco, in March 1960.*]

ALGERIA

THE EDUCATIONAL SYSTEM

For the purposes of educational administration, Algeria forms an *académie*, headed by a *Recteur*. All public schools come under the authority of the Directorate-General of Education, a service controlled by the *Recteur*, who is responsible to the Ministry of National Education. However, Article 47 of the Law of 20 September 1947, defining the constitutional status of Algeria, specifies that the *Recteur* is answerable to the Governor-General for all matters concerning the plan for the extension of schooling to all Muslims in Algeria. The Algerian central authorities are

responsible for the financing of education, but regulations, curricula and the appointment of teachers are matters for the Ministry of National Education.

The *Recteur* is assisted by two deputies, an inspector of vocational education, a woman inspector of vocational and art education, and an inspector of agricultural education. At the head of each of the *départements* is a secondary school inspector with a number of primary inspectors under him.

TYPES OF SECONDARY EDUCATION

General secondary schools

The Order of 20 August 1958 stipulated that there was to be an increase of 4,000 in the total school enrolment each year. In compliance with this order, a large *lycée* for girls has just been opened at Kouba (Algiers), as well as a *lycée* at Tlemcen and a *collège* at Orléansville. Secondary education is also provided in *cours complémentaires* (primary complementary courses), which enrol an additional 3,700 pupils and which are expected to have an enrolment of 35,000 in 1966, and in a number of private secondary schools.

About 12 years ago, a provision was reintroduced whereby candidates for the *baccalauréat* in Algeria do not need to sit for a foreign language, as literary Arabic can count as the first language and a dialect of Arabic as the second language. The aim is to afford some compensation for the handicap which most young Muslims have to face owing to the fact that French is not their mother tongue, and also to encourage young Europeans to learn Arabic. The secondary schools have approximately 120 teachers who teach literary Arabic or a dialect of Arabic to about 10,000 pupils, most of them Muslims.

Franco-Muslim lycées. A great effort has been made to adapt secondary education to local conditions in Algeria, whose traditional culture and civilization are clearly an asset which could not be neglected. However, it was necessary that any such development should fit in with the metropolitan type of secondary schooling, which represented a 'modern' factor in education.

Thus, the ministerial Decree of 10 July 1951 established, alongside the metropolitan type of *lycée*, special schools for French Muslims in place of the *medersas* of Algiers, Constantine and Tlemcen. A commission for Franco-Muslim *lycées* was set up in Algiers to advise on problems concerning curricula in these schools.

In addition to providing the traditional instruction of the *medersas*, these schools prepare pupils for the secondary *baccalauréat* examinations. The course lasts 7 years, and pupils may choose between three different sections—classical (type B of the metropolitan French system) and modern, and a traditional section without Latin, where the same scientific subjects are taught as in the classical section, and a high standard is reached in Arabic and Islamic studies.

On reaching the sixth-year class (*classe de première*) the pupils from these three sections may sit for the first part of the corresponding type of *baccalauréat* (classical B, or modern) or of the *diplôme de fin d'études des lycées d'enseignement franco-musulman* (Franco-Muslim secondary leaving certificate). In the terminal classes, they prepare either for the second part of the *baccalauréat* (philosophy or elementary mathematics or experimental science) or for the second part of the Franco-Muslim certificate or for both.

The course of Arabic and Islamic studies, given in Arabic, involves a very advanced study of Muslim law in both the traditional and classical sections; it provides the training required by those seeking careers in the Muslim magistrature and by the *mouderres* who teach Arabic in the primary schools. The law courses are less advanced in the modern section, but cover the general principles governing Muslim family life. The examination for each part of the Franco-Muslim secondary leaving certificate includes eliminatory written tests followed by oral tests. The subjects for the written tests, which are the same for the two Franco-Muslim *lycées*, are selected by the *Recteur* of the Algiers *académie*.

The Franco-Muslim *lycées* have a total of 1,000 pupils, all native-born Algerians, and most of them boarders holding scholarships. To encourage still further the interpenetration of culture, a new experiment has been tried out. The two Franco-Muslim *lycées*, one for girls and the other for boys, have been linked up with the boys' *lycée* at Ben Aknoun and the girls' *lycée* at Kouba respectively, and now form special sections of these schools.

Vocational and technical schools

A great effort is also being made for the training of technicians. The plan for the extension of schooling provides for an enrolment of 42,000 pupils by 1966.

Secondary technical education is provided in the technical (industrial and commercial) *collèges* of Algiers, Constantine and Bône, and in the technical streams of *lycées* and *collèges*. There is a technical (industrial and commercial) stream at the *collège* in Oran, a stream preparing pupils for the technical *baccalauréat* and the preliminary examination for surveyors at the Maison-Carrée *lycée*, and combined economics and commercial streams at the *lycées* and *collèges* of Algiers, Oran, Sidi-bel-Abbès, Tlemcen, Mascara and Philippeville.

The main special subjects taught in the industrial streams are: fitting and machine-tools, iron-working, locksmithing, boiler-making, welding, carpentry and joinery, cabinet making, pattern making, electricity, auto mechanics and—according to the needs and possibilities of the schools—leatherwork, decorative painting and house painting, foundry work, building and public works and refrigeration. The industrial school at Dellys, which acquired the status of a national vocational school (*école nationale professionnelle*) under the Decree of 9 December 1950, concentrates mainly on the training of technicians for precision engineering, electricity and refrigeration, public works and building. Together with the industrial streams at Algiers, Maison-Carrée, Oran and Bône, it prepares pupils for the technical *baccalauréat*. Algiers and Oran also prepare pupils for the national schools of civil engineering.

Private associations, chambers of commerce and municipalities have instituted, with the help of the technical

education authorities, training courses in such fields as commerce, banking, and dressmaking.

Teacher training schools

There are not enough teacher training schools. Several of those in existence include a section providing special training for primary teachers from France in such subjects as Arabic, Kabyle, agricultural work, etc.

Under the plan for the extension of schooling, a special corps of teachers, who need no further qualifications than a lower secondary certificate—the *brevet élémentaire* (BE) or the *brevet d'études du premier cycle* (BEPC)—was established to make up for the shortage of primary school teachers. Special training facilities were provided for candidates to help them prepare for the *baccalauréat* which enables them to become fully qualified teachers.

STATISTICS

Population (mid-year 1958 estimate): 10,265,000.
Area: 919,593 square miles; 2,381,741 square kilometres.
Population density: 11 per square mile; 4 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, school enrolment at all levels (not including adult education courses) reached a total of 573,500 pupils, being about 6 per cent of the population. Of these pupils, 8 per cent were in kindergartens, 76 per cent in primary schools, 11 per cent in general secondary education, 4 per cent in vocational education, and about 1 per cent in higher education. The proportion of girls was 37 per cent in primary schools, 45 per cent in general secondary schools, and 30 per cent in institutions of higher education. In public schools, the pupil teacher ratio was 37 in primary schools, 22 in general secondary schools and 14 in vocational schools. Between 1953 and 1957, enrolment increased by 10 per cent in kindergartens and primary schools and by 19 per cent in secondary education of all types. (See Table 2.)

Enrolment trends in secondary education, 1950–57. Between 1950 and 1957, total secondary enrolment increased by 62 per cent. The increase in vocational school enrolment was slightly more than in general secondary schools. The proportion of girls in general secondary school changed very little over this period, but showed some increase in teacher training. The average total enrolment for the period 1955–57 represented about 9 per cent of the estimated population 15–19 years old. (See Table 1.)

Examination results in secondary education, 1953–57. The number of lower stage secondary school certificates increased by 27 per cent between 1953 and 1957. Girls received about an equal number of certificates as boys. The number of pupils who passed the *baccalauréat*, first and second parts, increased by 23 per cent and 17 per cent respectively. In vocational education, the increase between 1954 and 1957 was 42 per cent for the *brevets* of industrial and commercial schools and 14 per cent for the vocational proficiency certificates (CAP). The annual number of teacher training certificates fluctuated between 200 and 300, with girls receiving slightly more than half of the total. (See Table 3.)

Educational finance, 1957. In the fiscal year beginning in April 1957, total expenditure for education (not including funds from the separate budgets of the Algerian *départements* nor from the local authorities) amounted to 30,170 million French francs, averaging about 3,000 francs per inhabitant. About 75 per cent was for recurring expenditure. (See Table 4.) The distribution of recurring expenditure by level and type of education is shown in Table 4C.

Source. Algeria: Direction de l'Education Nationale, Bureau des Statistiques, reply to Unesco questionnaire.

1. TRENDS IN SECONDARY EDUCATION, 1950–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational[1]		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1950	38 649	44	13 764	...	865	37			
1951	41 242	45	15 990	...	883	40			
1952	43 910	44	17 274	...	935	41	65	952	7
1953	50 597	44	20 729	...	1 053	44			
1954	56 458	44	20 966	...	1 133	44			
1955	59 431	42	22 374	...	1 100	45			
1956	55 066	46	20 267	...	1 021	46	82	956	9
1957	62 749	45	22 589	...	1 075	44			

1. Not including data on agricultural schools under the supervision of the Ministry of Agriculture, and on the Merchant Navy College.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools, public	1957/58	134	634	*634	30 520	13 651
	Infant classes, public	1957/58	(223)	223	*223	11 016	5 804
	Nursery schools, private	1957/58	2	...	...	275	127
	Infant classes, private	1957/58	(59)	...	...	3 306	1 983
	Total	**1957/58**	**136**	[1]**857**	[1]***857**	**45 117**	**21 565**
	„	1956/57	138	[1]801	[1]*801	37 499	17 409
	„	1955/56	142	[1]770	[1]*770	44 109	21 159
	„	1954/55	[1]133	[1]725	[1]*725	42 426	20 502
	„	1953/54	[1]131	[1]692	[1]*692	40 854	19 220
Primary[2]	Primary schools, public	1957/58	1 919	11 546	...	427 721	154 698
	Primary schools, private	1957/58	96	...	...	9 238	6 032
	Total	**1957/58**	**2 015**	[1]**11 546**	**...**	**436 959**	**160 730**
	„	1956/57	1 922	[1]10 318	...	378 205	138 255
	„	1955/56	2 185	[1]10 229	...	403 026	141 506
	„	1954/55	2 579	[1]10 579	...	417 767	138 341
	„	1953/54	2 497	[1][3]10 612	...	397 573	132 547
Secondary							
General	*Cours complémentaires*, public	1957/58	(142)	870	...	17 629	8 183
	Lycées and *collèges*, public	1957/58	48	1 635	...	37 469	15 800
	Cours complémentaires, private	1957/58	(24)	...	...	2 062	1 495
	Secondary institutions, private	1957/58	38	...	...	5 589	2 677
	Total	**1957/58**	**86**	[1]**2 505**	**...**	**62 749**	**28 155**
	„	1956/57	83	[1]2 218	...	55 066	25 232
	„	1955/56	82	[1]2 171	...	59 431	25 203
	„	1954/55	80	[1]2 035	...	56 458	24 786
	„	1953/54	78	[1][3]1 369	...	50 597	22 033
Vocational[4]	Vocational training courses, public	1957/58	141	765	...	10 625	4 048
	Technical schools and courses, public	1957/58	18	227	...	3 285	603
	Technical schools and courses, private	1957/58	158	...	...	8 679	...
	Total	**1957/58**	**317**	[1]**992**	**...**	**22 589**	[1]**4 651**
	„	1956/57	302	[1]868	...	20 267	[1]3 963
	„	1955/56	286	[1]792	...	22 374	[1]4 245
	„	1954/55	267	[1]754	...	20 966	[1]4 457
	„	1953/54	261	[1]684	...	20 729	[1]3 668
Teacher training	Teacher training schools, public						
	Total	**1957/58**	**6**	**58**	**...**	**1 075**	**478**
	„	1956/57	6	58	...	1 021	472
	„	1955/56	6	54	...	1 100	492
	„	1954/55	6	47	...	1 133	496
	„	1953/54	6	45	...	1 053	464
Higher							
General and Technical	University of Algiers	1957/58	1	244	...	4 815	1 480
	National Engineering College	1957/58	1	14	...	106	—
	Commercial College	1957/58	1	...	...	40	8
	Other[5]	1957/58	4	...	...	...	...
	Total	**1957/58**	**7**	[7]**258**	**...**	[6]**4 961**	[6]**1 488**
	„	1956/57	[6]3	[7]257	...	[6]4 853	[6]1 494
	„	1955/56	[6]3	[7]259	...	[6]5 361	[5][6]1 691
	„	1954/55	[6]3	[7]241	...	[6]5 345	[6]1 745
	„	1953/54	[6]3	[7]235	...	[6]5 345	[6]1 657
Special[8]	Institution for handicapped children						
	Total	**1957/58**	**1**	**5**	**...**	**80**	**...**
	„	1956/57	1	5	...	97	...
	„	1955/56	1	5	...	80	...
	„	1954/55	1	5	...	75	...
	„	1953/54	1	5	...	70	...

1. Public schools only.
2. Not including data on social centres of fundamental education nor primary classes attached to secondary schools.
3. Teachers in *cours complémentaires* are included with those in primary schools.
4. Not including data on agricultural schools nor on the Merchant Navy College.
5. Including two agricultural colleges, the School of Art and the School of Arabic Studies.
6. Data on the University of Algiers, the National Engineering College and the Commercial College only.
7. Teachers of the university and the Engineering College only.
8. Not including institutions pertaining to the department of public health and of justice.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
	1953/54		1954/55		1955/56		1956/57		1957/58	
Lower secondary certificate (*brevet*)	4 133	2 029	4 420	2 057	4 643	2 371	4 773	2 441	5 248	2 677
Baccalauréat										
1st part	1 871	...	1 961	...	2 184	...	2 206	...	2 295	...
2nd part	1 395	...	1 561	...	1 637	...	1 621	...	1 636	...
Commercial or industrial certificate (*brevet*)	...	...	372	...	479	...	490	...	527	...
Vocational proficiency certificate (CAP)	...	...	1 896	...	2 111	...	2 005	...	2 150	...
Teacher training certificate	228	116	243	128	293	141	269	149	245	132

4. EDUCATIONAL FINANCE, 1957/58 (in thousand French francs)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2] [3]	***30 190 028**
French State Budget	1 299 949
Budget of Algeria	*28 869 493
University income[4]	20 586

B. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**30 169 443**
Recurring expenditure		22 582 149
For central administration	400 556	
For instruction		
Salaries to teachers, etc.	19 296 039	
Other instructional expenditure	1 874 010	
Other recurring expenditure	1 011 544	
Capital expenditure		7 587 294
Educational facilities	6 868 242	
Auxiliary facilities	719 052	

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**22 582 149**		**100.0**
Central administration		400 556		1.8
Instruction		18 693 126		82.8
Primary education[5]	12 905 744		57.2	
Secondary education	4 974 154		22.0	
General	3 102 230		13.7	
Vocational	1 442 235		6.4	
Teacher training	429 689		1.9	
Higher education	439 050		1.9	
Special education	100 000		0.44	
Adult education	100 000		0.44	
Fundamental education social centres	174 178		0.8	
Other recurring expenditure		3 488 467		15.4
School hygiene	280 373		1.2	
Sports, popular education and youth groups, national library	782 171		3.5	
Miscellaneous	2 225 893		9.8	
Expenditure, not specified	200 030		0.9	

1. Official exchange rate (1957): 100 French francs = 0.24 U.S. dollar (approx.).
2. Closed account.
3. Not including funds from the separate budgets of the Algerian *départements* nor from the local authorities.
4. Includes tuition fees amounting to 13,439,000 francs.
5. Includes *cours complémentaires*.

FRENCH GUIANA

THE EDUCATIONAL SYSTEM

Prior to 1 January 1948, when it became a French *département*, Guiana came under the Colonial Ministry, and legislation on education had to be made applicable in the Colony by special decree.

For many years, education was provided by the Church, with the schools under the management of religious congregations. The public schools were secularized in 1884. With the introduction of the education laws of the Republic, public education was taken out of the hands of the religious bodies and entrusted to laymen, religious instruction becoming a purely denominational matter. The staff, who were appointed by the Governor on the recommendation of the head of the Public Education Service, were in three categories: staff on the home establishment seconded for duty in Guiana, usually for a period of two years; staff on the overseas establishment, authorized to teach only in the colonies; and personnel on contract, recruited solely for service in the Colony.

The curricula of public schools were as in metropolitan France, but adapted for local use (more particularly the lessons in history, geography and science).

In 1906, two decrees were promulgated, one on the reorganization of primary education and the other on the colonial *collège*. The Collège de Cayenne—now the Lycée Felix Eboué—consisted of a secondary education division, equivalent to the first cycle of secondary education in France, whence pupils could get scholarships to continue their studies in France; a senior primary division corresponding to the general education sections of French senior primary schools (*écoles primaires supérieures*); and an industrial education division corresponding to the trade schools in France. The Governor was empowered to add to the *collège* a division of primary education and post-school courses dealing more particularly with political economy, economic geography, applied science with special reference to local industries, and agriculture.

With effect from 1 January 1948, the laws and regulations in force in France are applicable to Guiana. The legislation applied in the *département* does not differ in any appreciable degree from that of the mother country. Provision is, however, made for certain adjustments in view of Guiana's remote situation.

For educational administration, the *département* is part of the Bordeaux *académie*. The *Recteur* of the latter is represented locally by the *Inspecteur d'Académie* and is also responsible for the running of the primary school system and for sports and youth services. Owing to the shortage of supervisory staff, he also carries out some of the duties of an inspector of schools.

Supervision and inspection. In principle, school supervision is exercised by travelling inspectors-general, the deputy-rector and a primary school inspector. The deputy-rector's powers include the supervision, at departmental level, of physical and moral conditions and of the finances in educational establishments. The inspecting authorities of the *académie* retain their powers as regards the creation of new public schools, the opening of new private schools and the public financing of education.

Private schools are subject to the same supervision as those in metropolitan France: thus, the *Inspecteur d'Académie* refrains from expressing any opinion on the educational methods employed, and merely satisfies himself that the teaching provided does not contravene the law.

The *académie* services are likewise required to satisfy themselves as to the sanitary conditions of the school buildings and the efficiency of the school health services.

Finance. The expenses of education in Guiana are covered by the French metropolitan budget, but the appropriations made available to the *Préfecture* by the Ministry for allocation to public education fall short of the amount needed. The *communes* are responsible for the upkeep of school premises, but are quite unable to fulfil this requirement satisfactorily, though there is no slackening of effort in Cayenne and Saint-Laurent, the principal centres of activity.

TYPES OF SECONDARY EDUCATION

General secondary schools. General education is provided by the co-educational Lycée Félix Eboué at Cayenne, where the enrolment has trebled since 1947, and by a private school whose enrolment has more than doubled in the same period. The regulations for the admission of pupils are the same as for the *lycées* in Martinique.

There is one private and two public *cours complémentaires*.

Vocational and technical schools. At Cayenne a *centre d'apprentissage* (vocational training school) for boys teaches several specialized subjects, such as woodwork, iron-working and electricity. The course lasts 3 years, after which the pupils sit for a local examination. The level of studies is gradually being raised so as to bring it up to the standard required for the *certificat d'aptitude professionnelle* (vocational proficiency certificate).

The only technical education for girls is provided by two domestic science centres, operated by nuns.

STATISTICS

Population (mid-year 1958 estimate): 30,000.
Area: 35,135 square miles; 91,000 square kilometres.
Population density: 0.9 per square mile; 0.3 per square kilometre.

Summary of school statistics, 1953–57. The total enrolment reported for 1957/58 was less than 6,000, showing a decline from the 1953 and 1954 levels. The proportion of girls was 48 per cent in the primary schools and 44 per cent in the public secondary school. There were no girls enrolled in the technical vocational school up to 1956/57. (See Table.)

Examination results in secondary education, 1956, 1958. Information available for 1958/59 shows 28 pupils (16 girls) as having passed the first part of the *baccalauréat*, and 12 (5 girls) the second part. At the end of the school year 1956/57, 59 pupils (28 girls) obtained a lower secondary certificate and 12 (10 girls) a teacher training certificate.

Educational finance, 1956. The budget for education in 1956 amounted to 236,425,000 French francs, an average of 8,000 francs per inhabitant. Capital expenditure was 21 per cent of the total. Official exchange rate (1956): 100 French francs = 0.29 U.S. dollar (approx.).

Source. France: Institut National de la Statistique et des Etudes Economiques, *Annuaire statistique de la Guyane*, 1952–56; Bureau Universitaire de Statistique, *Informations statistiques*.

SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery school, public	1957/58	1	...	...	759	379
	Infant classes, public	1957/58	...	...	...	326	150
	Nursery schools, private	1957/58	...	...	...	150	90
	Infant classes, private	1957/58	...	...	...	172	113
	Total	**1957/58**	**...**	**...**	**...**	**1 407**	**732**
	,,	1956/57	...	...	...	[1]810	...
	,,	1955/56	...	...	...	[1]800	...
	,,	1954/55	...	...	...	1 424	829
	,,	1953/54	...	...	...	1 271	710
Primary	Primary schools, public	1957/58	28	...	...	3 133	1 334
	Primary schools, private	1957/58	5	...	...	488	411
	Total	**1957/58**	**33**	**...**	**...**	**3 621**	**1 745**
	,,	1956/57	33	168	...	[2]4 997	...
	,,	1955/56	33	[1]114	...	[2]4 678	...
	,,	1954/55	35	150	110	4 647	2 148
	,,	1953/54	35	139	103	4 578	2 307
Secondary *General*	Secondary school, public	1957/58	1	...	...	562	249
	Secondary school, private	1957/58	1	...	...	...	...
	Total	**1957/58**	**2**	**...**	**...**	**[1]562**	**[1]249**
	,,	1956/57	2	[1]38	...	[1]516	[1]240
	,,	1955/56	2	[1]36	...	[1]487	[1]217
	,,	1954/55	2	40	16	494	267
	,,	1953/54	2	40	18	489	267
Vocational	Technical school, public						
	Total	**1957/58**	**1**	**...**	**...**	**...**	**...**
	,,	1956/57	1	18	...	144	—
	,,	1955/56	1	19	...	129	—
	,,	1954/55	1	18	...	154	—
	,,	1953/54	1	18	...	142	—

1. Public schools only.

2. Including infant classes and nursery private schools.

FRENCH WEST INDIES

Guadeloupe, Martinique

Both islands having been French since 1635, the French culture of Martinique and Guadeloupe is therefore already long established. Before the Revolution, the only teaching provided for the indigenous population was religious (prayers and catechism), given verbally by the priests.

As Martinique and Guadeloupe formed a single colony in those days, both benefited by a law signed by King Louis-Phillippe on 10 August 1839, 'for the moral betterment of the Negroes' and an Order dated 5 January 1840 requiring the clergy 'to lend their services to slave owners for the instruction of the slaves in the Christian religion, ... to arrange for the education of slave children', and prescribing that 'slaves of either sex of 4 years of age or over shall be admitted to all free schools which may be set up in towns, townships and *communes*'.

It was with the abolition of slavery in 1848 that culture began to spread, though somewhat on 'hit-and-miss' lines and quite unplanned. Schoelcher was the great champion of the compulsory secular school.

In pursuance of the Law of 19 March 1946, which gave the former French colonies in the Americas the status of *départements*, the French educational laws and regulations became applicable in their entirety to Martinique and Guadeloupe. Nevertheless, long before 1946, the basic laws on education in metropolitan France were already in force in what are now the overseas *départements* (Laws of 1881, 1882 and 1889, as amended by the Law of 1936, making education free of charge, secular and compulsory between the ages of 6 and 14). After 1 January 1948, both islands' educational services became inspectorates under an *académie*, and the staffs of public educational establishments were enrolled in the metropolitan establishment of teachers.

Thus, the Government has pursued the objective of complete assimilation to the metropolitan system, while allowing for the special aspirations and needs of the inhabitants of the new *départements* and also for the inevitable difficulties caused by their remoteness from the home country.

The constitutional basis and general aims are the same in Martinique and Guadeloupe as for metropolitan France, and are laid down in the Constitution of the French Republic of 4 October 1958, the Preamble to which states: 'The nation guarantees equal access for children and adults to schooling, professional training and culture. The organization of free secular public education at all levels is a duty of the State'.

In the overseas *départements*, staff salary charges are borne by the State. Expenditure for school buildings, the furnishing of classrooms and teaching material is, in theory, distributed between the State and the *communes*. In actual fact, the bulk of this expenditure is borne by the State, as the *communes*, which often have but scant resources, can defray only a small fraction of this expenditure. State subsidies are also provided for school buildings.

GUADELOUPE

The island of Guadeloupe, first occupied by the French in 1635, has been permanently attached to France since 1815. It has many islands and groups of islands as its dependencies, including the Saintes Group, Marie-Galante, La Désirade, Saint-Barthélemy and Petite Terre.

For educational administration the *département* of Guadeloupe is attached to the *académie* of Bordeaux.

The head of the education service in the island is a university *agrégé* stationed at Pointe-à-Pitre, who is assisted by two primary school inspectors.

TYPES OF SECONDARY EDUCATION

General secondary schools. There are two co-educational *lycées* at Guadeloupe. The first, at Pointe-à-Pitre, comprises a division for boys, the Groupe Carnot, and one for girls, the Groupe Michelet. School enrolment has been steadily increasing, particularly in the case of girls, whose numbers have doubled since 1947. The second is the Lycée Gerville-Réache at Basse-Terre. Its enrolment has almost doubled since 1947.

The admission of pupils and the recruitment of teachers follow the same rules as in the *lycées* of Martinique.

There are also three private secondary schools at Guadeloupe, one at Pointe-à-Pitre, one at Basse-Terre and the *collège* at Blanchet.

Between 1957 and 1959 the number of public primary complementary courses (*cours complémentaires*) rose from 20 to 34 and the pupil enrolment from 2,489 to 4,101. Guadeloupe also has private *cours complémentaires*.

Vocational and technical schools. There is a co-educational *collège technique* at Pointe-à-Pitre. The special subjects taught in the industrial section are fitting, carpentry and joinery, and lathe-work, and, in the commercial section, book-keeping, typing and shorthand.

A co-educational apprenticeship centre is attached to the *collège technique*, where commerce, book-keeping, drawing, iron-working and carpentry are taught.

A technical section attached to the Pointe-à-Pitre *lycée* is for girls only. It teaches cutting, sewing, embroidery, hat making, etc. A technical section is also attached to the Lycée Gerville-Réache.

STATISTICS

Population (mid-year 1958 estimate): 259,000.
Area: 687 square miles; 1,780 square kilometres.
Population density: 377 per square mile; 146 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment was 54,027, representing 22 per cent of the total population. Of these pupils, nearly 4 per cent were in pre-primary schools, 89 per cent in primary schools, 6 per cent in general secondary schools, and the rest in vocational and teacher training schools. The proportion of girls was 50 per cent in primary schools and 68 per cent in general secondary schools. The teaching staff (not including private primary schools which enrolled 8.5 per cent of all pupils) consisted of 1,144 members, of whom 69 per cent were women. In the public primary schools there were approximately 45 pupils per teacher. Between 1953 and 1957, total enrolment increased by 17 per cent. (See Table 2.)

Enrolment trends in secondary education, 1931–57. Enrolment in general secondary schools increased 7 times between 1931 and 1957. Vocational education, which hardly existed at the beginning of this period, enrolled more than 500 pupils towards the end. In recent years girls have outnumbered boys in all three types of secondary education. The secondary enrolment ratio rose steadily from about 2 in the 1931–34 period to about 17 for the period 1955–57. (See Table 3.)

Examination results in secondary education, 1956, 1958. Information available for 1958/59 shows 186 pupils (90 girls) as having passed the first part of the *baccalauréat*, and 98 (52 girls) the second part. At the end of the school year 1956/57, 443 pupils (240 girls) obtained a lower secondary certificate (*brevet*) and 43 pupils (28 girls) a teacher training certificate.

Educational finance, 1957. Total expenditure for education in 1957 amounted to 1,430 million French francs, an average of 5,700 francs per inhabitant. Capital expenditure was about 8 per cent of the total. (See Table 1.)

Source. Guadeloupe: replies to Unesco questionnaires. France: Bureau Universitaire de Statistique, *Informations statistiques.*

1. EDUCATIONAL FINANCE, 1957 (in thousand French francs)[1]

A. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure		**1 430 300**
Recurring expenditure		1 310 929
For salaries to teachers, etc.	1 106 216	
Other recurring expenditure	204 713	
Capital expenditure		119 371

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure	**1 310 929**	**100.0**
Primary education	978 488	74.6
General secondary education	84 665	6.5
Vocational education, secondary level	40 902	3.1
Other recurring expenditure, not specified	206 874	15.8

1. Official exchange rate (1957): 100 French francs = 0.24 U.S. dollar (approx.).

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Infant classes, public	1957/58	...	[1] ...	[1] ...	1 021	569
	Infant classes, private	1957/58	...	...	...	926	388
	Total	**1957/58**	**...**	[1] **...**	[1] **...**	**1 947**	**957**
	„	1956/57	...	[1] ...	[1] ...	1 892	817
	„	1955/56	...	[1] ...	[1] ...	1 715	772
	„	1954/55	...	[1] ...	[1] ...	1 761	799
	„	1953/54	...	[1] ...	[1] ...	1 880	911

1. Teachers in infant classes are included with those in primary schools.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	193	[1] [3]972	[1] [3]698	44 439	22 393
	Primary schools, private	1957/58	24	...	...	3 673	1 449
	Total	**1957/58**	**217**	[2]**972**	[2]**698**	**48 112**	**23 842**
	,,	1956/57	186	[2]880	[2]651	45 749	22 637
	,,	1955/55	169	[2]835	[2]605	43 192	21 312
	,,	1954/55	146	[2]777	[2]544	41 029	20 757
	,,	1953/54	147	[2]731	[2]536	40 791	20 872
Secondary							
General	*Lycées*, public	1957/58	2	[3]77	[3]37	2 075	1 100
	Secondary schools, private	1957/58	3	55	46	1 375	1 245
	Total	**1957/58**	**5**	[3]**132**	[3]**83**	**3 450**	**2 345**
	,,	1956/57	5	[3]122	[3]73	3 169	2 146
	,,	1955/56	5	[3]118	[3]74	3 034	2 034
	,,	1954/55	5	[3]105	[3]68	3 022	2 029
	,,	1953/54	5	[3]101	[3]61	2 943	1 921
Vocational	*Collège technique*, public	1957/58	1	20	8	265	156
	Technical departments, public	1957/58	2	11	6	100	39
	Technical school, private	1957/58	1	9	—	78	—
	Total	**1957/58**	**4**	**40**	**14**	**443**	**195**
	,,	1956/57	4	37	13	549	287
	,,	1955/56	5	28	12	541	288
	,,	1954/55	5	26	11	*480	*214
	,,	1953/54	5	27	12	567	297
Teacher training	Teacher training school, public						
	Total	**1957/58**	**1**	[3] ...	[3] ...	**75**	**40**
	,,	1956/57	1	[3] ...	[3] ...	82	44
	,,	1955/56	1	[3] ...	[3] ...	74	42
	,,	1954/55	1	[3] ...	[3] ...	81	46
	,,	1953/54	1	[3] ...	[3] ...	82	50

1. Teachers in infant classes are included with those in primary schools.
2. Public schools only, including teachers of infant classes and of teacher training school.
3. Teachers in the teacher training school are included with those of primary and secondary schools.

3. TRENDS IN SECONDARY EDUCATION, 1931–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational[1]		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1931	477	...	10	...	...	...	0.6	28	*2.1*
1932	541	...	7	...	...	...			
1933	618	...	9	...	...	...			
1934	658	...	17	...	...	...			
1935	679	...	24	...	...	...	0.8	30	*2.5*
1936	699	...	27	...	...	...			
1937	711	...	20	...	...	...			
1938	819	...	27	...	...	...			
1944	1 087	47	373	55	...	...	*2.3	26	**9*
1945	...	...	423	...	...	...			
1948	2 262	...	382	...	...	...			
1949	2 355	...	334	...	...	...			
1950	1 370	47	329	62	20	80	2.1	22	*9.5*
1951	1 693	49	362	63	42	67			
1952	1 777	49	401	65	79	70			
1953	1 886	50	395	59	82	61			
1954	1 879	52	404	64	81	57			
1955	3 034	67	541	53	74	57	3.6	22	*17*
1956	3 169	68	549	52	82	54			
1957	3 450	68	...	...	75	54			

1. From 1950 to 1954, public schools only.

MARTINIQUE

TYPES OF SECONDARY EDUCATION

General secondary schools. There are two *lycées* at Fort-de-France, one for boys and one for girls. The Lycée Schoelcher (for boys) also has primary classes. The qualifications for admission to the first-year class (*classe de sixième*) are the completion of 5 years' primary schooling and success in the entrance examination. The best pupils from the primary complementary courses (*cours complémentaires*), which offer 4 years' schooling after the 5-year primary course proper, are admitted to the fifth-year class (*classe de deuxième*) of the *lycées* on conditions laid down by ministerial instructions of 3 June 1949. Candidates passing the competitive examination for student teachers may also enrol in the upper stage of the *lycée*. The Lycée Schoelcher accepts full boarders (paying fees), day boarders or ordinary day pupils. The buildings are relatively recent and modern. Since 1948 the *lycée* has, in accordance with a ministerial decree, been classified as a state-maintained building for civil use. The girls' *lycée* accepts only day pupils. A technical stream has also been added to the school.

Teaching staff is recruited from among candidates holding the *agrégation*, or a teacher's certificate, or a *licence*, or they may be *délégués ministériels d'enseignement* (temporary staff appointed by the Minister of Education), i.e. assistant teachers and assistant teachers not holding any degree. Posts not filled by the Minister may be occupied by auxiliary staff appointed by the Deputy-Rector. Staff from metropolitan France is appointed to the *département* for a period of two years.

Private education is provided in three schools, two at Fort-de-France and one at Morne Rouge.

Apart from the *lycées* and *collèges*, there are now 26 public *cours complémentaires*, as against 19 in 1957, and 2 private schools.

Vocational and technical schools. A co-educational vocational training school (*centre d'apprentissage*) has been set up at Fort-de-France. A co-educational *collège technique* with several streams (industrial, commercial and applied arts) has also been established at Fort-de-France; admission is on a competitive basis.

Boys may study the following special subjects: fitting, lathe-work, carpentry and joinery, cabinet-making, auto mechanics, electricity, machine-tool work and boiler-making. The course of study is extended to 4 years for topographers, electricians and specialists in internal combustion engines.

Pupils are prepared for the *certificat d'aptitude professionnelle* (vocational proficiency certificate), the *brevet d'enseignement technique* (technical certificate) and the *brevet d'enseignement commercial* (commercial certificate). The best pupils are sent to France and generally enter the third year of a national vocational school (*école professionnelle nationale*). Girls in technical schools are taught dressmaking, sewing and embroidery, cooking, and welfare work.

Enrolment in technical schools has slightly increased since 1957.

STATISTICS

Population (mid-year 1958 estimate): 265,000.
Area: 425 square miles; 1,102 square kilometres.
Population density: 624 per square mile; 240 per square kilometre.

Summary of school statistics, 1953–57. For 1957/58, total school enrolment may be estimated at 71,000 pupils, or 28 per cent of the population. Of these pupils, 9 per cent were in nursery schools and 85 per cent in primary schools. The proportion of girls was 51 per cent in the primary schools and 46 per cent in public secondary schools. Between 1953 and 1957, enrolment increased by 37 per cent in primary schools and by 38 per cent in public secondary schools, including vocational and teacher training schools. (See Table 1.)

Enrolment trends in secondary education, 1936–56. Enrolment in public secondary schools increased by 73 per cent between 1936 and 1956; in vocational schools there was a doubling of enrolment between 1938 and 1956, though it had reached a higher level in the years up to 1952. The average total enrolment of public secondary school pupils (general and vocational) in 1956 and 1957 represented about 13 per cent of the estimated population 15–19 years old. (See Table 2.)

Examination results in secondary education, 1956, 1959. Information available for 1958/59 shows 233 pupils (119 girls) as having passed the first part of the *baccalauréat* and 150 pupils (85 girls) the second part. At the end of the school year 1956/57, 516 pupils (355 girls) obtained a lower secondary certificate (*brevet élémentaire* or *brevet d'études du premier cycle*), and 131 pupils (102 girls) a teacher training certificate.

Educational finance, 1956. In 1956 the general budget for national education amounted to 1,819 million French francs, averaging over 7,000 francs per inhabitant. Official exchange rate: 100 French francs (1956) = 0.29 U.S. dollar (approx.).

Sources. France: Institut National de la Statistique et des Etudes Economiques, *Annuaire de la Martinique*, 1952–56; Bureau Universitaire de Statistique, *Informations statistiques* and supplements.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools, public	1957/58	9	...	...	6 355	3 312
	Nursery schools, private	1957/58	—	...	...	103	49
	Total	**1957/58**	**9**	**...**	**...**	**6 458**	**3 361**
	„ [1]	1956/57	...	...	...	5 399	2 853
	„ [1]	1955/56	...	...	...	5 624	2 848
	„ [1]	1954/55	...	...	...	4 833	2 433
	„ [1]	1953/54	...	...	...	4 528	2 385
Primary	Primary schools, public	1957/58	175	...	...	59 071	30 262
	Primary schools, private	1957/58	8	...	...	941	409
	Total	**1957/58**	**183**	**...**	**...**	**60 012**	**30 671**
	„	1956/57	[2]181	[2]1 541	...	53 172	26 836
	„	1955/56	[2]181	[2]1 414	...	49 139	24 689
	„	1954/55	[2]169	[2]1 323	...	46 358	23 394
	„	1953/54	[2]165	[2]1 263	...	43 859	22 118
Secondary							
General	Secondary schools, public	1957/58	...	...	...	[3]4 030	[3]1 871
	Secondary schools, private	1957/58	...	...	...	...	...
	Total	**1957/58**	**...**	**...**	**...**	**[1 3]4 030**	**[1 3]1 871**
	„	1956/57	5	[1]97	...	2 988	...
	„	1955/56	5	[1]99	...	[1]2 504	[1]1 260
	„	1954/55	5	[1]93	...	[1]2 374	[1]1 237
	„	1953/54	5	[1]86	...	2 641	1 393
Vocational	Technical schools, public	1956/57	2	58	...	654	270
	Vocational schools, private	1956/57	5	13	...	339	...
	Total	**1956/57**	**7**	**71**	**...**	**993**	**...**
	„	1955/56	7	[1]57	...	[1]583	[1]228
	„	1954/55	7	[1]53	...	[1]618	[1]263
	„	1953/54	7	[1]51	...	[1]608	[1]280
Teacher training	Teacher training school, public						
	Total	**1956/57**	**1**	**...**	**...**	**70**	**45**
	„	1955/56	1	...	...	54	39
	„	1954/55	1	...	...	40	32
	„	1953/54	1	...	...	27	22
Higher							
General	School of Law						
	Total	**1956/57**	**1**	**...**	**...**	**242**	**...**
	„	1955/56	1	...	...	282	...
	„	1954/55	1	...	...	279	...
	„	1953/54	1	...	...	301	...

1. Public schools only.
2. Including data concerning public nursery schools.
3. Including secondary vocational and teacher training.

2. TRENDS IN SECONDARY EDUCATION, 1936–56: PUBLIC SCHOOLS ONLY

School year	Number of students enrolled by type of education				Average enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational				
	Total	Per cent female	Total	Per cent female			
1936	1 471	52	...	...	2.3	27	*8.6*
1937	...	...	...	...			
1938	2 039	56	292	—			
1944	1 522	49	...	...	...	27	...
1946	1 735	52	743	37	2.5	28	*9*
1950	1 714	47	721	45			
1951	1 703	48	740	40			
1952	1 817	47	755	36	2.7	24	*11*
1953	2 287	51	608	40			
1954	2 374	52	618	43			
1955	2 504	50	*613	*37	3.2	24	*13*
1956	2 542	53	*684	*39			

RÉUNION

THE EDUCATIONAL SYSTEM

Decree No. 47–1286 of 27 June 1947 made the laws and regulations of metropolitan France on education at all levels applicable in full to the *département* of Réunion. This decree was the corollary, in the educational sphere, of the Law of 19 March 1946 making Réunion a French *département*. The Laws of 1881, 1882 and 1889, amended by the Law of 1936, making primary education free of charge, secular and compulsory, were, however, already in force in Réunion.

The constitutional bases and aims of education are the same as for metropolitan France. The Article in the Preamble of the French Constitution of 4 October 1958 which guarantees the right of all French citizens to education, vocational training and culture by the provision of secular, free and compulsory education, applies to Réunion on the same footing as to the *départements* in the mother country. Some children, however, especially those living in the mountains inland, or scattered among the isles, fail to attend school; the distances to be covered, often over dangerous paths, preclude attendance.

For purposes of educational administration the *département* of Réunion comes under the *Recteur* of the *académie* of Aix-en-Provence, who is represented by his deputy; who is also the *Inspecteur d'Académie* and is in charge of all departmental services under the Ministry of National Education. He is assisted by three primary school inspectors. Over and above their educational functions, the latter have wide administrative responsibilities—the establishment and building of new public schools, opening of new private schools and supervision of school attendance. They also advise on the appointment and promotion of men and women teachers in the public education service.

There is a good health service.

The staff costs of public education are met by the State. The costs of building, maintaining and fitting out school premises are in theory at any rate, shared between the State and the *communes*. The funds made available to the *département* by the mother country, being greatly in excess of those which were at the former Colony's disposal, have allowed of a substantial increase in the number of classes and staff within the space of a few years.

The private schools receive subsidies from the State in the form of capitation grants proportionate to the numbers of their pupils.

TYPES OF SECONDARY EDUCATION

General secondary schools. There are two *lycées* at St. Denis, one for boys (the Lycée Leconte de Lisle) and the other for girls (Lycée Juliette Dodu). Between 1947 and 1959 the enrolment in the boys' *lycée* rose from 648 to 937, and in the girls' *lycée* from 283 to 613.

St. Denis also has two private secondary schools (a seminary and a girls' boarding school). There are also 36 public and 6 private *cours complémentaires*.

Vocational and technical schools. There are two *centres d'apprentissage* (vocational training schools), one at St. Louis and the other at St. Denis. Both have up-to-date equipment. The boys may choose between the following special subjects: fitting, lathe-work, milling, electricity, carpentry and joinery, and masonry; the girls may choose between dressmaking and domestic economy.

Teacher training schools. A teacher training section for student teachers is attached to the *lycée*.

STATISTICS

Population (mid-year 1958 estimate): 318,000.
Area: 969 square miles; 2,510 square kilometres.
Population density: 328 per square mile; 127 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment of about 63,000 pupils represented approximately 21 per cent of the population. Primary schools accounted for 91 per cent of these pupils, nursery schools and infant classes 6 per cent, and about 3 per cent were enrolled in secondary schools. There were more girls than boys at every level of education except in vocational schools and in the Institute of Legal Studies. Women made up 75 per cent of the teaching staff in primary schools, where there were an average of 38 pupils per teacher. In secondary schools the pupil teacher ratio was 16. Between 1953 and 1957 enrolment increased by 27 per cent in the primary schools. (See Table 1.)

Enrolment trends in secondary education, 1930–57. Between 1930 and 1957, total enrolment in public secondary schools multiplied more than four times. The proportion of girls steadily increased during this period until it reached 51 per cent of enrolment. Yet, taking into account all types of secondary education, both public and private, the average total enrolment for the period 1955–57 was only 6 per cent of the estimated population 15–19 years old. (See Table 2.)

Examination results in secondary education, 1953–57. At the end of the school year 1957/58, 98 pupils (52 girls) passed the second part of the *baccalauréat*, as compared

with 64 (37 girls) in 1953. In 1956/57 lower secondary certificates (*brevet élémentaire* or *brevet d'études du premier cycle*) were awarded to 581 pupils (365 girls), and teacher training certificates to 145 pupils (108 girls).

Educational finance, 1957. In 1957, total expenditure on education amounted to 2,826 million French francs (about 8,900 francs per inhabitant). Teachers' salaries accounted for 92 per cent of the total and capital expenditure for about 4 per cent. (See Table 3.)

Source. Réunion: Vice-Rectorat, replies to Unesco questionnaires.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools, public	1957/58	4	25	25	1 303	645
	Primary schools with infant classes, public	1957/58	19	25	25	1 422	788
	Primary schools with infant classes, private	1957/58	18	18	18	1 173	805
	Total	**1958/58**	**41**	**68**	**68**	**3 898**	**2 238**
	„	1956/57	[1]16	[1]37	[1]37	3 087	1 809
	„	1955/56	[1]10	[1]27	[1]27	2 357	1 322
	„	1954/55	17	27	27	1 863	969
	„	1953/54	18	28	28	1 635	918
Primary	Primary schools, public	1957/58	226	1 326	992	49 435	23 833
	Primary schools, private	1957/58	41	169	134	7 500	5 665
	Total	**1957/58**	**267**	**1 495**	**1 126**	**56 935**	**29 498**
	„	1956/57	262	1 383	1 041	52 648	27 429
	„	1955/56	257	1 359	1 025	49 740	25 892
	„	1954/55	250	1 154	857	46 479	24 350
	„	1953/54	243	1 102	829	44 829	23 447
Secondary *General*	Secondary schools, public	1957/58	2	[2]82	[2]30	1 297	657
	Secondary schools, private	1957/58	2	16	12	246	161
	Total	**1957/58**	**4**	**[2]98**	**[2]42**	**1 543**	**818**
	„	1956/57	4	[2]92	[2]40	1 351	761
	„	1955/56	4	[2]87	37	1 217	671
	„	1954/55	4	[2]86	35	1 079	578
	„	1953/54	4	[2]87	37	1 045	570
Vocational	Apprenticeship centres, public						
	Total	**1957/58**	**2**	**37**	**14**	**370**	**135**
	„	1956/57	2	34	11	360	129
	„	1955/56	2	31	10	379	131
	„	1954/55	2	29	9	320	119
	„	1953/54	...	...	...	...	...
Teacher training	Teacher training school, public						
	Total	**1957/58**	**1**	**1**	**—**	**40**	**27**
	„	1956/57	1	1	—	40	22
	„	1955/56	1	1	—	43	29
	„	1954/55	1	1	—	33	22
	„	1953/54	1	1	—	30	15
Higher *General*	Institute of Legal Studies						
	Total	**1957/58**	**1**	**19**	**—**	**19**	**6**
	„	1956/57	1	19	—	33	13
	„	1955/56	1	19	—	39	12
	„	1954/55	1	19	—	43	12
	„	1953/54	1	19	—	39	8

1. Public schools only.

2. Not including part-time teachers as follows: 1957/58—3 (F. 1); 1956/57—3 (F. 1); 1955/56—1 (F. –); 1954/55—1 (F. –);1953/54—1 (F. –).

2. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled [1]		Average enrolment [1] (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio [1]
	Total	Per cent female			
1930	310	...			
1931	325	...			
1932	350	...	0.3	25	*1.3*
1933	350	...			
1934	340	...			
1935	330	...			
1936	325	...			
1937	340	...	0.4	25	*1.5*
1938	432	22			
1939	470	23			
1940	510	28			
1941	615	28			
1942	654	32	0.7	26	*2.5*
1943	727	33			
1944	767	32			
1945	723	31			
1946	759	33			
1947	796	38	0.7	26	*2.9*
1948	748	40			
1949	718	42			
1950	688	42			
1951	701	43			
1952	829	43	0.8	27	*3*
1953	920	48			
1954	956	48			
1955	1 073	49			
1956	1 195	51	[2]1.2	29	[2]*4*
1957	1 297	51			

1. General secondary education, public schools only.
2. Based on enrolment in general, technical and teacher training education, public and private, the average for 1955–57 would be 1.781 and the ratio 6.

3. EDUCATIONAL FINANCE, 1957 (in thousand French francs)[1]

A. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure		**2 825 853**
Recurring expenditure		2 700 853
For central administration	20 251	
For salaries to teachers, etc.	2 600 045	
Other recurring expenditure	80 557	
Capital expenditure		125 000

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount			Per cent
Total recurring expenditure			**2 700 853**	**100.0**
Central administration			20 251	0.7
Instruction			2 600 045	96.3
Primary education		2 081 635		77.1
Secondary education		518 410		19.2
General	392 375			14.5
Vocational	126 035			4.7
Other recurring expenditure (Scholarships, medical expenses and miscellaneous)			80 557	3.0

1. Official exchange rate (1957): 100 French francs = 0.24 U.S. dollar (approx.).

FRANCE

French Overseas Territories

French Overseas Territories which, in the referendum of 28 September 1958, accepted the Constitution of the Fifth Republic, were given the opportunity to decide on their future status: they could retain their status as territories, become overseas *départements*, or become Member States of the *Communauté*. The five territories treated in this chapter: Comoro Islands, French Somaliland, French Polynesia, New Caledonia and St.Pierre and Miquelon chose the first of these solutions.

Each is administered by a governor, assisted by a government or executive council and an elected territorial assembly. Each territory is also represented in the National Assembly and the Senate in Paris.

The pattern of education is essentially the same as in metropolitan France, with some adaptation of programmes to local conditions.

COMORO ISLANDS

STATISTICS

Population (mid-year 1958 estimate): 182,000.
Area: 838 square miles; 2,171 square kilometres.
Population density: 217 per square mile; 84 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58 there were 2,907 pupils enrolled, including 300 girls. The teaching staff consisted of 60 teachers, of whom 5 were women. The pupil-teacher ratio in primary schools was 55, as compared with 63 in 1953/54. Total enrolment increased by 10 per cent between 1953 and 1957. The enrolment of girls nearly tripled during these years, but the proportion of girls was still only about one-tenth of the total enrolment in 1957. (See Table 2.)

Enrolment trends in secondary education, 1949–57. There were 30 pupils enrolled in a secondary school in 1949. This number had increased to 100 by 1951, then remained more or less stationary up to 1957. Even including the pupils receiving vocational and teacher training, the total enrolment in secondary education in 1957 was less than 1 per cent of the estimated population 15–19 years old.

Educational finance, 1959. For the fiscal year beginning in January 1959, the amount budgeted for education was 42,569,000 C.F.A. francs, of which 66 per cent was for salaries to teachers, etc. Average expenditure for education was about 2.30 francs per inhabitant. (See Table 1.)

Source. Comoro Islands: reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1959 (in thousand C.F.A. francs)[1]

Recurring expenditure by level and type of education	Amount		Per cent	
Total recurring expenditure		**[2]42 569**		**100.0**
Central administration		50		0.1
Instruction		37 259		87.5
Primary education	22 242		52.2	
Secondary education	15 017		35.3	
General[3]	11 115		26.1	
Vocational	3 902		9.2	
Other recurring expenditure		5 260		12.4
Scholarships	4 500		10.6	
Subsidies to private education	760		1.8	

1. Official exchange rate: 100 C.F.A. francs = 0.405 U.S. dollar.
2. Of this sum, 28,119,000 C.F.A. francs were spent on salaries to teachers, etc.
3. Includes teacher training.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	33	46	1	2 633	241
	Primary schools, private	1957/58	2	4	4	109	57
	Total	**1957/58**	**35**	**50**	**5**	**2 742**	**298**
	„	1956/57	32	45	2	2 343	248
	„	1955/56	32	39	2	2 782	206
	„	1954/55	34	41	3	2 647	170
	„	1953/54	34	39	3	2 438	106
Secondary							
General	Complementary course, public						
	Total	**1957/58**	**1**	[1]4	—	**117**	**2**
	„	1956/57	1	[1]4	—	86	—
	„	1955/56	1	[1]4	—	96	—
	„	1954/55	1	4	—	111	2
	„	1953/54	1	4	—	104	—
Vocational	Apprenticeship centre, public						
	Total	**1957/58**	**1**	**4**	—	**37**	—
	„	1956/57	3	3	—	74	—
	„	1955/56	3	3	—	97	—
	„	1954/55	3	3	—	92	—
	„	1953/54	3	3	—	95	—
Teacher training	Teacher training section of complementary course, public						
	Total	**1957/58**	**1**	**1**	—	**11**	—

1. In addition there was one part-time teacher.

FRENCH POLYNESIA

STATISTICS

Population (mid-year 1958 estimate): 79,000.
Area: 1,544 square miles; 3,998 square kilometres.
Population density: 51 per square mile; 20 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total school enrolment reached 16,456 pupils, or 22 per cent of the population. Of these pupils 93 per cent were enrolled in primary schools; in the public primary schools as a whole, the average number of pupils per teacher was 36. Between 1953 and 1957, primary school enrolment increased by 12 per cent and secondary enrolment including vocational schools by 72 per cent. (See Table 1.)

Enrolment trends in secondary education, 1950–57. Total enrolment in secondary education tripled between 1950 and 1957. For the period 1955–57 the average enrolment represented about 15 per cent of the estimated population 15–19 years old. (See Table 2.)

Examination results in secondary education, 1953–56. The number of certificates granted each year from 1953 to 1956 was as follows: lower secondary certificate (*brevet*)—1953/54, 51; 1954/55, 78; 1955/56, 59; 1956/57, 88: vocational proficiency certificate (CAP)—1953/54, 18; 1954/55, 23; 1956/57, 22.

Educational finance, 1958. The educational budget for 1958 amounted to 408 million French francs. In addition, 82.3 million francs were allotted to education from the Investment Fund for Economic and Social Development (FIDES) for the 1958/59 period. Thus the average expenditure per inhabitant was about 6,200 francs. Subsidies to private education amounted to 81 million francs. (See Table 3.)

Source. France: Ministère de la France d'Outre-Mer, *Enseignement Outre-Mer.*

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	108	[1]311	...	10 805	5 267
	Primary schools, private	1957/58	15	...	...	4 444	2 307
	Total	**1957/58**	**123**	**[1]311**	**...**	**15 249**	**7 574**
	,,	1956/57	118	[1]291	...	14 580	7 301
	,,	1955/56	121	[1]285	...	14 746	7 251
	,,	1954/55	118	[1]272	...	14 193	7 010
	,,	1953/54	114	[1]295	...	13 608	6 887
Secondary							
General[2]	Secondary schools, public	1957/58	2	...	...	346	194
	Secondary schools, private	1957/58	4	...	...	704	333
	Total	**1957/58**	**6**	**...**	**...**	**1 050**	**527**
	,,	1956/57	6	...	...	994	410
	,,	1955/56	6	...	...	858	386
	,,	1954/55	5	...	...	643	305
	,,	1953/54	5	...	...	608	342
Vocational	Apprenticeship centre, public	1957/58	1	...	...	92	—
	Vocational school, private	1957/58	1	...	...	65	65
	Total	**1957/58**	**2**	**...**	**...**	**157**	**65**
	,,	1956/57	2	...	...	134	49
	,,	1955/56	2	...	...	139	63
	,,	1954/55	2	...	...	96	20
	,,	1953/54	2	...	...	94	28

1. All public teaching staff.
2. Including teacher training.

2. TRENDS IN SECONDARY EDUCATION, 1938 and 1950–57

School year	Number of students enrolled by type of education				Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational				
	Total	Per cent female	Total	Per cent female			
1938	128	43	...	...	...	...	...
1950	285	55	96	34			
1951	546	44	75	35			
1952	...	...	...	...	• 0.6	6.7	*9*
1953	608	56	94	30			
1954	643	47	96	21			
1955	858	45	139	45			
1956	994	41	134	37	1.1	7.6	*15*
1957	1 050	50	157	41			

1. Including teacher training.

3. EDUCATIONAL FINANCE, 1958 (in thousand French francs)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**490 710**
Territorial Government	408 430
Investment Fund for Economic and Social Development (FIDES)[3]	82 280

B. GOVERNMENT EXPENDITURE BY LEVEL AND TYPE OF EDUCATION[2]

	Amount	Per cent
Total expenditure by Government[2]	**[4]408 430**	**100.0**
Primary education	257 530	63.1
Secondary education	58 150	14.2
Vocational education	11 230	2.7
Subsidies to private education	53 400	13.1
Miscellaneous, not specified	28 120	6.9

1. Official exchange rate (1958): 100 French francs = 0.24 U.S. dollar (approx.).
2. Budget estimate.
3. FIDES allocation for 1958/59, which includes 27,500,000 francs for private education.
4. Includes expenditure for equipment amounting to 4,290,000 francs.

FRENCH SOMALILAND

STATISTICS

Population (mid-year 1958 estimate): 69,000.
Area: 8,500 square miles; 22,000 square kilometres.
Population density: 8 per square mile; 3 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, there were 2,518 pupils enrolled in primary schools, complementary courses, and vocational courses; this represents less than 5 per cent of the total population. Girls made up about one-fourth of total enrolment. The pupil teacher ratio in primary schools was 32. The average number of pupils per teacher tended to be higher in private schools than in public schools. Between 1953 and 1957 there was almost 30 per cent increase in primary school enrolment. (See Table 2.)

Enrolment trends in secondary education, 1950–57. In 1950, there were 20 pupils (including 2 girls) receiving general secondary education. This number had increased to 161 (including 47 girls) in 1957. In vocational education, the growth was less marked, since there were 143 pupils (including 70 girls) in 1957 as compared with 107 pupils (including 37 girls) in 1950. The average total enrolment in secondary education for the whole period under review amounted to about 4 per cent of the estimated population 15–19 years old.

Examination results in secondary education, 1953–56. The number of pupils receiving certificates for completing the lower cycle of secondary education, lower stage (*brevet élémentaire* and *brevet d'études du premier cycle*) was as follows: in 1953, 10; 1954, 9; 1955, 8; 1956, 12. There were, in addition, 11 certificates of vocational aptitude awarded in 1956/57.

Educational finance, 1959. The budget for education in the fiscal year beginning in January 1959 amounted to about 80 million Djibouti francs, or 1,156 francs per inhabitant. (See Table 1.)

Source. French Somaliland: Department of Education, replies to Unesco questionnaires.

1. EDUCATIONAL FINANCE, 1959 (in thousand Djibouti francs)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure	**79 765**	**100.0**
Central administration	4 915	6.2
Instruction	51 835	65.0
Primary and general secondary education	47 174	59.1
Vocational education (secondary level)	4 661	6.9
Other recurring expenditure	23 015	28.8
Supplies	6 115	7.7
Subsidies	12 900	15.0
Scholarships	4 900	6.1

1. Official exchange rate: 100 Djibouti francs = 0.47 U.S. dollar (approx.).

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary[1]	Primary schools, public[1]	1957/58	12	48	...	1 204	100
	Primary schools, private	1957/58	4	21	...	1 010	409
	Total	**1957/58**	**16**	**69**	**...**	**2 214**	**509**
	„	1956/57	15	60	...	1 890	415
	„	1955/56	16	52	...	2 000	492
	„	1954/55	16	34	...	1 779	376
	„	1953/54	...	...	...	1 722	300

1. Including kindergarten classes in private schools.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Secondary							
General	Complementary course, public	1957/58	1	4	...	89	14
	Complementary courses, private	1957/58	2	5	...	72	33
	Total	**1957/58**	**3**	**9**	**...**	**161**	**47**
	„	1956/57	3	9	...	153	42
	„	1955/56	3	9	...	138	30
	„	1954/55	3	9	...	131	24
	„	1953/54	3	...	...	115	21
Vocational	Vocational courses, public	1957/58	1	7	...	59	20
	Vocational courses, private	1957/58	3	6	...	84	50
	Total	**1957/58**	**4**	**13**	**...**	**143**	**70**
	„	1956/57	4	13	...	121	45
	„	1955/56	4	13	...	179	38
	„	1954/55	3	7	...	110	4
	„	1953/54	...	...	...	...	...

NEW CALEDONIA

STATISTICS

Population (mid-year 1958 estimate): 69,000.
Area: 7,202 square miles; 18,653 square kilometres.
Population density: 10 per square mile; 4 per square kilometre.

Summary of school statistics, 1953–56. In 1956/57, total school enrolment was made up of 14,850 pupils, nearly one-fourth of the total population. Of these pupils, 88 per cent were enrolled in primary schools, 7 per cent in general secondary education and teacher training, 5 per cent in vocational schools. The proportion of girls was 47 per cent in primary schools, 44 per cent in secondary schools, and 36 per cent in vocational schools. In the public schools, there were on the average 25 pupils per teacher in primary schools, 17 in secondary schools, and 32 in vocational schools. Between 1953 and 1956, primary school enrolment increased by 7 per cent, but secondary (including vocational) enrolment almost doubled. (See Table 2.)

Enrolment trends in secondary education, 1945–56. The number of pupils in general and teacher training secondary schools increased steadily from about 200 in 1945 to over 1,000 in 1956. In vocational schools, the increase was from 68 to 711 over the same period. The average total enrolment was about 400 for the period 1945–49, about 900 for the period 1950–54 and 1,800 for the period 1955–56. Thus, in relation to the estimated population 15–19 years old, the secondary enrolment ratio rose from about 9 for the 1945–49 period to 18 for the next 5-year period, and to 36 for the most recent years.

Examination results in secondary education, 1953–55. The number of certificates granted each year for the years 1953/54, 1954/55, 1955/56, was as follows: lower secondary

1. EDUCATIONAL FINANCE, 1957 (in thousand French francs)[1]

Territorial Government expenditure by level and type of education[2]	Amount	Per cent
Total expenditure by Government[2]	**658 300**	**100.0**
Primary education	324 690	49.3
Secondary education	115 030	17.5
Vocational education	42 100	6.4
Physical training and sports	39 380	6.0
Subsidies to private education	9 100	1.4
Miscellaneous, not specified	128 000	19.4

1. Official exchange rate (1957): 100 French francs = 0.24 U.S. dollar (approx.).
2. Budget estimate.

certificate (BE or BEPC) 38, 46, 83; *baccalauréat*, 1st part, 12, 24, 27; *baccalauréat*, 2nd part, 19, 20, 27; industrial or commercial certificate (*brevet*) 7, 19, 17; vocational proficiency certificate (CAP) 36, 38, 34.

Educational finance, 1957. The territorial government budget for education in 1957 amounted to 658 million French francs, representing an average expenditure of slightly under 10,000 francs per inhabitant. Distribution of this expenditure by level and type of education is shown in Table 1.

Source. France: Ministère de la France d'Outre-Mer, *Enseignement Outre-Mer.*

2. SUMMARY OF SCHOOL STATISTICS, 1953–56

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1956/57	120	298	...	7 563	3 393
	Primary schools, private	1956/57	93	...	...	5 497	2 798
	Total	**1956/57**	**213**	**[1]298**	**...**	**13 060**	**6 191**
	„	1955/56	185	[1]287	...	12 859	6 320
	„	1954/55	...	...	...	...	...
	„	1953/54	201	[1]225	...	12 163	5 673
Secondary							
General and teacher training	Secondary schools, public	1956/57	3	28	...	480	246
	Secondary schools, private	1956/57	7	...	...	599	230
	Total	**1956/57**	**10**	**[1]28**	**...**	**1 079**	**476**
	„	1955/56	13	[1]21	...	1 132	422
	„	1954/55	...	...	...	...	...
	„	1953/54	4	[1]18	...	591	261
Vocational	*Collège technique*, public	1956/57	1	14	...	442	121
	Vocational schools, public	1956/57	2				
	Vocational schools, private	1956/57	5	...	...	269	134
	Total	**1956/57**	**8**	**[1]14**	**...**	**711**	**255**
	„	1955/56	22	[1]15	...	694	285
	„	1954/55	...	...	...	...	...
	„	1953/54	7	[1]8	...	368	110

1. Public schools only.

ST. PIERRE AND MIQUELON

STATISTICS

Population (mid-year 1958 estimate): 5,000.
Area: 93 square miles; 240 square kilometres.
Population density: 54 per square mile; 21 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, a total of 1,325 pupils, about one-fourth of the total population, were enrolled in school. There were more girls than boys enrolled, the proportion of girls being 51 per cent in the primary schools and 57 per cent in the secondary schools and vocational courses combined. There was an increase of 6 per cent in total enrolment between 1953 and 1957. (See Table 2.)

Educational finance, 1958. For the year 1958, the educational budget of the Territorial Government amounted to about 75 million French francs, or approximately 15,000 francs per inhabitant. (See Table 1.)

Source. France: Ministère de la France d'Outre-Mer, *Enseignement Outre-Mer.*

1. EDUCATIONAL FINANCE, 1958 (in thousand French francs)[1]

Expenditure by purpose	Amount	Per cent
Total expenditure[2]	[3]**74 730**	**100.0**
Primary education	42 320	56.6
Secondary education	1 200	1.6
Vocational education	16 760	22.4
Physical training and sport	630	0.8
Subsidies to private education	12 000	16.1
Miscellaneous, not specified	1 800	2.4

1. Official exchange rate (1958): 100 French francs = 0.24 U.S. dollar (approx.).
2. Budget estimate of the Territorial Government.
3. Owing to rounding of figures the total does not correspond exactly to the sum of the components.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary[1]	Primary schools, public	1957/58	5	[2]35	...	403	179
	Primary schools, private	1957/58	6	...	...	675	375
	Total	**1957/58**	**11**	[2]**35**	**...**	**1 078**	**554**
	,,	1956/57	11	[2]31	...	1 232	700
	,,	1955/56	11	[2]38	...	1 121	600
	,,	1954/55	11	...	...	1 083	555
	,,	1953/54	11	...	...	1 092	580
Secondary *General*	Secondary schools, public	1957/58	1	[3]...	...	58	17
	Secondary schools, private	1957/58	2	...	...	95	55
	Total	**1957/58**	**3**	**...**	**...**	**153**	**72**
	,,	1956/57	3	...	...	163	79
	,,	1955/56	3	...	...	137	62
	,,	1954/55	3	11	5	131	59
	,,	1953/54	3	11	5	121	51
Vocational	Apprenticeship centres, public	1957/58	3	[3]...	...	55	30
	Domestic science course, private	1957/58	1	...	...	39	39
	Total	**1957/58**	**4**	**...**	**...**	**94**	**69**
	,,	1956/57	4	...	...	75	44
	,,	1955/56	3	...	...	73	33
	,,	1954/55	3	...	...	64	25
	,,	1953/54	3	...	...	36	23

1. Including private kindergartens.
2. All public teaching staff.
3. Included in primary schools.

FRANCE

Members of the *Communauté*

Under the Constitution of the Fifth Republic all French territories were given the opportunity to decide on their future status. Three possibilities were offered to them: that they should retain their status as territories, that they should become overseas *départements*, or that they should become, singly or in groups, self-governing members of an association of states to be known as the *Communauté*. Those which opted for the third solution were granted full internal autonomy; foreign affairs, defence, currency, common economic and financial policy and higher education were among the matters that were placed under the jurisdiction of the *Communauté* as a whole. At the time the manuscript of this third *World Survey of Education* was being prepared (see Preface), the following twelve countries had chosen this status: Central African Republic, Republic of Chad, Republic of the Congo, Republic of Dahomey, Gabon Republic, Republic of the Ivory Coast, Malagasy Republic, Mauritanian Islamic Republic, Republic of the Niger, Republic of Senegal, Republic of Sudan, Republic of the Upper Volta.

CENTRAL AFRICAN REPUBLIC

THE EDUCATIONAL SYSTEM

The secondary schools in the Central African Republic take children who have completed 6 years' primary schooling. The age-limit for admission is fixed at 11–14 for the 'long course' (*enseignement long*), leading after 7 years of study to the *baccalauréat* (university entrance examination), 11–15 for the 'short course' (*enseignement court*), leading after 4 years of study to the *brevet* (lower secondary certificate); and 11–16 for the technical course, which at present lasts 3 years but is to be increased to 4, and which leads to the *certificat d'aptitude professionnelle* (vocational proficiency certificate). A year's grace may be allowed each way; the upper age limits for girls are one year higher.

Pupils taking the long course are normally those who intend to continue at university; the short course is taken by those who will eventually undertake vocational training in order to equip themselves for the intermediate ranks in administration, industry or commerce; while those opting for the technical course will become workers in industry or—where the course is an agricultural one—supervisory workers in agriculture.

Education is centralized under the Ministry of Public Instruction and is given in various types of school: the *collège classique* (or *lycée*) and *collège moderne*, the short-course *collège*, the vocational school (industrial and commercial), and the agricultural school.

The private schools coming under the Catholic missions belong to the first two categories, but the instruction given at them is only up to the level of the *brevet*.

In view of the small number of pupils, there are at present no terminal classes providing instruction for the second part of the *baccalauréat*.

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary education in the Central African Republic dates back barely 15 years, and it is only since 1953—the date of construction of the Collège Emile Gentil—that the long course can be said to have existed.

The responsibility for organizing education rests with the Ministry of Public Instruction through its Directorate of Education, the school management boards having only an advisory role.

The Agricultural School comes under the Ministry of Agriculture.

The schools are inspected by a locally stationed education officer (*Inspecteur d'Académie*) as well as by inspectors-general sent out on mission by the French Ministry of Education at the request of the Central African Republic.

As the teaching staff, through lack of local teachers, is almost entirely made up of officials provided under the French technical assistance programme, the salaries are paid in the main by the French Government. The funds for building schools also come from this source. On the other hand, current operational costs are defrayed from the

Central African Republic's budget, which also provides for the payment of scholarship grants to practically all the pupils in view of the present low income level of most of the parents. Closer control will in all probability be exercised in the very near future in order to discover which parents are in a position to help maintain their children at school.

The medical and welfare services at schools are still rudimentary.

TYPES OF SECONDARY EDUCATION

The school year lasts from 1 October to 30 June. There are school holidays on 1 December (National Day) and at Christmas, Shrovetide (a few days' break during the hot spell) and Easter (10 days).

The schools listed above, which prepare pupils for examinations coming within the French educational system, follow the pattern of French schools but their curricula are adapted, or are in process of being adapted, to local conditions. The staff has the same qualifications as in France except that the classes for the first secondary cycle are often taught by primary teachers.

The pupils are enrolled on the strength of an entrance examination, and so far the number of successful candidates has never exceeded the number of places available. The intention is to establish a system of competitive scholarship examinations.

The school results depend on the mode of life of the pupils: those able to take advantage of the boarding arrangements achieve much better results than the others. Class promotion depends on the marks obtained during the year. Pupils who repeat a class and still fail to get good results are discharged or redirected. The agreed principle is that the first-year class (*classe de sixième*) should serve as a testing ground.

The percentage figures for examination successes are similar to those for corresponding examinations in France, but a considerable number of the pupils abandon their studies on taking their *brevet*, as the average age is higher. This applies particularly to girls, who are at a disadvantage in this respect, for it was only in October 1959 that the Girls' College initiated its fourth-year class (*classe de troisième*) which completes the lower cycle of secondary studies.

Technical training is given at a vocational school run on the lines of a French *centre d'apprentissage* and including the following sections: carpentry, metal-work, motor car mechanics, clerical and book-keeping.

The instruction given at the agricultural school is essentially practical.

The short-course college at Bambari provides an additional year of teacher training to prepare pupils who have their *brevet* for service as assistant teachers at primary schools.

There is also a trade school (*école artisanale*) for boys which trains primary certificate holders in carving, bookbinding, leather work or basketwork, and a trade school for girls at the same level and comprising two sections: sewing and embroidery, cutting and dressmaking.

TRENDS AND PROBLEMS

The aim of the present programme is to enlarge the scope of the second cycle of secondary education so as to train at least 50 *bacheliers* a year (the present figure is 3 or 4) and to develop short-course colleges in the provincial centres.

Educational progress can be followed year by year thanks to an annual report prepared at the beginning of March on the basis of reports from the various headmasters, and the applications for financial assistance made to the Aid and Co-operation Fund envisage its further extension.

[*Text prepared by the Ministry of Public Instruction and Labour, Bangui, and transmitted by the French National Commission for Unesco in May 1960.*]

STATISTICS

Population (mid-year 1958 estimate): 1,161,000.
Area: 241,699 square miles; 626,000 square kilometres.
Population density: 5 per square mile; 2 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, the total school enrolment of 47,254 pupils represented about 4 per cent of the population. Almost all (97 per cent) of these were in primary schools. The proportion of girls was 16 per cent in primary schools, 14 per cent in secondary schools, and 54 per cent in vocational courses. In the public schools, the average number of pupils per teacher was 59 in primary schools, 57 in secondary schools, and 14 in vocational courses. Between 1953 and 1957, total enrolment increased by 53 per cent. (See Table 1.)

Enrolment trends in secondary education, 1950–57. Secondary school enrolment (general and teacher training) increased more than four times from 237 in 1950 to 1,044 in 1957. However, the number of pupils enrolled in vocational courses, after rising from 606 in 1950 to 1,734 in 1953, dropped back to 436 in 1957. For all types of secondary education the total enrolment during this period averaged less than 1.5 per cent of the estimated population 15–19 years old.

Examination results in secondary education, 1953–56. The annual number of certificates granted for the years 1953/54, 1954/55, 1955/56, 1956/57, was as follows: lower secondary certificate (*brevet*) 21, 29, 32, 55; *baccalauréat*, 1st part, 4, 3, 4, 6; *baccalauréat*, 2nd part, 2 (1955/56); vocational proficiency certificate 4 (1955/56); 3 (1956/57).

Educational finance, 1958. For 1958, the education budget amounted to 694 million French francs. Including an amount of 187 million francs allocated for 1958/59 from

the Investment Fund for Social and Economic Development (FIDES), the average expenditure per inhabitant was about 760 francs. Total subsidies to private education amounted to 160 million francs. (See Table 2.)

Source. France: Ministère de la France d'Outre-Mer, *Enseignement Outre-Mer.*

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff[1]		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	140	446	...	26 487	4 106
	Primary schools, private	1957/58	103	...	...	19 287	3 340
	Total	**1957/58**	**243**	**446**	**...**	**45 774**	**7 446**
	„	1956/57	227	406	...	38 831	5 779
	„	1955/56	194	353	...	32 851	4 753
	„	1954/55	183	363	...	31 566	3 977
	„	1953/54	169	299	...	30 001	3 764
Secondary							
General[2]	Secondary schools, public	1957/58	6	13	...	743	117
	Secondary schools, private	1957/58	9	...	...	301	24
	Total	**1957/58**	**15**	**13**	**...**	**1 044**	**141**
	„	1956/57	10	13	...	686	108
	„	1955/56	9	13	...	615	71
	„	1954/55	11	12	...	587	91
	„	1953/54	9	12	...	475	51
Vocational	Apprenticeship centre, public	1957/58	1	29	...	416	237
	Vocational courses, public	1957/58	14				
	Vocational courses, private	1957/58	2	...	...	20	—
	Total	**1957/58**	**17**	**29**	**...**	**436**	**237**
	„	1956/57	16	19	...	672	421
	„	1955/56	18	18	...	583	348
	„	1954/55	35	19	...	1 366	1 062
	„	1953/54	45	51	...	1 734	1 413

1. Public schools only.

2. Including teacher training.

2. EDUCATIONAL FINANCE, 1958 (in thousand French francs)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**881 180**
Government of Central African Republic	693 780
Investment Fund for Economic and Social Development (FIDES)[3]	187 400

B. GOVERNMENT EXPENDITURE BY LEVEL AND TYPE OF EDUCATION[2]

	Amount	Per cent
Total expenditure by Government[2]	**[4]693 780**	**100.0**
Primary education	283 170	40.8
Secondary education	155 540	22.4
Vocational education	45 880	6.6
Physical training and sports	6 760	1.0
Subsidies to private education	126 980	18.3
Miscellaneous, not specified	75 440	10.9

1. Official exchange rate (1958): 100 French francs = 0.24 U.S. dollar (approx.).
2. Budget estimate.
3. FIDES allocation for 1958/59, which includes 33,600,000 francs for private education.
4. Owing to the rounding of figures the total does not correspond exactly to the sum of the components.

REPUBLIC OF CHAD

THE EDUCATIONAL SYSTEM

On 28 November 1958, Chad became a Republic and a Member State of the French Community. Previously, it had been a territory within the federation of French Equatorial Africa and had been governed by decrees and orders issued by the French Government, the Governor-General of French Equatorial Africa or the Governor of the Territory.

Some basic legal texts relating to the organization of education and to its functioning have been specifically repealed; others have lapsed, and those still in force must, in any event, be revised to form part of a general system adapted to the country's new political status.

Among the main instruments responsible for the present educational pattern are:

Order of 2 January 1937 of the Governor-General of French Equatorial Africa laying down the general organization of education in the federation.

Order of 28 July 1941 of the Governor-General laying down the organization of educational services.

Order of 6 July 1949 of the Governor-General organizing the general inspectorate and education services in French Equatorial Africa, as amended by the Order of 30 December 1953 and later by the Order of 1 February 1954.

Decree of 3 February 1955 of the Government of the French Republic on the division of powers in regard to the creation of educational institutions in French West Africa and French Equatorial Africa.

Order of 18 December 1952 of the Governor-General of French Equatorial Africa regulating the administration of schools financed by the budget of the federation.

A bill is now before the Chad National Assembly which would make school attendance compulsory for both boys and girls between the ages of 6 and 14 in all parts of the country where there are sufficient schools. In view of the low school attendance rate (14.1 per cent), this is the immediate objective.

French is spoken in Chad, and its school pupils are taught in that language, which is a unifying element for the many different races among its people. However, an Arabic dialect more or less related to literary Arabic predominates in the northern part of the country. For this reason, a Franco-Arab College was founded at Abéché in the Ouaddaï region; it gives its pupils thorough classical Arabic as well as French instruction.

Education is still insufficiently developed in the Republic of Chad, since only 55,648 children out of 390,174 of school age were receiving it on 1 January 1960, although the annual increase in the school population is about 20 per cent.

There are now 46,666 children in public primary and 7,307 in private primary schools, 1,120 in general secondary education, 353 in secondary technical education and 200 in teacher training at secondary level.

There are no higher educational institutions in the Republic of Chad. Teaching at this level is provided by the French Republic, at its expense, in the institutes, higher professional schools and faculties of France. This situation is likely to change; a university was recently founded at Dakar (Senegal) and a Centre d'Etudes Supérieures is being set up at Brazzaville (Congo). Young people wishing to continue their higher studies are liberally provided with grants and allowances by the Government if these studies interest the country.

Except for higher education, which is the responsibility of the French Republic, all educational levels are supervised by the Government of the Republic of Chad; French curricula and methods, adapted to African conditions, are followed.

The Government has entrusted the supervision of teaching to the Minister of Education, who is the highest authority in this sphere and acts through the Directorate of Education. The Directorate's functions are to ensure the proper operation of the schools, see that the curricula are observed and adapt the teaching methods to suit local needs. Regional authorities have no concern with the internal administration of education, except as regards the maintenance of public order.

Private bodies do not at present play any part in education. The creation of an Education Council is, however, in contemplation, with members chosen from among the most prominent persons in the public and private organizations concerned with education.

THE DEVELOPMENT OF SECONDARY EDUCATION

General secondary education is of relatively recent origin, having been organized by the Order of 20 January 1944 of the Governor-General of French Equatorial Africa, which officially instituted the Ecoles Supérieures des Territoires. The oldest, the *collège* at Bongor, was set up in 1942; the *collège* at Fort-Lamy was founded in 1947 and that at Abéché in 1952. *Cours complémentaires* (primary continuation courses) were opened at Fort-Archambault and Moundou in October 1959.

Teacher training has been provided since 1959 at the Pedagogical Centre at Bongor. Prior to that, student monitor and student teacher sections were operating at Moundou and at Fort-Archambault.

Technical education has been provided at the Vocational School at Fort-Archambault since 1951 and at the Professional Technical and Vocational Training Centre at Fort-Lamy, founded in November 1958.

Administration

The Directorate of Education is under an official appointed by the French Republic in agreement with the Republic

of Chad. His title is Director of Education and *Inspecteur d'Académie.* The Directorate has six departments: personnel, accounting and supplies, scholarships and examinations, educational information and documentation, school health, youth and sport.

Two sub-directorates are also planned, one of which will control all primary educational activities, while the other will establish regulations and settle disputes between the three levels of education.

The Director of Education has a permanent right of inspection over all staff. In practice, however, inspectors-general appointed by the French Republic are responsible for inspecting secondary classical and modern institutions and technical schools. As a rule these inspectors visit the Republic of Chad every year. One of their duties is to propose the appointment or promotion of French teachers provided under the technical assistance programme of the French Government; more generally it is their responsibility to give teachers all advice and educational instructions which may be necessary.

Finance. Education is financed out of the budget of the Republic of Chad. At the end of the year, each institution addresses a financial statement to the Directorate of Education, with budget estimates for the next school year in regard to staff, equipment, maintenance of buildings, operating expenses, etc. On this basis, the Directorate of Education draws up estimates for the year and submits them at the budget session of the National Assembly. After the vote, funds are distributed to the various schools, in proportion to the amounts applied for, and within the limits of the total appropriation for education.

Valuable assistance has been granted to the Republic of Chad since 1948 by the Investment Fund for Economic and Social Development (FIDES) and, since 1959, by the Fund for Assistance and Co-operation (FAC) and the European Development Fund for Overseas Countries and Territories (FEDOM). The Organisation Commune des Régions Sahariennes (OCRS), whose field of action includes the northern part of Chad, is also to participate very shortly in the financing of education and especially in the building and equipping of schools. A 3-year plan and several projects for improving the school infra-structure have recently been submitted to these organizations and are now under review.

Under the technical assistance conventions concluded with the States of the Community, France pays the salaries of established French teachers who are seconded to these States. All locally recruited staff are paid from the Chad budget.

Both primary and secondary education are free in the Republic of Chad. The Government also makes a large contribution to the maintenance of pupils by supplying them with clothing and opening free school canteens attached to the schools. The secondary schools have boarding establishments in which the majority of the pupils live.

Buildings and equipment. The secondary schools are all of recent construction and meet modern space, health and security requirements, taking into account, however, the exigencies of an equatorial climate. They are permanent buildings and are also provided with the usual equipment of European secondary schools. However, their present capacity being regularly insufficient to absorb the influx of pupils from primary schools, a plan of expansion has been submitted to the Fund for Aid and Co-operation.

School welfare services. The Public Health Service is generally responsible for supervising the health of children and teachers in Chad schools. Both pupils and teachers are given check-ups at regular intervals by the staff of state hospitals and dispensaries. They also receive free care at these establishments.

A School Health Office was established under the Directorate of Education in February 1960. This is to be followed by the construction of a School Medical Preventive Centre at Fort-Lamy, a plan for which has just been submitted to FEDOM. School health supervision will then be under the Ministry of Education.

TYPES OF SECONDARY EDUCATION

General and technical secondary education is reserved to pupils who are at least 11 to 13 years old, who have acquired basic study habits in primary school and enough general culture to benefit from more advanced schooling and choose a special subject or technique. Great importance is attached to general education in secondary curricula, even in the technical institutions.

Pupils from the final class of primary school who wish to continue their studies in a secondary institution take an entrance examination, held every June. The examination comprises three tests: the study of a text, an arithmetic test and a dictation test. In June 1960, there will be more than 2,800 candidates for this examination, which is in effect competitive, since the number of pupils who pass will be limited by the number of vacancies in the secondary schools.

Pupils are admitted to the following institutions:

College at Bongor. This school gives a short modern course (4 years of study) leading to the lower secondary school certificate (*brevet d'études du premier cycle* or BEPC).

College at Abéché. The Franco-Arab College at Abéché enables children from the Arabic-speaking regions of the North to continue their studies in French while developing their knowledge of classical Arabic. The object of this school is to give a long bilingual modern course (7 years of study), but at present it has only 4 classes. The pupils prepare for the BEPC; when the enrolment increases, they will be able to continue their studies as far as the *baccalauréat.*

Félix Eboué College. The Félix Eboué College at Fort-Lamy gives a complete classical and modern course. The first cycle lasts 4 years and leads to the BEPC; the second lasts 2 years and takes pupils up to the first part of the *baccalauréat;* at present, because of the difficulty of recruiting science teachers, there are no terminal classes which prepare for the second part of the *baccalauréat.* It is expected that these terminal classes—philosophy, experimental sciences and elementary mathematics—will be instituted at the beginning of the 1960 school year.

Cours complémentaires. The complementary courses at Fort-Archambault and Moundou last 4 years and lead to

the elementary certificate (*brevet élémentaire* or BE) and the BEPC; the course ends with the 3rd class. Each of these schools now has one 6th class, but there will be two 5th classes at the beginning of the 1960 school year.

Pedagogical Centre. The Pedagogical Centre at Bongor has two sections for student monitors and one section for student teachers. The student monitors, who hold a primary certificate, undergo 2 years of pedagogic training before taking a final examination and becoming educational monitors for literacy classes (preparatory course and elementary course).

Once they have their BEPC, student teachers receive one year's pedagogic training, after which they are appointed as probationary assistant teachers and are authorized to teach in all primary classes.

Vocational School at Fort-Archambault. This school has a 3-year course for masons, carpenters, fitters, motor-car mechanics, and electricians. On passing out they obtain a vocational proficiency certificate (*certificat d'aptitude professionnelle*) and may be given employment as qualified technical staff or go on to higher studies in a vocational or technical school of the French Republic.

Centre of Professional and Technical Training at Fort-Lamy. This centre trains subordinate staff for government service and private business, such as office employees, accountants, and shorthand-typists.

The training at these two technical institutions lasts 3 years and consists of specialized technical courses as well as of methodically graduated general educational courses. After the third year of school, pupils undergo training periods in government departments, banks and commercial institutions. On passing out, they receive a vocational proficiency certificate.

The Professional and Technical Training Centre of Fort-Lamy is to be greatly developed in the near future. The Government plans to add to it new sections for topographers, surveyors, radio operators, male nurses, sanitary inspectors and veterinary assistants; the centre is to be in general charge of training specialists in the various professions necessary to the public service.

Diplomas. The diplomas granted in Chad are identical with those of the French Republic and have the same value. They are valid throughout the French Community. All examinations are held under the responsibility of the Director of Education. The subjects for the *baccalauréat* and for some technical examinations are supplied by the Rector of the Academy of Bordeaux and the papers are corrected by that university.

Teaching staff. In contrast to primary education, where most of the teachers are local citizens, secondary education is almost entirely in the hands of teachers from France who belong to the staff of the French Ministry of Education, or teachers under contract recruited on the spot who hold a *licence* or at least a full *baccalauréat* (for general guidance courses in the lower cycle). Scholarship holders from Chad now studying at French higher educational institutions will, when they return to their country, be able to take their place as secondary teachers and thus gradually replace the French staff.

Out-of-class activities. In the time-tables of the above-mentioned secondary schools the afternoons of Thursdays, Sundays and public holidays are generally given over to activities and games—athletics, volley-ball, basket-ball, etc. Highly successful broadcasts for young people have been made with the assistance of a number of secondary school pupils. Societies have been founded in most of the main centres, with the purpose of attracting young people to sport or educational activities and helping them to make a better use of their leisure time.

TRENDS AND PROBLEMS

A mere enumeration of the educational resources of the young Republic of Chad is enough to show that the structure of its general and technical secondary education is, as yet, embryonic.

The isolated geographical position of the country in the heart of Africa seems to be the main reason why it has been late in absorbing Western civilization. It has also been necessary to convince the people that attending school is useful, and in the past there has often been great resistance to this idea.

In any case, Chad, which has now reached a decisive moment in its history, considers that education for the people and the training of an elite are among its most urgent objectives.

An increase in school attendance is obviously the first stage. Children who finish primary school and who are capable of continuing their studies must be able to enter a general or technical secondary school, if possible as boarders, since the families of most of them are of very modest means. There are two aspects to this problem: the foundation of new secondary schools and expansion of existing ones, the training and recruitment of teachers. In both cases, the investment of large sums must be authorized.

Moreover, young people who have received this training must find a place in the new economic structure. Chad is in urgent need of teachers, health officers, technicians, and administrative staff of all categories. Every young citizen must be directed towards the profession which best suits both his capacities and the needs of his country. The question of vocational guidance in relation to the social and economic advancement of this young State is another national problem.

[*Text prepared by the Department of Education, Fort-Lamy, and transmitted by the French National Commission for Unesco in March 1960.*]

STATISTICS

Population (mid-year 1958 estimate): 2,600,000.
Area: 495,368 square miles; 1,283,000 square kilometres.
Population density: 5 per square mile; 2 per square kilometre.

Summary of schools statistics, 1953–57. In 1957/58, the total school enrolment of 33,312 pupils represented less than 1.5 per cent of the total population; 98 per cent of these pupils were in primary schools. Girls were about 11 per cent of the total enrolment. The average number of pupils per teacher was 55 in the primary schools, 27 in the secondary schools, and 10 in the apprenticeship centres and vocational courses. School enrolment more than doubled between 1953 and 1957. (See Table 2.)

Enrolment trends in secondary education, 1950–57. While the number of pupils enrolled in secondary schools grew from 106 in 1950 to 485 in 1957, and in vocational courses from 157 to 217, the average total enrolment for the period 1955–57 was only about 0.2 per cent of the estimated population 15–19 years old.

Examination results in secondary education, 1953–56. The number of certificates granted each year for the years 1953/54, 1954/55, 1955/56, 1956/57, was as follows: lower secondary certificate (BE and BEPC), 19, 36, 25, 38; *baccalauréat*, 1st part, 2, 2, 1, 6; *baccalauréat*, 2nd part, 1 (1954/55); 4 (1955/56).

Educational finance, 1958. For the year 1958, the educational budget, including an allocation for 1958/59 from the Investment Fund for Economic and Social Development (FIDES), amounted to 866 million French francs, or an average of 333 French francs per inhabitant. (See Table 1.)

Source. France: Ministère de la France d'Outre-Mer, *Enseignement Outre-Mer.*

1. EDUCATIONAL FINANCE, 1958 (in thousand French francs)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**866 160**
Government of Chad	581 160
Investment Fund for Economic and Social Development (FIDES)[3]	285 000

B. GOVERNMENT EXPENDITURE BY LEVEL AND TYPE OF EDUCATION[2]

	Amount	Per cent
Total expenditure by Government[2]	[4 5]**581 160**	**100.0**
Primary education	321 050	55.2
Secondary education	114 870	19.8
Vocational education	54 590	9.4
Physical training and sports	17 590	3.0
Subsidies to private education, etc.	17 640	3.0
Miscellaneous, not specified	55 410	9.5

1. Official exchange rate (1958): 100 French francs = 0.24 U.S. dollar (approx.).
2. Budget estimate.
3. FIDES allocation for 1958/59, which includes 14,000,000 francs for private education.
4. Includes expenditure for equipment amounting to 60,900,000 francs.
5. Owing to the rounding of figures, the total is not the exact sum of the components.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	124	481	...	26 648	2 404
	Primary schools, private	1957/58	30	...	...	5 962	1 061
	Total	**1957/58**	**154**	[1]**481**	**...**	**32 610**	**3 465**
	„	1956/57	133	[1]392	...	26 738	2 748
	„	1955/56	122	[1]311	...	21 061	1 659
	„	1954/55	113	[1]309	...	16 084	1 243
	„	1953/54	94	[1]271	...	13 740	975
Secondary							
General[2]	Secondary schools, public						
	Total	**1957/58**	**3**	**18**	**...**	**485**	**61**
	„	1956/57	6	16	...	462	36
	„	1955/56	6	12	...	402	34
	„	1954/55	5	10	...	278	20
	„	1953/54	5	8	...	444	17
Vocational	Apprenticeship centres, public	1957/58	2	22	...	217	1
	Vocational courses, public	1957/58	4				
	Total	**1957/58**	**6**	**22**	**...**	**217**	**1**
	„	1956/57	3	16	...	103	—
	„	1955/56	4	15	...	108	—
	„	1954/55	3	17	...	119	—
	„	1953/54	2	15	...	97	—

1. Public schools only.
2. Including teacher training.

REPUBLIC OF THE CONGO

Formerly a part of French Equatorial Africa, the Republic of the Congo has a centralized system of education. The Ministry of Education maintains public primary and secondary schools and exercises control over the private schools. State aid is granted to private schools to the level of 80 per cent of the salaries of qualified teachers.

Funds for education are derived entirely from the state budget, of which in 1958 about 26 per cent was devoted to education. Assistance from France through the FIDES fund forms part of a 4-year plan (1958–62) and is directed mainly to building costs for secondary schools and teacher training centres.

The school system closely resembles the French pattern. After a 6-year primary course pupils take an examination that gives access to secondary schools of either the long or the short form. In the long form, the *lycée* and *collège*, the 7-year course is divided into two cycles, 4+3, leading to the *baccalauréat*. The short form corresponds to the first cycle and leads to the lower secondary certificate (*brevet*), this type of secondary school is gradually being developed from complementary courses.

Training courses for primary school teachers are given in separate establishments and in sections of some secondary schools. Technical education is provided in apprenticeship centres and vocational training courses, one of which prepares skilled artisans in an accelerated 1-year period of training. One complete *collège technique* has recently been established by the expansion of a vocational school.

[*Text prepared by the Unesco Secretariat in June 1960 from official sources.*]

STATISTICS

Population (mid-year 1958 estimate): 780,000.
Area: 134,749 square miles; 349,000 square kilometres.
Population density: 6 per square mile; 2 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, an enrolment of 82,221 pupils represented 11 per cent of the total population. Of these pupils, 96 per cent were enrolled in primary schools, over 2 per cent in general secondary schools, and less than 2 per cent in vocational courses. Girls were 28 per cent of the enrolment in the primary schools, 24 per cent in the secondary schools, and 35 per cent in vocational courses. Private schools enrolled more pupils than public schools at the primary level, but somewhat less at the secondary level. In the public schools, the pupil-teacher ratio was 62 for primary schools, 22 for secondary schools, and 18 for vocational courses. Between 1953 and 1957, total enrolment increased by 39 per cent. (See Table 2.)

Enrolment trends in secondary education, 1950–57. Enrolment in secondary schools, including teacher training, more than doubled between 1950 and 1957, but in vocational courses there was a gradual decrease. The proportion of girls changed in the same direction as the respective enrolments. Throughout this period the average secondary enrolment represented about 4 per cent of the estimated population 15–19 years old. (See Table 3.)

Examination results in secondary education, 1953–56. Table 4 shows an overall increase in the number of certificates granted each year after 1953, but the trend is mixed as regards the different types of certificates. Leaving certificates (*brevets*) from industrial and commercial schools were given for the first time, in 1956/57, to 3 pupils.

1. EDUCATIONAL FINANCE, 1958 (in thousand French francs)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**1 253 860**
Government of the Congo	1 205 260
Investment Fund for Economical and Social Development (FIDES)[3]	48 600

B. GOVERNMENT EXPENDITURE BY LEVEL AND TYPE OF EDUCATION[2]

	Amount	Per cent
Total expenditure by Government[2]	[4]**1 205 260**	**100.0**
Primary education	433 040	35.9
Secondary education	354 460	29.4
Vocational education	118 270	9.8
Physical training and sports	4 500	0.4
Subsidies to private education, etc.	224 740	18.7
Miscellaneous, not specified	70 250	5.8

1. Official exchange rate (1958): 100 French francs = 0.24 U.S. dollar (approx.).
2. Budget estimate.
3. FIDES allocation for 1958/59, which includes 34,600,000 francs for private education.
4. Includes expenditure for equipment amounting to 18,900,000 francs.

Educational finance, 1958. For the year 1958 the education budget consisted of 1,205 million French francs from the Government of the Congo, plus 48.6 million francs from the Investment Fund for Economic and Social Development (FIDES), making a total expenditure of 1,254 million francs, or about 1,600 francs per inhabitant. Subsidies to private schools amounted to nearly 260 million francs. (See Table 1.)

Source. France: Ministère de la France d'Outre-Mer, *Enseignement Outre-Mer.*

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff[1]		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, private	1957/58	187	568	...	35 283	9 284
	Primary schools, private	1957/58	295	...	...	43 679	12 567
	Total	**1957/58**	**482**	**568**	**...**	**78 962**	**21 851**
	„	1956/57	471	516	...	67 638	17 081
	„	1955/56	467	510	...	59 572	14 008
	„	1954/55	459	488	...	57 130	11 584
	„	1953/54	432	468	...	56 683	8 949
Secondary							
General[2]	Secondary schools, public	1957/58	4	53	...	1 185	344
	Secondary schools, private	1957/58	6	...	...	790	131
	Total	**1957/58**	**10**	**53**	**...**	**1 975**	**475**
	„	1956/57	13	51	...	1 563	317
	„	1955/56	12	44	...	1 407	254
	„	1954/55	12	42	...	1 324	244
	„	1953/54	13	36	...	1 055	203
Vocational	*Collège technique*, public	1957/58	1				
	Apprenticeship centres, public	1957/58	3	36	...	637	32
	Vocational courses, public	1957/58	11				
	Apprenticeship centre, private	1957/58	1	...	...	647	423
	Vocational courses, private	1957/58	9	...	...		
	Total	**1957/58**	**25**	**36**	**...**	**1 284**	**455**
	„	1956/57	34	47	...	1 458	647
	„	1955/56	22	20	...	1 148	485
	„	1954/55	35	39	...	1 483	712
	„	1953/54	45	51	...	1 594	928

1. Public schools only.

2. Including teacher training.

3. TRENDS IN SECONDARY EDUCATION, 1950–57

School year	Number of students enrolled by type of education				Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational				
	Total	Per cent female	Total	Per cent female			
1950	933	9	1 640	59			
1951	1 243	17	1 541	52			
1952	...	...	...	...	*2.7	70	*4
1953	1 055	19	1 594	58			
1954	1 324	18	1 483	48			
1955	1 407	18	1 148	42			
1956	1 563	20	1 458	44	2.9	78	4
1957	1 975	24	1 284	35			

1. Including teacher training.

4. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–56

Type of diploma or certificate granted	School year							
	Total	Female	Total	Female	Total	Female	Total	Female
	1953/54		1954/55		1955/56		1956/57	
Lower secondary certificate *(brevet)*	82	...	124	...	130	...	112	...
Baccalauréat								
First part	22	...	33	...	33	...	29	...
Second part	17	...	21	...	17	...	29	...
Commercial and industrial certificate *(brevet)*	—	—	—	—	—	—	3	...
Vocational proficiency certificate (CAP)	25	...	31	...	28	...	40	...

REPUBLIC OF DAHOMEY

THE EDUCATIONAL SYSTEM

As the educational system in Dahomey was organized under the auspices of France, it reflects the educational concepts of metropolitan France, together with an increasing desire to adapt these concepts, in appropriate cases, to the realities of the geographical and human environment in Tropical Africa.

The educational system consists in the first place of primary schooling for children between 6 and 12 (or even 13 or 14) years of age. This is now (1960) provided for 88,189 children, including 22,916 girls.

Three possibilities are open to pupils who complete their primary schooling: (a) Those who, during their first 4 or 5 years at school, have not shown any marked liking or aptitude for theoretical study, can receive training in rural or agricultural work or craftsmanship, provided by monitors trained in apprenticeship centres. The purpose of this training, which is to be provided on an increasingly systematic basis, is to keep the adolescent in his village, while contributing towards his vocational and social advancement. (b) Children who have successfully completed the fifth primary class sit for the elementary primary school certificate (*certificat d'études primaires élémentaires*). Those who are between 11 and 14 years of age on 31 December of the current year (exemptions from these age-limits may, however, be granted) may also sit for the entrance examination to secondary schools (*lycées* and *collèges*) or technical schools. (c) Those who do not meet the above requirements but are less than 15 years of age on 31 December of the current year sit for the same examination but can be admitted only to junior teacher training courses (*cours normaux*) or to complementary courses (*cours complémentaires*).

Ethnic and linguistic factors are not taken into account in the organization of education in Dahomey, where French is the only language of wide communication. The vernacular languages (Fon, Yoruba, Mina, Nagot, Bariba and Somba) are used only for certain types of adult education (mainly through the radio).

Public education is secular and free at all levels, and primary education is compulsory.

Legislation. The main constitutional or legislative provisions governing the educational system in Dahomey as a whole were common to all the territories of French Africa from the time of the issue of the Decree of 18 October 1904, reorganizing the Government of French West Africa, until the institutional reforms instituted by the Decree of 4 April 1957, which provided for the reorganization of French West Africa and French Equatorial Africa. On 4 December 1958 the Territorial Assembly of Dahomey voted for the status of Member State of the French Community, and on 31 December 1959 French West Africa ceased to exist as a political and administrative entity.

Under the Cultural Agreement, signed in Paris on 16 September 1959 and approved in Dahomey by the Law of 19 December 1959, the Republic of Dahomey, in accordance with the provisions of its Constitution, was given responsibility for the administration of its educational services and for the organization of all forms of cultural activity. This agreement also defined the forms of aid to be provided by the French Republic and the procedures for co-operation between the French Republic and the

Republic of Dahomey in the field of education and culture.

Education in West Africa had hitherto been governed by a General Ordinance dated 22 August 1945. A number of that instrument's provisions still remain in force, while others have been supplemented, amended or deleted in the educational legislation now being drawn up in Dahomey, as in the other States of what was formerly French West Africa. The organization of the Educational, Youth and Sports Department in Dahomey was laid down in a Decree dated 22 January 1959.

Regulations concerning the status of teachers and assistant inspectors, complementary courses, secondary schools, qualifying examinations, etc. have already been issued or are being drawn up.

Role of the public authorities. These consist of the Minister of National Education of the Republic of Dahomey, assisted by a Secretary of State for Youth and Sport. The Director of Educational Services is an *Inspecteur d'Académie* placed at the disposal of the Republic of Dahomey by the French Republic, which guarantees that the diplomas obtained in Dahomey will be recognized by universities throughout metropolitan France and the States of the French Community.

Role of private organizations. The principal private organizations which play an important part in education are the Catholic and Protestant Missions. There are also a few non-denominational private schools.

THE DEVELOPMENT OF SECONDARY EDUCATION

The history of secondary education in Dahomey is essentially the history of the establishment and growth of the existing schools. The Lycée Victor-Ballot was founded in 1911 under the name of Cours Supérieur et Cours Normal de Porto-Novo; it later became the Cours Secondaire de Porto-Novo and the Ecole Primaire Supérieure Victor-Ballot (1916), the Collège Victor-Ballot (1947) and, lastly, the Lycée Victor-Ballot, with classical and modern courses (1956). The Collège Moderne de Jeunes Filles de Porto-Novo, was founded on 11 January 1943 as an upper primary school; in 1947 it became a *collège moderne* providing the short (4-year) course of secondary education (*enseignement court*) and in 1957 was expanded to provide the full 7-year course (*enseignement long*).

All other general secondary schools and teacher training establishments, both public and private, were founded after the second world war.

The history of technical education begins with a General Decree of 13 November 1918 organizing a vocational section at the Ecole Primaire Supérieure Victor-Ballot. In 1924 this section was transferred to Cotonou and became the Ecole Professionnelle Reste which was converted in 1947 into a *collège technique*, which also provided a training course for apprentices. The agricultural apprenticeship centre at Porto-Novo was set up in 1952 and the apprenticeship centre at Ina in 1959. Private technical education is provided by a technical section attached to a general secondary school and by an apprenticeship centre for domestic economy and craftsmanship.

Administration. The organization of secondary education is now the responsibility of the Ministry of National Education of Dahomey. The Educational Sub-Commission of the National Committee for the Ten-Year Plan was entrusted in 1959–60 with the planning of educational development.

The Minister of National Education has sole authority for modifying the plan for the organization of technical education, after consultation with the *Inspecteur d'Académie*, the Director of Technical Education, the heads of schools and the teachers' councils. An Advisory Committee on Technical Education, now in process of formation, will be consulted in due course.

Conferences of Ministers and Directors of Education of the various States of the French Community are held periodically in Paris to discuss their joint problems with the assistance of the French Ministry of National Education and, in particular, of the Directorate for Co-operation with States of the Community and Other Countries and of the Institut Pédagogique National.

Control. Under the authority of the Minister of National Education of Dahomey, the *Inspecteur d'Académie* controls the central services which include: the administrative offices, an information and vocational guidance office, a directorate of primary education, a directorate of technical education, and a youth and sports department.

General secondary education is under the direct supervision of the *Inspecteur d'Académie.* The *lycées* have management boards (*conseils d'administration*), while the *collèges* and teacher training schools have management committees (*bureaux d'administration*), which meet twice a year under the chairmanship of the Minister of Education or his deputy, the *Inspecteur d'Academie*, and consider all problems relating to the administration and development of these schools.

The technical schools are directly subordinate to the central administration, the *conseils d'administration* merely acting in an advisory capacity.

The Minister of Agriculture is consulted on technical problems concerning the organization of agricultural education.

Technical education is controlled by an Inspector of Technical Education, placed under the authority of the *Inspecteur d'Académie.*

Inspection. In compliance with Article 9 of the Cultural Agreement of 16 September 1959, the French Republic organizes general inspection missions which in their own right inspect the work of administrative staff and teachers employed by the French Republic and may, at the request of the Government of the Republic of Dahomey, inspect the work of other staff as well. The cost of these missions is borne by the French Republic.

In accordance with Article 8 of the same agreement, 'an official having at least the rank of *Inspecteur d'Académie* shall be placed at the disposal of the Republic of Dahomey, under the terms laid down in the regulations in force in the French Republic, and the Republic of Dahomey agrees to accept such official.

'The *Inspecteur d'Académie*, who shall be in charge of the resident inspectors, shall be responsible for the super-

vision of all teachers employed by the French Republic. He shall also be responsible for inspecting the work of other staff.

'He shall be specifically responsible for organizing and sanctioning under the conditions laid down by the French Republic, competitive and other examinations entitling candidates to diplomas, certificates or other qualifications current in the French Republic.

'On behalf of the Government of the French Republic, he shall give notice of any changes in the curricula and examinations provided for in Article 14. The Government of the Republic of Dahomey shall entrust this official with the supervision of educational services, under the authority of the responsible Minister.'

Inspection of teacher training and complementary courses and their staff is the direct responsibility of the Director of Primary Education and of the primary education inspectors, who must hold a proficiency certificate known as the *certificat d'aptitude à l'inspection primaire* or CAIP, either for metropolitan France or for overseas territories.

Technical schools are inspected by an official seconded from metropolitan France.

Parents' associations are represented on the management boards and committees of the various schools, and on the central planning body (*Comité du Plan*), scholarship commissions and any other commission required to handle major questions of concern to education.

Finance. The secondary schools are, in principle, financed by the national budget of Dahomey, but in practice they are largely subsidized by France.

Most of the cost of school buildings and equipment has been borne by a French government fund, the Investment Fund for Economic and Social Development (FIDES), which has now become the Assistance and Co-operation Fund (FAC). It is hoped that aid will also be forthcoming from the European Development Fund for Overseas Countries and Territories (FEDOM).

Funds are allocated to schools under the budget for national education, which amounts to approximately one-quarter of the total budget of Dahomey—a relatively large proportion which, however, still falls short of needs.

Locally recruited teachers, auxiliary teachers (*auxiliaires*) and teachers working under contract (*contractuels*) are paid out of funds drawn from the national budget. Technical assistance staff recruited from metropolitan France, including fully qualified African staff [e.g. teachers holding the *certificat d'aptitude professionnelle de l'enseignement secondaire* (CAPES)] is paid by the French Republic, while the Republic of Dahomey refunds to metropolitan France 20,000 C.F.A. francs a month for each staff member. Travel and subsistence allowances are paid by the French Republic (FAC).

The staff of private schools receives from the Republic of Dahomey a subsidy amounting to 60 per cent of the salary of equivalent teachers in public schools. Private schools also receive a bonus for each pupil who passes his examinations. For the erection of school buildings, private and public school buildings, private and public schools alike can obtain subsidies from FAC.

Pupils attending public schools pay no fees. A very liberal scholarship system enables all children of needy parents to be maintained in secondary boarding schools free of charge. In actual fact, nearly all boarders hold scholarships which are a considerable burden on the national budget. Secondary school boarders' scholarships now amount to 48,000 C.F.A. francs a year.

Most young people who continue their studies at the university receive scholarships which, until last year, were charged to the general budget of French West Africa. Scholarships for students sent to metropolitan France are now charged to the budget of Dahomey. A category D scholarship amounts to 5,200 NF a year, plus travelling expenses every two years and various other allowances for clothing and holidays.

Students attending the University of Dakar all receive university grants amounting to 152,000 C.F.A. francs a year, this sum being charged to the metropolitan budget for higher education. Dahomey gives these students an additional monthly allowance of 2,300 C.F.A. francs, pays the fare between Cotonou and Dakar and grants various other allowances (e.g. for clothing).

Buildings and welfare services. Secondary schools, both public and private, fulfil modern standards of hygiene and equipment. Medical supervision and care, measurements, vaccination, etc., are the responsibility of the School Medical Inspectorate. Pharmaceutical products are paid for by the schools within the limits of their budget, and each school has a sick-room.

TYPES OF SECONDARY EDUCATION

Schools providing general education or teacher training may be divided into the following categories:

1. Classical and modern *lycées* and *collèges*, a 7-year course, the classes being known as sixth, fifth, fourth and so on up to the first, which is followed by a terminal class. After 4 years' study, that is at the end of the third class, pupils may sit for the lower secondary school certificate [*brevet d'études du premier cycle* (BEPC)]. They then have a choice between: (a) continuation of secondary studies (second, first and terminal classes) which prepares them for the first and second parts of the *baccalauréat*, all series; (b) taking a competitive entrance examination for the second class in teacher training schools (*écoles normales*), where they first prepare for the *baccalauréat* and then for the teacher's certificate (*certificat d'aptitude pédagogique*), which will make them fully qualified primary teachers (*instituteurs*); (c) direct entrance into the preparatory training year of the junior teacher training courses (*cours normaux*), after which they will have the status of trainee assistant teacher (*instituteur-adjoint stagiaire*). After obtaining the *baccalauréat*, students may continue their studies in metropolitan France or at Dakar, as Dahomey is not yet able to provide higher education.
2. Junior teacher training courses (*cours normaux*). These provide a 4-year course for pupils who pass the entrance examination for the sixth class (i.e. first-year class) in secondary schools. Pupils are prepared for the elementary certificate (*brevet élémentaire* or BE) after which they undergo 1 year's professional training. Free board is

provided for those who undertake to serve for 10 years as assistant primary teachers, first as trainees and later as fully qualified teachers once they have obtained the *certificat élémentaire d'aptitude pédagogique* (CEAP).

3. *Cours complémentaires.* These provide a 4-year post-primary course and prepare pupils for the BE or the BEPC. These pupils have the same openings as those who pass the BEPC at the end of the third class (fourth year) in *lycées* and *collèges.*
4. As yet Dahomey has no *école normale* (teacher training school at upper secondary level) of its own. Pupils passing the entrance examination for this type of institution [see 1(b) above] have therefore been attending one of the inter-territorial teacher training schools—for boys at Dabu (Ivory Coast) or Sebikotone (Senegal), and for girls at Rufisque (Senegal). Pending the establishment of a full *école normale* in Dahomey, pupils who pass the competitive entrance examination will in future continue preparing for the *baccalauréat* in a *lycée* or *collège* and, after the *baccalauréat,* will receive a year's professional training at the Ecole Normale de Formation Professionnelle which is to be opened in October 1960.

In all these schools, the time-tables and curricula are the same as those in corresponding establishments in France, except for a few adjustments in history, geography, natural science and civics.

At the Conference of Ministers of Education of the States of the French Community, held in Paris from 10 to 13 February 1960, and at the Meeting of Ministers and Directors of Education of Tropical African Countries, organized by Unesco at Addis Ababa from 16 to 20 February 1960, it was agreed that curricula and textbooks should continue to be adapted to local needs without, however, adopting a narrow approach incompatible with true culture.

The academic year runs from mid-October to 13 July, with 10 days' holiday from 24 December to 2 January and 1 week's holiday at Easter (from Easter Thursday to the following Thursday). Schools are also closed on all public holidays.

Vocational and technical schools

Agriculture. The apprenticeship centre (*centre d'apprentissage*) at Porto-Novo (3-year course) prepares pupils for the vocational proficiency certificate (*certificat d'aptitude professionnelle* or CAP) in agriculture. The curriculum includes such general subjects as French, mathematics, science, geography and physical training, together with technical subjects. The pupils attend training periods in model farms approved by the Ministry of Agriculture.

Commerce and distribution. Commercial training is provided in the practical commercial sections of the *collège technique* at Cotonou, in the vocational classes attached to this college and in the commercial course attached to the private secondary school of Notre-Dame des Apôtres at Cotonou, which prepares pupils for vocational proficiency certificates in shorthand and typewriting and office work.

Domestic economy and dressmaking. Three-year courses in these subjects are provided by the school of Notre-Dame des Apôtres, where the curricula and general organization are much the same as in apprenticeship centres in metropolitan France. This school prepares pupils for vocational proficiency certificates in domestic economy and dressmaking.

Technical and industrial schools. The technical college at Cotonou has an industrial section for electricity and engineering. The apprenticeship centre attached to this college consists of five sections (general engineering, automobile engineering, carpentry, masonry and electricity) and prepares pupils for the corresponding vocational proficiency certificates. These schools have much the same organization and curricula as their equivalents in metropolitan France.

The rural crafts apprenticeship centre at Ina trains 'polyvalent' artisans for the building and engineering industries. The pupils have 40 hours' lessons a week, 30 of which are taken up with practical work, 3 with draughtsmanship and 7 with general subjects (French, mathematics and science). The course last for 3 years and is followed by 1 year's practical work in villages under the supervision of the centre.

TRENDS AND PROBLEMS

The Education Sub-Commission of the Committee for the Ten-Year Plan proposed that a *lycée* providing full classical and modern studies should be opened at Parakou in 1961, and that a boys' *lycée* and a girls' *lycée,* both providing classical and modern studies should be opened later at Cotonou.

A big effort will be made to arrange for the establishment of 4 new *cours complémentaires* in October 1960, 4 in 1961, 4 in 1962 and 4 in 1963, in order that each administrative district may be provided with an establishment of this type.

[*Text prepared by the Ministry of National Education, Porto-Novo, and transmitted by the French National Commission for Unesco in May 1960.*]

STATISTICS

Population (mid-year 1958 estimate) 1,725,000.
Area: 44,696 square miles; 115,762 square kilometres.
Population density: 39 per square mile; 15 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, the total enrolment, fairly evenly divided between public and private schools, consisted of 78,224 pupils, or less than 5 per cent of the total population. About 3 per cent of these pupils were in secondary schools. Girls made up 28 per cent of the enrolment in primary schools, 29 per cent in general secondary schools, 36 per cent in vocational schools. In the public schools, the average number of pupils per teacher was 45 in primary schools, 27 in secondary schools

and 15 in the *collège technique*. Between 1953 and 1957, there was a 40 per cent increase in total enrolment. (See Table 3.)

Enrolment trends in secondary education, 1950–57. Enrolment in secondary education roughly tripled between 1950 and 1957. However, for the period 1955–57, it still represented less than 2 per cent of the estimated population 15–19 years old. (See Table 2.)

Examination results in secondary education, 1953–56. The number of certificates granted each year for the years 1953/54, 1954/55, 1955/56, 1956/57 was as follows: lower secondary certificates (BE and BEPC), 107, 155, 192, 117; *baccalauréat*, 1st part, 25, 40, 65, 50; *baccalauréat*, 2nd part, 18, 20, 47, 49; industrial and commercial certificates (*brevets*) 1, 4, 1, 6; vocational proficiency certificates (CAP) 28, 38, 33, 45.

It may be noted that the total number of certificates granted in 1956 was much less than the year before, due to a sudden drop in the number of *brevets* for the completion of the lower stage of secondary studies, and in the number who passed the 1st part of the *baccalauréat*. However, compared with 1953, there was an increase in every category of certificate, the total for all categories being in 1956 higher by nearly 50 per cent.

Educational finance, 1958. For the year 1958, the government budget for education amounted to 1,883 million French francs. In addition, there was an allocation of 113 million francs from the Investment Fund for Economic and Social Development (FIDES), bringing the total to nearly 2,000 million francs, averaging about 1,160 francs per inhabitant. Subsidies to private education, from both the government budget and FIDES, amounted to some 232 million francs, or nearly 12 per cent of the total expenditure. (See Table 1.)

Source. France: Ministère de la France d'Outre-Mer, *Enseignement Outre-Mer.*

1. EDUCATIONAL FINANCE, 1958 (in thousand French francs)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**1 995 940**
Government of Dahomey	1 883 040
Investment Fund for Economic and Social Development (FIDES)[3]	112 900

B. GOVERNMENT EXPENDITURE BY LEVEL AND TYPE OF EDUCATION[2]

	Amount	Per cent
Total expenditure by Government[2]	**1 883 040**	**100.0**
Primary education	336 680	17.9
Secondary education	19 000	1.0
Vocational education	100 400	5.3
Physical training and sports	4 100	0.2
Subsidies to private education, etc.	189 000	10.0
Miscellaneous, not specified	1 233 860	65.5

1. Official exchange rate (1958): 100 French francs = 0.24 U.S. dollar (approx.).
2. Budget estimate.
3. FIDES allocation for 1958/59, which includes 42,900,000 francs for private education.

2. TRENDS IN SECONDARY EDUCATION, 1950–57

School year	Number of students enrolled by type of education				Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational				
	Total	Per cent female	Total	Per cent female			
1950	803	34	342	9			
1951	876	34	548	27			
1952	...	...	...	...	1.8	165	*1.1*
1953	1 449	29	605	31			
1954	1 587	31	854	32			
1955	1 803	30	1 009	39			
1956	1 983	29	1 199	38	3.0	174	*1.7*
1957	2 257	29	...	...			

1. Including teacher training.

3. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	230	782	...	35 406	8 919
	Primary schools, private	1957/58	203	...	...	40 000	11 969
	Total	**1957/58**	**433**	**[1]782**	...	**[2]75 406**	**[2]20 888**
	"	1956/57	382	[1]632	...	67 875	16 428
	"	1955/56	334	[1]624	...	59 950	15 425
	"	1954/55	314	[1]493	...	54 799	13 822
	"	1953/54	326	...	...	53 822	12 494
Secondary *General*[3]	Secondary schools, public	1957/58	4	37	...	1 007	301
	Secondary schools, private	1957/58	7	...	...	1 250	345
	Total	**1957/58**	**11**	**[1]37**	...	**2 257**	**646**
	"	1956/57	9	[1]24	...	1 983	570
	"	1955/56	9	[1]23	...	1 803	543
	"	1954/55	9	[1]25	...	1 587	493
	"	1953/54	8	[1]18	...	1 449	413
Vocational	*Collège technique*, public	1957/58	1	26	...	387	28
	Apprenticeship centre, public	1957/58	1				
	Apprenticeship centre, private	1957/58	1	...	...	174	174
	Other schools, private	1957/58	1				
	Total	**1957/58**	**4**	**[1]26**	...	**[2]561**	**[2]202**
	"	1956/57	28	[1]30	...	1 199	454
	"	1955/56	27	[1]25	...	1 009	395
	"	1954/55	26	[1]21	...	854	274
	"	1953/54	20	[1]23	...	605	189

1. Public schools only.
2. In 1957/58, enrolments in some vocational departments have been included under 'Primary'.
3. Including teacher training.

GABON REPUBLIC

THE EDUCATIONAL SYSTEM

The most recent regulation defining the structure of education in Gabon is Decree No. 4153/IGE, published in the *Journal Officiel de l'Afrique Equatoriale Française* (Brazzaville) on 30 December 1953. As a result of the political changes in the former territories of French Equatorial Africa, this regulation is in general no longer applicable, but some of its provisions are still valid. Gabon has, in fact, retained the basic principles and—for the time being, at least—the administrative structure of the educational system laid down by this instrument.

According to Article I of the decree, education in French Equatorial Africa was under the control of an Inspector-General with an office at Brazzaville, who was responsible to the High Commissioner and appointed by him. In Gabon and each of the other territories, education came under the *Inspecteur d'Académie*, subordinate to the Inspector-General.

Under the Preamble to the Constitution of the Republic of Gabon and Article 4 (Relations between the Assembly and the Government), the Government of the Republic is responsible, as from 1958, for 'the organization and principles of education'. A Ministry of National Education was created at Libreville and the District Inspectorate became the Education Department, the *Inspecteur d'Académie* being the head of the Department. The spheres of jurisdiction of these authorities are being redefined and the legal basis will be modified accordingly.

Gabon is divided into nine prefectures—an administrative division which has no apparent connexion with the geographical distribution of ethnic groups and vernacular languages. Moreover, because modern ideas have gained acceptance in some parts of the country more than in others—and possibly, too, because some ethnic groups are more adaptable than others—there are wide differences in school attendance. This gives rise to a number of local problems, which are in theory solved by the adoption of a

common official language, French. In fact, however, the solution of these problems is delayed by traces of tribal rivalry, although these are dying out.

Religious problems cause little difficulty; the provision of schools has in fact been an integral part of the establishment of missions. In each religious zone, therefore, the majority of the schools belong to the first confession established there. In areas with a large number of schools there is generally 'peaceful coexistence' between the public education system and private education.

The Ministry of National Education of the Republic of Gabon recognizes the following types of education: private schools, which from 1 January 1960 have been sub-divided into Catholic schools (21,404 primary and 592 secondary school pupils), Protestant schools (3,471 primary and 129 secondary school pupils); and public schools (24,341 primary and 1,349 secondary school pupils).

The heads of public secondary schools are directly responsible to the *Inspecteur d'Académie.*

There are four primary education zones, in each of which a primary inspector, assisted by one or more heads of the educational sections, is responsible for educational affairs. From an administrative point of view, complementary courses (*cours complémentaires*) are under the jurisdiction of primary inspectors, but in the statistics given below they are grouped with secondary schools because they cater for pupils in the 12 to 18 age group and provide a course which is at the same level as the first cycle (4 years) of secondary education proper.

THE DEVELOPMENT OF SECONDARY EDUCATION

There was no secondary education in Gabon before the second world war. Mention should be made, however, of the instruction, comparable with secondary education, provided by the little seminary at Libreville, dating back to 1845. Some of the best pupils from this school used to be sent to France.

It was not till 1944 that a higher primary school (*école supérieure*) was established. It became a *collège* in 1947, and a *lycée* in 1958. Similarly, in 1953, a private *école supérieure* became the *Collège Bessieux.*

There has been a marked increase in the number of secondary and higher primary school pupils, as the following figures show: 90 pupils in 1944, 185 in 1948, 430 in 1952, 950 in 1956, and 2,070 in 1960.

It is noteworthy that there has been no pause in this rapid increase, as there has been in the number of primary pupils, which did not rise between 1953 and 1955 because of economic difficulties (the slump in okoume wood) and insufficient funds.

Technical education also came into being during the war. Enrolments at the Owendo Vocational School rose steadily, from 18 pupils in 1942 to 110 in 1950. In the last few years, there has been no increase—indeed, the numbers have fallen; but the school is now being made into a *collège technique* (technical secondary school), which should give a fillip to this branch of education.

The Law of 22 June 1959, which makes education compulsory in Gabon for 'children and adolescents from 6 to 16 years of age', is likely to bring about radical changes in the structure of education in Gabon. It will be some years, however, before it has any appreciable effect on general and technical secondary education.

Administration

As already stated, the regulations governing the general organization of secondary education in France also apply to the Republic of Gabon. Secondary school examinations and certificates are the same. The same qualifications are required of teachers from France, who either work under contract to the Government of the Republic of Gabon or are seconded by the French Ministry of Education for employment in Gabon.

The *Inspecteur d'Académie*, who is the head of the Education Department, is responsible to the Ministry of National Education, Youth and Sport for the observance of both French and local regulations concerning secondary education. He has direct authority over general and technical secondary schools, and the Gabon Teacher Training School, and indirect authority over *cours complémentaires*, through the primary school inspectors. Some specialized educational institutions, which will be mentioned later, come under other ministries.

The work of the teachers in secondary schools is assessed at regular intervals by the competent department and, where possible, by inspectors-general from France, who represent the French Ministry of Education.

School buildings are financed through funds made available by the Fonds d'Aide et de Coopération (FAC—Assistance and Co-operation Fund), which has superseded the Fonds d'Investissement pour le Développement Économique et Social (FIDES—Investment Fund for Economic and Social Development). However, equipment for boarding-schools, classroom furniture, etc., are purchased from the local budget's operational funds.

Teachers working under contract are paid by the Government of Gabon from the local budget, whilst teachers from France who are seconded to Gabon have since 1 January 1960 been paid by France, with the help of credits from the FAC.

All Gabon pupils are entitled to free secondary education, provided that they have passed the competitive entrance examination. Pupils who win resident scholarships are entitled to board, lodging, clothes, textbooks and transport to their homes for the summer holidays. Those obtaining non-resident scholarships receive a monthly grant of 3,750 francs if their parents do not live in the city and 2,400 francs if they do. These scholarships are financed from the local budget.

School equipment and buildings must conform to the standards required in France, adapted to suit local conditions, with particular reference to climate.

TYPES OF SECONDARY EDUCATION

Pupils who have completed the primary course may enter: a complete secondary school (*lycée* or *collège*); a complementary school providing a short modern course; a junior teacher training school (*collège normal* or *cours normal*) at lower secondary level; a technical secondary school (*collège*

technique); or a specialized school of agriculture or forestry.

Pupils taking the competitive entrance examination, which is the same for all the above types of course, are entitled to indicate which studies they prefer. They are guided in their choice by their class teacher and by a Vocational Guidance Centre, whose function it is to spread information on this subject, particularly by radio broadcasts.

At the conclusion of the secondary course, pupils are free to choose the type of course they wish to pursue. The Vocational Guidance Centre supplies them with full information on advanced courses and opportunities for employment in Gabon.

The school year is divided up in the same way as in France. The chief modification to suit local conditions is that, for climatic reasons, most of the lessons are held in the morning.

General secondary schools

Secondary education as such is given in two schools providing a full course similar to the schools in France—the *lycée* at Libreville (a public school) and the Collège Bessieux (a Catholic school). The course lasts 7 years, divided into two cycles (4+3) and leads to the *baccalauréat*.

The *cours complémentaires* provide a 4-year course at the level of the first cycle of secondary studies and prepare pupils for the lower secondary certificate [*brevet d'études du premier cycle* (BEPC)]; the best pupils can then enter the second cycle of the full course at a *lycée* or *collège*.

The public education system includes one *cours complémentaire* in each district—a total of 9 such schools. Except for the Port-Gentil school, founded in 1957, they were opened only in 1958 and therefore will not have all four lower secondary classes until October 1961. The object—which has already been attained in part—is of course to encourage more pupils to remain at school after the primary course, but also to decentralize education and extend its emancipating influence to country districts. There is a risk, however, that once the labour market is saturated the standard of the certificate awarded at the end of the first cycle (BEPC) will tend to fall as a result of the rapid development of this type of education.

The Catholic and Protestant missions each run a *cours complémentaire*, at Oyem and Bitam respectively.

Vocational and technical schools

The only school of this type in Gabon is the Collège Technique at Libreville. It was originally a trade school (*école des métiers*) which provided training in carpentry and joinery. At the end of the 3-year course an apprenticeship certificate was awarded. In 1953, the trade school was converted into a vocational school (*école professionnelle*) with two additional sections—fitting and masonry. In 1958 the school was moved from Owendo to new premises at Libreville, and by the Law of 22 June 1959 it became a *collège technique*, with an apprenticeship centre and a crafts department (*section artisanale*) attached. It is proposed to open a commercial section for the forthcoming school year.

At present the competitive entrance examination for the *collège technique* is taken at the end of the fourth class (technical division)—the third year of the secondary course, but in future admission will be by a competitive entrance examination for pupils in the sixth class (first year of the secondary course). Pupils are admitted to the apprenticeship centre when they have reached the standard of the *certificat d'études primaires* (CEP—primary certificate), at the age of 14 to 16, by competitive examination; admission to the crafts department is by examination.

Curricula and time-tables are the same as in French technical schools. The apprenticeship centre trains carpenters, cabinet-makers, auto mechanics and fitters, and prepares pupils for the vocational proficiency certificate [*certificat d'aptitude professionnelle* (CAP)] in these subjects. The crafts department was opened in November 1959; it will provide a 4-year course. The first-year curriculum at present provides for 6 hours' general instruction and 24 hours' vocational training.

Teacher training schools

The Gabon Junior Teacher Training School (Collège Normal du Gabon), at Mitzic, was opened in 1952. It trains primary teachers and prepares them for the certificate obtainable at the end of the first cycle of the secondary course—the *brevet élémenatire* or *brevet d'études du premier cycle* (BEPC). The course therefore includes 4 years' general instruction and 1 year's professional training; the pupils gain practical experience at the practice school attached to the teacher training school.

A plan to extend the course year by year has been carried out, and the number of pupils has risen rapidly—117 pupils in 1956/57, 147 in 1957/58, 192 in 1958/59 and 215 in 1959/60. When, in the near future, the Collège Normal du Gabon (lower secondary level) becomes the École Normale du Gabon (upper secondary level) the educational system will have acquired the one training establishment it has so far lacked.

The Catholic mission operates teacher training courses at Mouila and (for girls) at Libreville, while the Protestant mission has a similar institution at Lambarene.

Other specialized schools

Agricultural Training Centre (*Oyem*). This centre, which was established in 1945, comes under the Ministry of Agriculture. It has the two following sections: an agricultural apprenticeship centre, which gives practical instruction in agriculture, and the Territorial School of Agriculture, which admits pupils from public or private schools who have completed the lower cycle of the secondary course.

In the first of these two sections pupils can obtain the vocational proficiency certificate (*certificat d'aptitude professionnelle*) and in the second a certificate called the *brevet professionnel*. In the 11 years between 1947 and 1959. 83 agricultural instructors (*moniteurs agricoles*) obtained their certificates in the Apprenticeship Centre and 11 agriculturists (*agents de culture*) were trained at the Territorial School.

The Forestry School at Cape Estérias. This school is controlled by the Forestry Department. Pupils are admitted either on application or by competitive examination. The school also admits scholarship holders from other countries and those sponsored by private firms.

The Forestry School periodically arranges practical courses for the training of qualified forestry workers for private firms. The school's statutes are drawn up by the Forestry School Council, consisting of the Minister of Forestry, the chairman of the Forestry Association, the chairman of the Chamber of Commerce, the director of the Gabon section of the Technical Centre for Tropical Forestry and the head of the Gabon Forestry Department.

Out-of-class activities

The Federation for Out-of-School Education [*Fédération des Œuvres Post- et Périscolaires* (FOPPS)], which was established in 1958, is affiliated to the French League of Education (Ligue Française de l'Enseignement). It plays an active part in arranging exchange visits of young people between the Republic of Gabon and France or other members of the Community. It organizes training courses for holiday camp monitors under the guidance and leadership of specialists from Paris.

In 1960, a film club was established and began its activities—an entirely new phenomenon in Libreville. Photography and amateur film production sections will shortly be added.

Various plans are in hand for the near future, among which the following deserve special mention: organization of free classes for adults, leading to the elementary certificate (*certificat d'études élémentaires*) and to the various other certificates; establishment of a department responsible for organizing and extending the system of holiday camps; establishment of an art education department; opening of a public library; establishment of a girls' and women's department, whose task will be to improve the social and human lot of African women.

The interest aroused by the early achievements of the FOPPS encourages the belief that all these projects may be realized in the near future.

TRENDS AND PROBLEMS

Since secondary education has been extended throughout the whole country by the establishment of *cours complémentaires* in the principal towns of each district, national education in Gabon has acquired a firm basis, which will enable the number of schools to be increased sufficiently to meet the country's needs for many years to come. It is to be expected that the *cours complémentaires* will tend to become *collèges* and that new vocational subjects will be taught in the *collège technique* or in separate new schools. It is probable, too, that, owing to the rapidly increasing number of secondary school pupils, classes will have to be opened to prepare pupils for the higher professional schools (*grandes écoles*) in France, and this will be the first step towards the establishment of the future University of Gabon.

[*Text prepared by the Ministry of National Education, Youth and Sport, Libreville, and transmitted by the French National Commission for Unesco in May 1960.*]

STATISTICS

Population (mid-year 1958 estimate): 417,000.
Area: 102,317 square miles; 265,000 square kilometres.
Population density: 4 per square mile; 1.6 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, the total enrolment was 40,919, or about 10 per cent of the population. Primary school pupils accounted for 97 per cent of the total enrolment, which was distributed almost equally between public and private schools. The proportion of girls was 34 per cent in the primary schools and 16 per cent in the secondary schools. In the public system, the average number of pupils per teacher was 48 in the primary schools and 44 in the secondary schools. Between 1953 and 1957 total enrolment increased by 39 per cent. (See Table 1.)

Enrolment trends in secondary education, 1950–57. Between 1950 and 1957 the number of pupils enrolled in secondary schools more than doubled. The average total enrolment in secondary education, for the period 1955–57, was about 3 per cent of the estimated population 15–19 years old.

Examination results in secondary education, 1953–56. The number of certificates granted each year for the years 1953/54, 1954/55, 1955/56, 1956/57, was as follows: lower secondary certificate (*brevet*), 36, 72, 43, 69; *baccalauréat*, 1st part, 4, 18, 13, 19; *baccalauréat*, 2nd part, 10 (1956/57); vocational proficiency certificate (CAP) 4, 6, –, 12. The total number of certificates granted in 1956 was two and a half times as many as in 1953.

Educational finance, 1958. For the year 1958, the budget for education amounted to 571 million French francs, averaging 1,370 French francs per inhabitant. A further sum of 79 million francs was allocated to education from the Investment Fund for Economic and Social Development (FIDES) for 1958/59, the total expenditure therefore being 650 million francs, or 1,560 francs per inhabitant. Subsidies to private education amounted to some 173 million francs. (See Table 2.)

Source. France: Ministère de la France d'Outre-Mer, *Enseignement Outre-Mer.*

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff[1]		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	149	413	...	19 686	6 055
	Primary schools, private	1957/58	163	...	...	20 077	7 336
	Total	**1957/58**	**312**	**413**	**...**	**39 763**	**13 391**
	„	1956/57	295	378	...	35 661	11 503
	„	1955/56	276	357	...	31 203	9 480
	„	1954/55	267	353	...	28 798	8 411
	„	1953/54	260	333	...	28 754	7 647
Secondary							
General[2]	Secondary schools, public	1957/58	3	13	...	566	84
	Secondary schools, private	1957/58	4	...	...	459	83
	Total	**1957/58**	**7**	**13**	**...**	**1 025**	**167**
	„	1956/57	6	12	...	929	159
	„	1955/56	11	13	...	924	137
	„	1954/55	8	14	...	768	78
	„	1953/54	6	10	...	636	64
Vocational	Apprenticeship centre, public	1957/58	1	21	...	75	—
	Apprenticeship centre, private	1957/58	1	...	...	56	—
	Total	**1957/58**	**2**	**21**	**...**	**131**	—
	„	1956/57	...	17	...	...	—
	„	1955/56	1	14	...	65	—
	„	1954/55	...	...	...	...	—
	„	1953/54	1	14	...	87	—

1. Public schools only.

2. Including teacher training.

2. EDUCATIONAL FINANCE, 1958 (in thousand French francs)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**649 970**
Government of Gabon Republic	571 070
Investment Fund for Economic and Social Development (FIDES)[3]	78 900

B. GOVERNMENT EXPENDITURE BY LEVEL AND TYPE OF EDUCATION[2]

	Amount	Per cent
Total expenditure by Government[2]	**571 070**	**100.0**
Primary education	219 800	38.5
Secondary education	87 410	15.3
Vocational education	22 120	3.9
Physical training and sports	1 200	0.2
Subsidies to private education	143 400	25.1
Miscellaneous, not specified	97 140	17.0

1. Official exchange rate (1958): 100 French francs = 0.24 U.S. dollar (approx.).
2. Budget estimate.
3. FIDES allocation for 1958/59, which includes 29,900,000 francs for private education.

REPUBLIC OF THE IVORY COAST

THE EDUCATIONAL SYSTEM

The educational system of the Republic of the Ivory Coast is similar to that of France. No appreciable change has been made in the educational structure at the various levels, in the curricula or in the examinations.

As a consequence of the adoption of the Organic Law of 1956 and the institution of the *Communauté*, control over all branches of education has been transferred to the Republic of the Ivory Coast, which, since 1 April 1959, has also exercised the powers previously vested in the *Recteur* of the Dakar *Académie* as head of the joint service of the group of French West African Territories for the co-ordination of education, culture and research.

The educational activities of the Republic are directed by a Ministry of National Education, a Ministry of Technical Education, and a Youth and Sports Secretariat.

Special agreements for technical co-operation between the French Republic and the Republic of the Ivory Coast in the educational sphere are at present under discussion.

By Order No. 2984/DE/3 of 23 December 1959, the Ministry of National Education set up a Directorate of Education which, in addition to the offices responsible for personnel, equipment, accounting, scholarships and examinations, comprises four important sections: a school buildings and equipment section; an educational section for the various types of instruction; a physical training and school sports section; and an adult education section.

A Higher Education Centre was established at Abidjan in 1958. It functions with assistance from the University of Paris, which provides teaching staff and organizes examinations based on the curricula in force in the French faculties. This centre is now preparing students for the examinations which conclude the year of preparatory studies for university entrance (literature and science) and the first year of legal studies. It may be expected to play an increasingly important part in the training of secondary school teachers.

In addition to the state schools, which come under the authority of the Ministries of Education and of Technical Education or of certain other Ministries (such as Agriculture and Health), there is a fairly large number of private schools, the majority of which provide secondary education. The Directorate of Education issues permits for these institutions (which are set up and directed by Catholic and to a lesser extent Protestant missions), supervises their staff, and makes grants towards their running expenses.

There are also a few private vocational schools; these are supervised by the Ministry of Technical Education and their pupils take the examinations organized by that Ministry.

THE DEVELOPMENT OF SECONDARY EDUCATION

Prior to 1950, secondary school teaching was among the responsibilities of the General Directorate of Education, with headquarters at Dakar, which was itself under the joint supervision of the French Ministries of Overseas France and Education. In 1950, an *académie* for French West Africa was established at Dakar. A *Recteur*, appointed by interministerial decree, was entrusted, under the authority of the High Commissioner of the French Republic in French West Africa, with responsibility for all educational matters in the territories comprised within the jurisdiction of the *académie*.

Considerable powers were subsequently vested in the governments of the individual territories, under the Organic Law of 23 June 1956 and 4 April 1957 on the new institutions of French West Africa—though the *Recteur* of the Dakar *Académie* was still responsible for co-ordinating the educational activities of all territories.

In 1958 all the powers of the *Recteur* were transferred to the governments of the individual territories.

Administration

The administration of education is the responsibility of the Central Government, which adapts it to the teaching plans drawn up at the interministerial level. The regional authorities in the administrative sub-divisions assist in the building and upkeep of school premises, and in the administrative supervision of teaching staff.

French law applies in all matters of secondary education, including the organization of teaching and administration (curricula, time-tables, enrolment, examinations, etc.) and the recognition of schools and of staff qualifications.

Inspection is carried out by inspectors-general of the French Republic, who are sent on mission at the request of the Government of the Ivory Coast.

Finance. (a) Working expenses: those of the secondary schools are met from the state budget, except for the salaries of teaching staff from metropolitan France, which are paid from the Assistance and Co-operation Fund (FAC). (b) Capital investment: the building of secondary schools was financed at first—from 1948 to 1959—from a special fund instituted by the French Government, the Investment Fund for Economic and Social Development (FIDES). As from 1959, FIDES became the Assistance and Co-operation Fund (FAC). A further source of capital investment is the European Development Fund for Overseas Countries and Territories (FEDOM) set up by the European Economic Community. (c) Scholarships: the state budget defrays the maintenance expenses of scholarship holders.

TYPES OF SECONDARY EDUCATION

As in France, two types of general education are provided in the *lycées* and *collèges;* one of these is short (4 years) and the other long (7 years). The former is also provided in the primary complementary courses (*cours complémentaires*). The short 4-year course leads to the lower cycle secondary certificate (*brevet d'études du premier cycle* or BEPC) or the elementary certificate (*brevet élémentaire* or BE). The long course supplements this by 3 further years of study (second cycle) leading to the different *baccalauréats* which, as in France, comprise various sections (classical or modern).

Technical education also differentiates between the short course given in *collèges techniques*, which leads to the industrial diploma, and the long course in the *lycées techniques*, which leads to the *baccalauréats techniques*. There is also, however, a form of technical education known as the 'primary technical and vocational training course', which is given chiefly in the vocational training schools (*centres d'apprentissage*) and leads to the vocational proficiency certificate (*certificat d'aptitude professionnel* or CAP) in various crafts.

The secondary school year follows the French pattern.

General secondary schools

The public secondary schools of the Republic of the Ivory Coast comprise 1 *lycée*, 8 *collèges*, 17 *cours complémentaires*, 1 teacher training school and 7 teacher training courses[1], with a total enrolment of 6,777 pupils; the private section comprises 8 secondary schools, 2 *cours complémentaires* and 3 teacher training courses, with a total enrolment of 1,614 pupils. In all, therefore, there are 1 *lycée*, 16 *collèges* and secondary schools, 19 *cours complémentaires*, 1 teacher training school and 10 teacher training courses, with a total enrolment of 8,391.

Examination results. During the two examination periods in 1959 (June and October), 96 pupils obtained the *brevet élémentaire* (35.5 per cent of successes) 453 the *brevet d'études du premier cycle* (53 per cent of candidates), while 90 successfully passed the examination in the first part of the *baccalauréat* (34 per cent of candidates) and 50 in the second part of the *baccalauréat* (46 per cent of candidates). During the same year, 2,039 pupils, including 246 girls, were admitted to the first-year class in secondary schools, this being equivalent to 42 per cent of the pupils taking the entrance examination. The proportion of girls is steadily increasing, and the educational and social problems resulting from their access to secondary schools are now being studied.

Teaching staff. In 1958 the teaching staff of secondary schools included 5 headmasters with *licences*, 2 *censeurs* or directors of studies, 3 teachers holding *agrégations*, 30 teachers holding primary teacher's certificates or *licences*, 20 assistant teachers and 35 headmasters or teachers in *cours complémentaires*.

The number of Africans in primary school teaching is rapidly increasing, but this is not the case in secondary schools, where the staff is almost entirely French. Students from the Ivory Coast are now receiving higher education either in France, at the University of Dakar, or at the Higher Educational Centre at Abidjan, and in the near future will be able to take a hand in running the *lycées* and *collèges* of their own country.

Vocational and technical schools

The Republic of the Ivory Coast includes among its educational facilities a *lycée technique* for boys, where the curriculum comprises the following specialized subjects: general mechanics, carpentry, commercial course, shorthand-typing, and surveying. Pupils prepare for the *baccalauréat technique*, the industrial teachers' diploma, the commercial teacher's diploma or the preliminary surveyor's diploma. Three *centres d'apprentissage* prepare pupils for the vocational proficiency certificate (CAP) in the following subjects: auto mechanics, metal fitting, boilermaking, electrical fitting, masonry, carpentry and joinery, clerical work, shorthand-typing, book-keeping. A school of pottery and ceramics trains craftsmen, pottery being still the principal branch of handicrafts in this area. There are also in-service training courses for state employees, building workers and commercial staff, and intensified vocational training courses for the following branches of employment: shorthand typists, clerical staff, refrigeration mechanics and printers. In October 1959 these vocational training courses were attended by 460 students, or 60 more than the previous year. The Village Assistance Service trains village craftsmen at a *centre d'apprentissage*.

Mention should also be made of the recent opening of a rural technical centre at Gagnoa, as the first step in the government programme to improve the conditions and standard of living of the country people.

Teaching staff. The teaching staff for technical education, the majority of whom come from France, consisted in 1958 of 4 assistant technical teachers, 4 supervisors, 2 teachers of general subjects, 10 foremen, and 13 skilled workers and monitors supervising manual teaching.

Since October 1959 the vocational centres for women have been under the authority of a specialized service for the teaching of domestic occupations. The rapid expansion of technical education for girls is reflected in the examination results: 23 CAPs were awarded in 1959 (12 for domestic work, 7 as mothers' helps and 4 for sewing), as compared with only 1 in 1958.

There are a few private vocational schools, most of them commercial or for girls, which prepare pupils for the CAP. Of the 29 commercial CAPs issued by the Ministry in 1958, 4 went to pupils from private schools.

Other specialized schools. There is a vocational training school of agriculture (*centre d'apprentissage agricole*), which is run by the Ministry of Agriculture, a preparatory and technical school of military training (at Bingerville), and an arts school, also at Bingerville, which is a private establishment receiving a grant from the public authorities.

Teacher training schools

Primary school teachers (*instituteurs*) are trained at a teacher training school of the French type. At present it has 107 pupils. There is a competitive entrance examination,

1. These schools will be considered later under the heading 'teacher training schools'.

but since 1957 the school has also been providing teacher training for any holders of the *baccalauréat* who wish to take up primary school teaching as a career.

Ten teacher training courses (3 of them private) train students as assistant teachers (*instituteurs-adjoints*); candidates must be holders of the BE or the BEPC; the course lasts 12 months.

TRENDS AND PROBLEMS

The former 4-year plan sought to increase school attendance and train as many qualified teachers as possible. To this end, it aimed at establishing further *cours complémentaires* with provision for boarders, to open *collèges* and to establish a *lycée* for girls and a co-educational *lycée*.

Political developments have, however, led to the drafting of a 5-year plan 'better adapted to the new circumstances of the country'.

The establishment of a teacher training service under the Directorate of Education will facilitate the study of possible reforms in the school curricula and means of improving the system and structure of education.

The extension of general and technical secondary education is one of the chief aims of the Ministries concerned, owing to the need, for the Ivory Coast, to ensure the rapid training of the administrative and technical staff required both for Africanization and for the expansion of industrialization.

[*Text prepared by the French National Commission for Unesco in March 1960.*]

STATISTICS

Population (mid-year 1958 estimate): 3,090,000.
Area: 124,503 square miles; 322,463 square kilometres.
Population density: 25 per square mile; 10 per square kilometre.

Summary of school statistics, 1953–57. There were about 131,000 pupils enrolled in all levels of education in 1957/58, being about 4 per cent of the total population. About 95 per cent of all the pupils were in primary schools. Girls constituted about one-fourth of the total enrolment. In the public schools, the average number of pupils per teacher in 1956 was 38 in the primary schools, 27 in general secondary schools, and 15 in the vocational schools. The total enrolment in 1957 was more than two and a half times as high as in 1953. (See Table 3.)

Enrolment trends in secondary education, 1950–57. Secondary school enrolment increased at such a rate between 1950 and 1957 that the average total enrolment for 1955–57 was more than twice as high as for 1950–54. Nevertheless, the ratio of secondary pupils to the estimated population 15–19 years old, still stands at less than 2 for the period 1955–57. (See Table 4.)

Examination results in secondary education, 1953–56. The total number of pupils receiving all types of certificates in 1955/56 was twice as high as in 1953/54, but there was a decrease in each category (except the second part of the *baccalauréat*) in 1956/57. (See Table 2.) More recent information is given in the text.

Educational finance, 1957. For the fiscal year beginning in January 1957, total budget expenditure for education amounted to 1,357 million C.F.A. francs, averaging about 450 francs per inhabitant. Recurring expenditure was 96 per cent of the total. Teachers' salaries accounted for 53 per cent of the recurring expenditure. (See Table 1.)

Source. Republic of the Ivory Coast: reply to Unesco questionnaire. France: Ministère de la France d'Outre-Mer, *Enseignement Outre-Mer.*

1. EDUCATIONAL FINANCE, 1957 (in thousand C.F.A. francs)[1]

Expenditure by purpose	Amount	
Total expenditure[2]		**1 357 173**
Recurring expenditure		1 297 073
For central administration	28 959	
For instruction		
Salaries to teachers, etc.	683 073	
Other instructional expenditure	320 041	
Other recurring expenditure	265 000	
Capital expenditure		60 100

1. Official exchange rate (1957): 100 C.F.A. francs = 0.57 U.S. dollar (approx).
2. Budget estimate.

2. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–56

Type of diploma or certificate granted	School year							
	1953/54		1954/55		1955/56		1956/57	
	Total	Female	Total	Female	Total	Female	Total	Female
Lower secondary certificate (BE or BEPC)	148	...	253	...	298	...	271	...
Baccalauréat							57	
First part	38	...	54	...	99	...	66	...
Second part	35	...	28	...	39	...		...
Industrial or commercial certificate *(brevet)*	9	...	2	...	10	...	—	—
Vocational proficiency certificate (CAP)	31	...	35	...	77	...	55	...

3. SUMMARY OF SCHOOL STATISTICS, 1953–56[1]

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff[2]		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1956/57	393	1 474	...	56 499	12 713
	Primary schools, private	1956/57	255	...	...	34 408	6 261
	Total	**1956/57**	**648**	**1 474**	**...**	**90 907**	**18 974**
	„	1955/56	469	1 074	...	68 822	14 039
	„	1954/55	369	844	...	57 243	11 687
	„	1953/54	289	719	...	46 234	8 476
Secondary							
General	*Lycée*, public	1956/57	1	75	...	657	104
	Collèges, public	1956/57	4			1 368	203
	Collèges, private	1956/57	3	...	...	596	201
	Total	**1956/57**	**8**	**75**	**...**	**2 621**	**508**
	„	1955/56	8	64	...	2 326	436
	„	1954/55	7	54	...	1 818	327
	„	1953/54	7	50	...	1 517	281
Vocational	*Collège technique*, public	1956/57	1	76	...	160	3
	Apprenticeship centres, public	1956/57	4			452	53
	Manual training centres, public	1956/57	23			503	301
	Apprenticeship centres, private	1956/57	2	...	...	56	—
	Manual training centres, private	1956/57	7	...	...	131	131
	Total	**1956/57**	**37**	**76**	**...**	**1 302**	**488**
	„	1955/56	33	69	...	1 100	253
	„	1954/55	25	55	...	830	277
	„	1953/54	21	53	...	628	162
Teacher training	Teacher training school, public	1956/57	1	...	...	73	—
	Teacher training courses, public	1956/57	7	...	...	664	107
	Teacher training courses, private	1956/57	...	...	...	176	7
	Total	**1956/57**	**...**	**...**	**...**	**913**	**114**
	„	1955/56	8	...	...	663	85
	„	1954/55	6	...	...	534	37
	„	1953/54	6	...	...	441	35

1. In 1957/58, there were 125,727 (F. 29,734) pupils enrolled in primary schools and manual training centres, 4,310 (F. 786) in secondary schools and teacher training courses, and 794 (F. 114) in public technical schools and in public apprenticeship centres; in 1959/60 there were 266 students enrolled in higher education.
2. Public schools only.

4. TRENDS IN SECONDARY EDUCATION, 1950–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1950	[1]1 268	14	331	—	...	...			
1951	[1]1 482	14	327	2	...	...			
1952	1 288	16	612	32	369	7	2.3	228	*1.0*
1953	1 517	19	628	26	441	8			
1954	1 818	18	830	33	534	7			
1955	2 326	19	1 100	26	663	16			
1956	2 621	19	1 302	42	913	30	*4.7	258	**1.8*
1957	[1]4 310	18	...	...	...	...			

1. Data on teacher training are included with those on general education.

MALAGASY REPUBLIC

THE EDUCATIONAL SYSTEM

With the transformation of the political structure of the country, the system of education is itself undergoing change, and only a brief account of the main features will be given here.

The Constitution provides for two official languages, French and Malagasy. The Ministry of Education controls all public schools and subsidizes private schools in proportion to the number of qualified teachers and results achieved in public examinations. The central authorities legislate for education through decrees and circulars broad lines of policy, the curriculum and examination standards being the principal fields reserved for Ministry decision. The administration, inspection and financing of the schools are devolved to provincial authorities and the provincial directors of education.

The expansion of education is planned, and at present occupies a distinct place in the third four-year plan for national development (1958–62). The main educational goals of this plan are to complete the structure of higher education, decentralize secondary education, produce in technical schools the manpower at intermediate and higher level needed for production, develop rural trades and crafts and, for primary schooling, to complete the reform begun in 1951.

Funds for education are derived from the state budget, and in 1958 made up 9.7 per cent of all public expenditure. The greater part of this money is made available through the provincial authorities, which vary in the degree to which they devote funds to education. Still further decentralization to the level of districts and *communes* is being considered. For capital outlay, the state budget is assisted by FIDES funds from France, and the purpose of this aid in the 1958–62 period is mainly to construct secondary school buildings.

The inspection of secondary and technical schools is undertaken by a central inspectorate seconded from France.

TYPES OF SECONDARY EDUCATION

A unified primary school course lasting 6 years is progressively replacing the two previous types of primary school using the medium of French and Malagasy respectively. As in France, *cours complémentaires* (complementary courses) have been added to the complete primary course, and these still remain under the primary education authorities but are treated more and more as secondary schools with a short modern curriculum.

Upon completing the sixth primary grade, pupils take the *entrée en sixième* examination, provided they are over 11 and under 15 years of age. Success gives admission to the various forms of secondary education.

The academic secondary course lasts 7 years and is provided by *lycées* and *collèges* with their two cycles of study: 4 years to the *brevet*, 3 further years for the two parts of the *baccalauréat*. Curricula are similar to those followed in France; the language of instruction is French with Malagasy as a subject.

Since October 1957 as many *cours complémentaires* as possible have been developed to the full 4-year period of the first cycle of secondary education. The curriculum has been modified (e.g. through the introduction of a foreign language) so as to facilitate passage to the second cycle.

Four types of technical and vocational school are distinguished. School workshops are attached to certain centrally placed primary schools. Apprenticeship centres give a course lasting 3 or 4 years and are administered provincially, so that the curriculum corresponds in part to local needs. Vocational schools of a more specialized type are now developing. And finally, there is the *collège technique* with a full secondary course of 7 years leading to a technical *baccalauréat*.

Teacher training centres may also be regarded as vocational schools at secondary level. They were formerly sections of administrative schools (training for various government posts) but are now being established as provincial junior teacher training schools (*cours normaux*). Students take the lower cycle of secondary studies (4 years) and then a 1 year professional course. There is also an *école normale* of the French type, where students complete the *baccalauréat* before taking a 1-year teacher training course.

[*Text prepared by the Unesco Secretariat in June 1960 from official sources.*]

STATISTICS

Population (mid-year 1958 estimate): 5,184,000.
Area: 227,800 square miles; 590,000 square kilometres.
Population density: 23 per square mile; 9 per square kilometre.

Summary of school statistics, 1953–57. For 1957/58, total enrolment may be roughly estimated at 350,000 pupils, or about 7 per cent of the total population. More than 90 per cent of these pupils were in primary schools. The proportion of girls was 43 per cent in primary schools, 35 per cent in secondary schools, and 17 per cent in the Institute of Higher Studies. Between 1953 and 1957, primary school enrolment increased by 22 per cent and secondary school enrolment by 59 per cent. (See Table 3.)

Enrolment trends in secondary education, 1944–57. Enrolment in general secondary schools multiplied nearly 7 times between 1944 and 1957. In vocational education, the increase between 1944 and 1956 was even more striking; in teacher training it was less so. For the period 1955–57, the estimated average total enrolment, in all types of secondary schools, was nearly 7 per cent of the estimated population 15–19 years old. (See Table 4.)

Examination results in secondary education, 1953–57. At the end of the 1957/58 school year, 1,038 certificates were awarded for general secondary education (*brevets* and *baccalauréats*) against only 304 for the year 1953/54. Certificates of vocational education (commercial and industrial *brevets* and CAPs) were 7 times as many in 1957 as in 1954 or in 1953. Teaching training certificates reached their highest number in 1955. (See Table 1.)

Educational finance, 1957. For the fiscal year beginning in January 1957, total expenditure for education (not including agricultural and forestry education) was budgeted at 2,209 million C.F.A. francs, averaging about 450 francs per inhabitant. About 10 per cent of the total came from the Investment Fund for Economic and Social Development (FIDES). The distribution of the recurring expenditure by level and type of education is shown in Table 2B.

Source. Malagasy Republic: replies to Unesco questionnaires.

1. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Lower secondary certificate (*brevet*)	97	32	100	29	389	105	482	111	635	...
Baccalauréat										
First part	131	47	141	43	212	60	212	60	252	...
Second part	76	25	97	33	98	37	157	85	151	...
Commercial or industrial certificate (*brevet*)	—	—	8	...	5	...	38	...	57	...
Vocational proficiency certificate (CAP)	60	28	216	17	200	...	323	...	421	...
Teacher training certificate										
Lower stage	112	52	204	69	236	59	136	30	139	...
Higher stage	5	4	3	2	4	3	12	11	20	15

2. EDUCATIONAL FINANCE, 1957 (in thousand C.F.A. francs)[1]

A. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**2 209 019**
Recurring expenditure		1 969 594
For general administration and inspection	12 377	
For salaries to teachers, etc.	1 475 905	
Other recurring expenditure	481 312	
Running expenses	240 537	
Scholarships	122 575	
Subsidies to private education	118 200	
Capital expenditure		[3]239 425

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION[4]

	Amount		Per cent
Total recurring expenditure[4]		**1 978 019**	**100.0**
Central administration		92 184	4.7
Instruction		[5]1 770 958	[5]89.5
Primary education	951 069		48.1
Secondary education	756 762		38.3
General	428 885	21.7	
Vocational	327 877	16.6	
Teacher training	...	...	
Higher education	26 614		1.3
Physical training and sports	36 513		1.8
Other recurring expenditure (subsidies for private education and scholarships from provincial budgets).		114 877	5.8

1. Official exchange rate (1957): 100 C.F.A. francs = 0.57 U.S. dollar (approx.).
2. Budget estimate. Data do not include expenditure for agricultural and forestry education.
3. Of which 231,000,000 C.F.A. francs was allocated from the Investment Fund for Economic and Social Development (FIDES).
4. Includes capital expenditure amounting to 8,425,000 C.F.A. francs.
5. Includes expenditure for teacher training.

3. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergarten classes, public	1956/57	...	...	...	471	208
	Kindergarten classes, private	1956/57	...	...	...	4 467	2 191
	Total	**1957/58**	**...**	**...**	**...**	**...**	**...**
	,,	1956/57	...	...	...	4 938	2 399
	,,	1955/56	...	...	...	3 955	1 929
	,,	1954/55	...	...	...	2 981	1 341
	,,	1953/54	...	...	...	2 674	1 215
Primary	Primary schools, public	1957/58	1 522	...	...	207 031	83 071
	Primary schools, private	1957/58	832	...	...	114 487	54 074
	Total	**1957/58**	**2 354**	**...**	**...**	**321 518**	**137 145**
	,,	1956/57	2 154	[1]5 084	...	309 537	129 574
	,,	1955/56	2 151	[1]4 101	...	288 476	118 466
	,,	1954/55	2 026	[1]4 494	...	274 826	111 108
	,,	1953/54	2 021	[1]3 720	...	264 611	107 905
Secondary *General*	Secondary school and complementary courses, public	1957/58	30	...	...	5 705	1 862
	Secondary schools and complementary courses, private	1957/58	126	...	...	11 348	4 069
	Total	**1957/58**	**156**	**...**	**...**	**17 053**	**5 931**
	,,	1956/57	158	[1]128	...	14 964	5 153
	,,	1955/56	135	[1]110	...	12 993	4 171
	,,	1954/55	135	[1]103	...	12 295	4 139
	,,	1953/54	117	[1]111	...	10 739	...
Vocational	Technical and commercial schools, public	1956/57	3	860	...	601	78
	Apprenticeship centres, public	1956/57	19			1 805	223
	Vocational courses, public	1956/57	...			[2]314	[2]143
	Apprenticeship centres, private	1956/57	4	...	...	108	18
	Vocational courses, private	1956/57	11	...	...	[2]289	[2]184
	Total	**1957/58**	**...**	**...**	**...**	**...**	**...**
	,,	1956/57	[3]37	[4]860	...	3 117	646
	,,	1955/56	[3]35	[4]669	...	2 897	527
	,,	1954/55	[3]31	[4]660	...	2 754	662
	,,	1953/54	[3]26	[4]660	...	2 520	361
Teacher training	Teacher training courses, public	1956/57	5	[1]...	...	135	15
	Teacher training school, public	1956/57	1	4	...	35	5
	Teacher training courses, private	1956/57	...	[1]...	...	66	—
	Total	**1957/58**	**...**	**...**	**...**	**...**	**...**
	,,	1956/57	[4]6	[1]...	...	236	20
	,,	1955/56	[4]4	[1]...	...	324	15
	,,	1954/55	[4]4	[1]...	...	266	71
	,,	1953/54	[4]4	[1]...	...	223	28
Higher	Institute of Higher Studies						
	Total	**1957/58**	**1**	**...**	**...**	**424**	**73**
	,,	1956/57	1	27	—	507	71
	,,	1955/56	1	27	1	446	58
	,,	1954/55	1	30	2	425	71
	,,	1953/54	1	28	1	328	47

1. Teachers in complementary and teacher training courses are included in primary schools.
2. Part-time pupils only.
3. Not including public vocational courses.
4. Public schools only.

4. TRENDS IN SECONDARY EDUCATION 1944–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1944	2 499	33	229	—	64	13	3	270	*1*
1945	...	...	...	...	...	...			
1946	3 456	43	476	8	74	8			
1947	4 714	33	456	9	62	3	*5	257	**2*
1948	5 265	36	598	10	76	9			
1949	6 638	38	566	13	65	9			
1950	9 449	36	427	...	100	6			
1951	11 027	30	609	—	104	10			
1952	10 808	30	2 739	13	377	28	13	272	*5*
1953	10 739	...	2 520	14	223	13			
1954	12 295	34	2 754	24	266	27			
1955	12 993	32	2 897	18	324	5			
1956	14 964	34	3 117	21	236	1	*18	275	**7*
1957	17 053	35	...	...	...	...			

ISLAMIC REPUBLIC OF MAURITANIA

THE EDUCATIONAL SYSTEM

The educational system as a whole in the Islamic Republic of Mauritania is governed by Decree No. 5003 of 21 March 1959, the 85 Articles of which constitute the Code of the Teaching Profession, as envisaged in Article 3 of the General Civil Service Code (Act No. 52) of 4 July 1957.

The main factors affecting the provision of general and technical secondary education are as follows:

Geographical. Sites for schools have had to be chosen in localities comparatively easy to reach from the various parts of the Republic, for the great distances and the lack of means of communication seriously handicap all forms of public life.

Ethnical. The political necessity of mitigating or overcoming the effects of marked differences in race among the population made it essential to bring together rather than segregate the young people now being trained for posts of responsibility. The Republic accordingly established a single school for general secondary education and a single school for technical secondary education, instead of a number of small regional institutions.

Linguistic. In view of the variety of vernaculars (Hassania, Wolof, Sarakolé and Fulah dialects) and the State's links with the French Community, French was proclaimed the official language in 1959 (Arabic already being the national language). Secondary instruction is given entirely in French. Arabic is a compulsory subject, but figures in the time-table and curricula as the first foreign language. The various dialects are not taught.

Religious. Loyalty to Muslim traditions and beliefs is proving perfectly consistent with a quite manifest determination to modernize the educational system on Western lines.

The Government of the Republic includes a Ministry of Education, Youth and Information. The Minister is assisted by a technical adviser with the rank of *Inspecteur d'Académie* who acts as Director of Education. The local authorities, no matter what their level or nature, have no power to deal with secondary education as it is entirely under the central administration.

The only private institution is the Muslim Institute at Boutilimit, which was in existence before secondary education was introduced into Mauritania. It is not subject to any administration or pedagogical control but receives a grant from the Ministry of the Interior. It confines its activity to preserving the tradition of Islam (Arabic language and Islamic thought).

THE DEVELOPMENT OF SECONDARY EDUCATION

For a long time the two former territories of Senegal and Mauritania had all political, administrative and educational institutions in common and until 1945 all the secondary schools were in Senegalese territory—the Lycée Faidherbe at Saint Louis du Sénégal being sufficient to meet Mauritania's modest requirements.

The first Mauritanian school to go beyond the primary school certificate was a higher primary school which was opened in 1946, in Rosso, on the banks of the Senegal river. It was converted into a *collège moderne* in 1949. In 1953, when it looked as if Rosso was to become the capital of Mauritania, the *collège* was transferred to a new site outside the locality and accommodated in buildings designed to take 270 scholarship-holding boarders.

In 1958, the first autonomous Government of Mauritania decided to extend education rapidly among children, bring about a massive increase in secondary enrolment, and transfer the *collège* from Rosso to Nouakchott, situated on the dividing line between the two main ethnic groups in Mauritania. It was decided that the school should become a *lycée*, providing the 'long course' (*enseignement long*) of secondary schooling, divided into lower and upper cycles in the French pattern, and that it should house 700 to 800 pupils. The funds required for buildings to accommodate the first few grades of the school (300 pupils) were allotted by the Assistance and Co-operation Fund in 1960, and the school is due to open in October 1961. In the meantime the first-year class (*classe de sixième*), instituted in October 1959, is housed in temporary premises; the second-year class (*cinquième*) is to be instituted in October 1960. As the premises of the Rosso *collège* become available through the gradual transfer of secondary grades to Nouakchott, they will be used for technical instruction (as a primary technical school, at first, and later as a *collège technique*). It was also decided to run 3 *cours complémentaires* (primary complementary classes) at Atar, Aioun-el-Atrouss, and Kaédi. Such classes have been in operation in the last two localities since 1959.

Administration

All the present laws and regulations governing secondary education are contained in the Code of the Teaching Profession in Mauritania.

The general organization of education comes entirely under the Director of Education who is responsible to the Minister. The curricula, teaching methods and textbooks are, for the time being at least, the same as those for the corresponding French institutions.

School principals come under the direct authority of the central administration, all Ministry instructions being imparted to them by the Director of Education, who supervises implementation of policy. However, each school has a board of management (*conseil d'administration*) with the power to make recommendations for improving the running of the school.

The Director of Education is the only person qualified to inspect secondary schools, under the authority of the Ministry of Education, though the latter may also call in specialized inspectors for specific tasks: the administrative inspectorate of the Republic, to investigate the conduct of financial affairs, or inspectors-general of the French Ministry of Education for the various subjects. The inspectorate envisaged in the Code of the Teaching Profession will be set up when the secondary education system is large enough to warrant it.

The funds required for running the secondary schools come mainly from the national budget and partly from the French budget, under the heading of Aid and Co-operation. The appropriations made in the state budget on the proposal of the Ministry of Education for maintaining individual schools are administered by the Director of Education under the supervision of the Ministry of Finance.

Indigenous teachers and staff of non-Mauritanian nationality recruited under contract are paid from the Mauritanian budget, while teachers serving under the French technical assistance programme, i.e., regular French staff on secondment, are paid by the French Ministry of Education. No charge is made for education; on the other hand parents are given no assistance to enable them to keep their children at school.

The standards required of builders and maintenance services as regards space, heating, lighting, sanitation, safety, etc., are the same as those in force in corresponding establishments coming under the French Ministry of Education.

The medical service is staffed by the Health Department. Pupils' recreation is organized by the Youth and Sports Department of the Ministry of Education.

TYPES OF SECONDARY EDUCATION

There are three types of school providing full-time general education—the *lycée*, the *collège* and the *cours complémentaires*. There are no technical or teacher training schools.

All students who have completed their secondary studies and passed their *baccalauréat* have an opportunity to go on to institutions of higher education in France. This they are able to do thanks to state scholarships or French scholarships.

The classes begin in mid-October (end of the rainy season during which land communication is impossible) and finish at the end of June, examinations being synchronized as far as possible with those in the neighbouring States belonging to the *Communauté*. The school year is divided into three terms, with two holidays of one week in between. The schools also close on the official holidays of the Republic and the *Communauté:* 28 November (Republic Day), Christmas Day, Easter Monday, 1 May (Labour Day), 8 May (Armistice Day), Ascension Day and Whit Monday, and on the feasts of Mouloud or Gamou, El Father and Id El Ham. The summer holidays last from the evening of 13 July to the morning of 14 October.

There are no classes on Sundays, or on Thursday and Saturday afternoons, which are reserved for sports and recreation. School hours on the other days are from 8 a.m. to noon, and from 3 to 6 p.m.

General secondary schools

Admission to secondary education is by competitive

examination for entry into the first grade (*sixième*) and all pupils who have successfully completed the primary course can compete for the available places. They have three choices: the Nouakchott *lycée*, the Rosso *collège* or the *cours complémentaires* at Kaédi or Aioun-el-Atrouss. The wishes of the applicants are taken into account as far as their examination rating permits.

Subjects and teaching methods are the same as those in French state schools except that the first language has to be Arabic and the second English (all subjects other than these languages being taught in French). The weekly time-table is the same as for the corresponding sections of French secondary schools. The school results are satisfactory when one considers the resources available and especially the local handicaps: the trying climate which curtails the school year, the inadequate buildings and equipment and the uncertain supply of teachers. The examinations are organized and the results evaluated in accordance with French standards. The only national peculiarities are a strong liking for the French language (which is preferred to the mother tongue) and a marked general aptitude for the study of mathematics and grammar.

It is impossible to give a general assessment of the teaching staff. Teachers are very few in number (16 teachers in 1959–60 and 22 in 1960–61) and very uneven in quality. Practically the entire staff is renewed every year and hence teachers develop no strong attachment to the country or to their job. Furthermore, most of the teachers lack the academic qualifications for the work they perform. There are three different methods of recruitment: through the French Secretariat of the Assistance and Co-operation Fund (FAC) in the case of seconded French teachers; directly by the Mauritanian Education Department in the case of teachers engaged on contract (some of whom come from countries outside the *Communauté*, such as Tunis, Lebanon and Morocco, and others from French private schools); local recruitment of indigenous teachers. The indigenous teachers and seconded French teachers are established staff, their career (salary, promotion, changes in post) being regulated in accordance with French practice. The French seconded teachers are given home leave and have their travel expenses (to France and back) paid for them. All posts, including the administrative ones, will ultimately be filled by Mauritanians.

TRENDS AND PROBLEMS

Present policy in secondary education aims at the rapid formation of an elite so as to speed up the Africanization of the economic and administrative leadership of the nation. The training of this elite is well under way, as far as the number of children to be given secondary education is concerned, but the course is intellectualized to the highest degree, reproducing in detail the curricula and time-tables of the various sections of the French *lycée*.

Two problems are therefore likely to arise in the near future. The first will be that of finding employment for all secondary leavers. Failing a revolutionary change in the methods of producing the national wealth, and a rapid increase in population (of which there is at present no sign) Mauritania's needs in technicians and administrators will remain extremely limited. If Mauritanians are appointed as soon as possible to every post now held by non-Mauritanians, and for which a complete secondary education is the minimum qualification, all such posts will be filled by 1967. From that date onwards, however, the number of secondary leavers will be much greater owing to heavy intakes since 1958 (155 enrolments in the *classe de sixième* in 1958, 125 in 1959 and 125 in 1960).

The second problem is the adaptation of education to the country's needs. This has already been partially solved at the primary level but has yet to be taken up for secondary education. Urgent consideration needs to be given to adapting the latter to less academic ends, i.e., for purposes related to Mauritanian conditions.

[*Text prepared by the Ministry of Education, Youth and Information, Nouakchott, and transmitted by the French National Commission for Unesco in May 1960.*]

STATISTICS

Population (mid-year 1958 estimate): 640,000.
Area: 419,230 square miles; 1,085,805 square kilometres.
Population density: 1.5 per square mile; 0.6 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58 there were 6,784 pupils enrolled in 97 public schools, representing slightly over 1 per cent of the total population. The great majority of these pupils were in the primary schools, where there was an average of 32 pupils per teacher. In the two secondary schools, the average pupil teacher ratio was 42. Girls represented less than 8 per cent of the total enrolment. Between 1953 and 1957, total enrolment increased by 56 per cent. (See Table 1.)

Enrolment trends in secondary education, 1950–57. Even though the secondary school enrolment in 1957 was twice as high as in 1950, it represented hardly 0.5 per cent of the estimated population 15–19 years old. The number of girls receiving a secondary education had increased from 2 in 1951 to 15 in 1957.

Examination results in secondary education, 1953–56. The total number of lower secondary certificates awarded an completion of the 4 years' schooling in a secondary school or *cours complémentaires* (the *brevet d'études du premier cycle* or the *brevet élémentaire*) was 25 in 1953, 14 in 1954, 28 in 1955, and 36 in 1956.

Educational finance, 1958. The Government budget for education in 1958 was 460 million French francs. For 1958/59 an additional sum of 68 million francs was allocated from the Investment Fund for Economic and Social Development (FIDES). The total amount from these two sources represented an average expenditure of about 825 francs per inhabitant. (See Table 2.)

Source. France: Ministère de la France d'Outre-Mer, *Enseignement Outre-Mer.*

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public						
	Total	**1957/58**	**95**	**200**	...	**6 493**	**519**
	„	1956/57	73	144	...	5 540	759
	„	1955/56	65	199	...	4 998	687
	„	1954/55	60	152	...	4 543	563
	„	1953/54	56	167	...	4 135	462
Secondary *General*	Secondary schools, public						
	Total	**1957/58**	**2**	**7**	...	**291**	**15**
	„	1956/57	2	4	...	243	—
	„	1955/56	2	4	...	256	—
	„	1954/55	2	4	...	234	2
	„	1953/54	2	4	...	210	3

2. EDUCATIONAL FINANCE, 1958 (in thousand French francs)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**528 300**
Government of Mauritania	460 300
Investment Fund for Economic and Social Development (FIDES)[3]	68 000

B. GOVERNMENT EXPENDITURE BY LEVEL AND TYPE OF EDUCATION[2]

	Amount	Per cent
Total expenditure by Government[2]	**[4]460 300**	**100.0**
Primary education	296 610	64.4
Secondary education	141 890	30.8
Physical training and sports	3 640	0.8
Subsidies to societies	600	0.1
Miscellaneous, not specified	17 560	3.8

1. Official exchange rate (1958): 100 French francs = 0.24 U.S. dollar (approx.).
2. Budget estimate.
3. FIDES allocation for 1958/59 for public education only.
4. Includes expenditure for equipment amounting to 31 million francs.

REPUBLIC OF THE NIGER

THE EDUCATIONAL SYSTEM

Primary, secondary and technical education all come under the authority of the Ministry of Education, Youth and Sport. Education is provided free of charge; moreover, numerous boarding scholarships are granted as pupils are often needy and almost always separated from their families by considerable distances. There is no private secondary education.

Industrial vocational training comes under the Ministry of Labour and is financed from the proceeds of the recently instituted apprenticeship tax; technical education does not benefit from this tax.

The Ministries of Health, Agriculture and Stock Farming also run vocational schools, or apprenticeship centres, which recruit their pupils from among holders of the elementary primary certificate or at a slightly higher level.

In accordance with the Constitution, French is the official language of the Republic.

THE DEVELOPMENT OF SECONDARY EDUCATION

The circumstances peculiar to each of the former territories of French West Africa exerted an influence on the organization and operation of their respective educational services. For a long time this meant that the various elements of the educational system (courses, examinations, etc.) were of a purely local character—an arrangement which, while offering immediate advantages, presented drawbacks in the long run.

As development proceeded at an ever increasing pace, the need was felt for local leaders and, at the beginning, these could only be trained in France. Unless they held French educational qualifications, candidates had to give up the idea of further studies or of specialization in certain branches. After the adoption of the 1946 Constitution, therefore, the organization of the school system and in particular the examination system were brought into line with those obtaining in France.

Legal basis

French legislation is still in force in the Republic of the Niger with respect to organization into stages, curricula (adapted to local requirements in so far as the natural sciences, history and geography are concerned), time-tables, teachers' duties, examinations. Compulsory schooling cannot, of course, be implemented in a country where only 6 per cent of the children of school age are enrolled in schools.

Administration

There is no advisory council for secondary education. The adaptation of curricula, and the revision of textbooks which would be entailed by such adaptation, are being considered by the Conference of Ministers of Education of the *Communauté*. It is highly doubtful whether it would be worthwhile issuing special editions of textbooks for each State of the *Communauté*, or even for French-speaking Tropical Africa and Equatorial Africa. Accordingly, the revision will largely be embodied in loose-leaf insertions.

The Ministry of Education has only one Directorate of Education. At the head of the educational services is an *Inspecteur d'Académie* provided by the French Republic in accordance with the Cultural Convention of 11 September 1959. He exercises direct control over the principals of secondary schools (*collèges*) and vocational training schools (*centres d'apprentissage*), and indirect control over the persons in charge of teacher training courses and primary complementary courses (*cours complémentaires*); the latter provide instruction equivalent to the first cycle of secondary education but are subject to supervision by the primary school inspectors. This system is modelled on the administration of education in France at the level of the *département*.

Management boards (*conseils d'administration*) modelled on those in metropolitan France, were at one time set up for the existing *collège* and teacher training courses. In France, however, the chief task of these boards is to draw up the draft budget for the schools in question. In the Niger, where schools have no individual income and school budgets are incorporated in the general budget for education, and where, moreover, leaders in the liberal professions or in commerce and industry are still very few in number, the administrative boards had no essential purpose to serve and soon became dormant.

The supervision of general secondary schools and other schools of the same level is ensured mainly by the *Inspecteur d'Académie*. In compliance with the above-mentioned Cultural Convention, general inspection missions (inspectors-general specialized in particular subjects, and in technical education) are sent out from France. These missions inspect members of the teaching staff who are established teachers of the French Republic and, if requested to do so by the Republic of the Niger, they also supervise the other members of the teaching staff.

Parents' committees play only a small part (as advisers) in a clearly defined field (community life).

Finance. The funds required for education at the various levels are provided by the State, which controls their employment. These funds are paid in to a special agency which operates at the administrative level of the *cercle* (administrative district). The principals of schools, assisted by bursars, draw up their budgets. The agency checks these budgets and makes the necessary payments. At Niamey, the Directorate of Finance is responsible for such checking and payments.

Secondary schools and technical schools have been built mainly with the help of subventions received from France and paid out of the Investment Fund for Economic and Social Development (FIDES); they are now paid out of the Assistance and Co-operation Fund (FAC). On the other hand, the costs of furniture and equipment have nearly always been borne by the Niger.

With regard to teachers' salaries, members of the established staff working under the French programme for technical assistance are remunerated by the French authorities, who also pay their travel expenses. Staff engaged under contract, whether or not recruited in France, may be partly remunerated under the technical assistance programme. Lastly, the salaries of local staff holding the same university degrees and the same diplomas as the European staff are, in principle, paid out of the state budget (though there are a few exceptions).

Substantial funds are provided for scholarships. In fact, the great majority of the pupils are scholarship-holders whose entire expenses are borne by the State, which provides them with education, board and lodging, clothing, the means of transport and pocket money.

Buildings and equipment. The standards applied are those defined by the regulations in France relating to school buildings.

School welfare services. Education does not as yet have any medical or social services of its own. Teachers and pupils are fully cared for in state hospitals in the event of sickness or accident.

TYPES OF SECONDARY EDUCATION

Secondary education is at present represented by: (a) a *collège*, providing a full course of study up to *baccalauréat* standard and also comprising a commercial technical section; a *collège* for girls is to be established in the near future; (b) a teacher training school (for men and women teachers), opened at the beginning of the 1960 school year; (c) three teacher training courses for assistant teachers; (d) four *cours complémentaires*, similar to those in France and designed, like the latter, to provide guidance for pupils (the number of these courses will be increased to 7 by October 1960); (e) a *centre d'apprentissage* with four sections: masonry, motor car mechanics, metal work, electronics; the course is to be extended from 3 to 4 years, and a *collège technique* is to be established later on.

Pupils from the Niger may also attend schools in the other States of the *Communauté* which are members of the *Conseil d'Entente* (for instance, the technical secondary schools of the Ivory Coast), as well as in France (secondary schools, agricultural or industrial technical schools, various higher professional colleges).

Once pupils are admitted to a school, it is the principal or the council of teachers, assisted by the University Statistics Bureau, that advises them on any changes which may seem necessary in the orientation of their studies.

A uniform entrance examination has been instituted for secondary schools and other schools of the same level. Pupils are distributed among the schools according to their age, examination results, family situation, mode of life (nomads must necessarily be placed in boarding-schools) and geographical origin. The vocational training school selects its pupils on the basis of psychological and technical tests.

On completion of their secondary studies, pupils who have obtained the *baccalauréat* are eligible for scholarships from the Republic of the Niger or from the French Republic, enabling them to attend classes which prepare them for the higher professional schools or faculties (Dakar, Higher Educational Centre of Abidjan, faculties in France).

The school year lasts from 1 October to 30 June; it comprises three terms of almost equal length, separated by holidays (8 or 10 days) at Christmas and towards the end of March or the beginning of April. The weekly time-table is the same as that observed in schools in France—6 class hours per day (4 in the morning and 2 in the afternoon). As in France, the main subjects are taught in the morning; however, owing to the heat which prevails during the greater part of the year, physical exercises have to take place in the evening or very early in the day.

General secondary schools

The curricula and teaching methods applied in the *collèges* and assimilated schools are the same as those obtaining in the corresponding schools in France, apart from very slight adaptations of the curriculum to meet local conditions.

The same similarity exists with regard to achievement testing, reporting on pupils (school-record books, quarterly reports, observations by the Disciplinary Council), promotion from one class to another and examinations (primary certificate; lower secondary certificate; *baccalauréat* in philosophy, mathematics, experimental sciences, and now also the *baccalauréat technique*).

Vocational and technical schools

The Ministry of Agriculture has a *centre d'apprentissage agricole* at Kollo, near the rice-fields of the Niger, for the training of agricultural instructors. Entrants are required to have completed their primary studies.

The Ministry of Stock Farming recruits, subject to the same conditions, local veterinary attendants, who are trained at the Maradi school, now in process of reorganization.

The Ministry of Health has a school for assistant nurses (both men and women). Candidates are recruited subject to the same conditions as those obtaining in the two schools mentioned above.

All these schools provide both theoretical and practical training, more importance being attached to the latter.

Out-of-class activities

The pupils elect class heads to represent them *vis-à-vis* the principal; these representatives can also be heard by the Disciplinary Council. Each school has a co-operative, sometimes a journal, a small dramatic club, a troop of Boy Scouts, and sports clubs which are to be regrouped under the aegis of a School and University Sports Office, in liaison with similar offices in other States of the *Communauté* as well as in the French Republic.

TRENDS AND PROBLEMS

Beyond all other educational problems in the Niger is the overriding necessity for a rapid increase in the number and capacity of schools, so that education may be democratized and made accessible to the largest possible number of pupils. The Niger, which is an agricultural and pastoral country, has to train technicians; it has also to train up the leaders it needs. Secondary education benefits from the long experience gained by France, and also faces some of the problems of the French system.

[*Text prepared by the Ministry of Education, Youth and Sport, Niamey, and transmitted by the French National Commission for Unesco in May 1960.*]

STATISTICS

Population (mid-year 1958 estimate): 2,490,000.
Area: 458,995 square miles; 1,188,794 square kilometres.
Population density: 5 per square mile; 2 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, there were more than 12,000 pupils enrolled in school, of whom over 95 per cent were in the primary schools. This total enrolment represented less than 1 per cent of the total

population. In the primary schools the proportion of girls was 29 per cent, women teachers were 15 per cent of the whole teaching staff, and there were on the average 36 pupils per teacher. Primary school enrolment increased by 80 per cent between 1953 and 1957. (See Table 2.)

Examination results in secondary education, 1956–57. The number of certificates granted each year for the years 1956/57 and 1957/58 was: lower secondary certificate (*brevet*), 44, 41; *baccalauréat*, 1st part, 12, 19; *baccalauréat*, 2nd part, 2, 3.

Educational finance, 1957. For 1957, the education budget was 369 million C.F.A. francs, including 41 million francs from local revenues. In addition, there was an allocation, for the period 1956/57, of 61 million francs from the Investment Fund for Economic and Social Development (FIDES), which brought the total expenditure to 430 million francs, or an average of about 180 francs per inhabitant. Capital expenditure, including funds from the government budget and FIDES, accounted for 30 per cent of the total. (See Table 1.)

Source. Republic of the Niger: reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1957 (in thousand C.F.A. francs)[1]

A. RECEIPT BY SOURCE

	Amount
Total receipts[2 3]	**369 931**
Government of the Niger	328 261
Local authorities *(taxe de cercle)*	41 170
Repayment of loans	500

B. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2 3]		**369 731**
Recurring expenditure		299 590
For central administration	15 103	
For salaries to teachers, etc.	192 733	
Other recurring expenditure	91 754	
Capital expenditure[3]		69 641
Debt service		500

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**299 590**		**100.0**
Central administration		15 103		5.0
Instruction		241 791		80.7
Primary education	[4]176 507		58.9	
Secondary education	64 489		21.5	
General	37 500		12.5	
Vocational	5 806		1.9	
Teacher training	21 183		7.1	
Adult education	795		0.3	
Other recurring expenditure		42 696		14.3
Scholarships, etc., for higher education	11 060		3.7	
Cultural centres	1 675		0.6	
Youth and sports activities	4 416		1.5	
Maintenance and repairs	11 863		4.0	
School meals, etc.	3 993		1.3	
Miscellaneous	8 814		2.9	
Expenditure not specified	875		0.3	

1. Official exchange rate (1957): 100 C.F.A. francs = 0.57 U.S. dollar (approx.)
2. Closed account.
3. Data do not include amounts allotted by the Investment Fund for Social and Economic Development (FIDES). For the overlapping period 1956/57, FIDES allocated a total of 61,053,644 francs for construction, distributed as follows: primary education, 22,489,798; secondary education, 38,563,846 (general, 26,336,273, vocational 6,298,626); teacher training, 5,928,947.
4. Of this sum 4,816,000 francs was spent for private education.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	117	305	35	10 906	3 025
	Primary schools, private	1957/58	8	26	16	905	348
	Total	**1957/58**	**125**	**331**	**51**	**11 811**	**3 373**
	„	1956/57	101	283	43	9 895	2 574
	„	1955/56	68	220	32	8 128	1 987
	„	1954/55	67	208	24	7 890	1 852
	„	1953/54	65	190	26	6 555	1 349
Secondary							
General	Secondary school, public						
	Total	**1957/58**	**1**	**13**	**7**	...	...
	„	1956/57	1	15	5	243	37
	„	1955/56	1	14	4	194	25
	„	1954/55	1	11	2	166	24
	„	1953/54	1	...	...	...	...
Teacher training	Teacher training course, public						
	Total	**1957/58**	**1**	**8**	**1**	**71**	**4**
	„	1956/57	1	8	2	152	—
	„	1955/56	1	8	2	114	1
	„	1954/55	1	7	2	102	—
	„	1953/54	1	8	2	111	—

REPUBLIC OF SENEGAL

THE EDUCATIONAL SYSTEM

General and technical secondary education, which are at present patterned on the French system, are under the authority of the Ministry of Education and Culture and the Secretariat of State for Technical Education. In addition to its primary and secondary education departments, the Ministry has departments for physical education, youth and sport, fundamental education, and for medical inspection and school hygiene.

Dakar University has the same organization and method of operation as a French university, and the *Recteur* and teaching staff are members of the metropolitan civil service. The teaching and examinations are exactly the same as in French universities.

Apart from the university, all educational matters are under the jurisdiction of the Government of the Republic of Senegal. The transfer of powers from the French Government to the Government of Senegal took place in several stages: first in application of the *Loi-cadre* of 23 June 1956, then within the framework of the French Community; lastly, in 1959, the powers still retained by the *Recteur* of the Dakar *Académie* in respect of the co-ordination of educational, cultural and research services in the territories of French West Africa were also transferred to the respective governments.

There are both public schools and private confessional schools. The latter, which prepare pupils for the same examinations as the public institutions, receive subsidies varying in amount according to the qualifications of their teachers and the success of their pupils in examinations.

The Central Government has included in the third four-year economic and social development plan (1958–62) a scheme for the development of education. In the field of general secondary schooling the projects include: (a) the development of boarding schools, of which there are at present not enough (establishment of a girls' boarding house attached to the Van Vollenhoven *lycée* at Dakar); (b) the opening of a *collège d'orientation* (guidance school) comprising all the 6th and 5th classes at Dakar and thus relieving the congestion in the *lycées;* (c) the development of secondary schools outside Dakar (enlargement of the *collèges* at Kaoleck and Thiès and creation of a new *lycée* at St Louis); and (d) arrangements for the training of more primary school teachers (completion and extension of the Ziguinchor teacher training course and enlargement of the M'Bour teacher training course).

In the field of technical education, the plan provides for

the opening of new sections at the Dakar apprenticeship centre, of an apprenticeship centre for the hotel and garment making trades, and of rural apprenticeship centres adapted to the needs of the various economic regions of Senegal.

The Directorate of Technical Education and Vocational Training is responsible for all forms of vocational and general training (school instruction, apprenticeship, accelerated training, vocational training courses, etc.). Its plans for such training must be based on the needs in the different fields (industry, commerce, agriculture, administration and the various professions) indicated by the Ministry for the Development Plan and General Economy.

The regional authorities are concerned with the building and maintenance of school premises as well as with the administrative control of the teaching staff. There is a plan for decentralizing the construction of secondary school buildings.

THE DEVELOPMENT OF SECONDARY EDUCATION

In both administrative and teaching matters all general and technical secondary schools are governed by the same statutory provisions as apply in France.

The inspection of secondary schools in Senegal is carried out by Inspectors-General sent on mission from France.

As regards finance, the operating expenses of secondary schools are charged to the state budget, with the exception of the salaries of teachers on the metropolitan establishment which are paid by the Assistance and Co-operation Fund (*Fonds d'Aide et de Coopération* or FAC).

Until 1959 the construction of secondary schools was financed by France through the Investment Fund for Economic and Social Development (FIDES), some of this money being made available to private schools. Since 1959 the Assistance and Co-operation Fund has replaced FIDES. Investment funds are also provided by the *Fonds Européen de Développement pour les Pays et Territoires d'Outre-Mer* (FEDOM).

The living expenses of scholarship holders are borne by the State.

TYPES OF SECONDARY EDUCATION

General secondary education is divided into two cycles, the first lasting 4 years (short course) and culminating in the *brevet d'études du 1er cycle* (BEPC—lower secondary certificate) or the *brevet élémentaire* (elementary certificate), the second lasting an additional 3 years (long course) and leading to the *baccalauréat*. As in France, the long course has different sections (classical and modern), in which greater stress is placed on either the literary or scientific side. The first cycle is given in the *collèges* or the *cours complémentaires* (complementary courses), while the *lycées* and some *collèges* also provide the second cycle.

The technical education given by the technical *lycées* and *collèges* also leads through a long course to the *baccalauréat technique* and through a short course to the *brevet d'enseignement industriel* (industrial education certificate). An important part in vocational training is played by the apprenticeship centres which recruit, by competitive examination, candidates who have completed their primary schooling and train them in not less than 3 years for the *certificat d'aptitude professionnelle* (CAP—vocational proficiency certificate).

The school year is the same as that in France.

In 1958 the teaching staff in secondary schools comprised 2 *proviseurs* or *directrices agrégés* (headmasters or headmistresses who have passed the *agrégation* examination), 7 graduate principals of secondary schools, 2 *censeurs* (directors of studies), 10 *surveillants généraux* (non-teaching disciplinary officers), 10 *professeurs agrégés*, 67 certificated or graduate teachers, 43 *chargés* and *adjoints d'enseignement* (assistant teachers), 8 physical training and sports instructors, and 36 principals, teachers and instructors in *cours complémentaires*. The replacement of non-African secondary school teachers by Africans is not yet complete but is making progress. In 1958, 646 students were attending institutions of higher education, 266 at Dakar and 380 outside Senegal (most of them at French universities).

In 1958 the teaching staff of the various technical training schools consisted of 4 work supervisors (*chefs de travaux*) and technical instructors, 25 assistant technical instructors and 6 teachers of general subjects. They were assisted by a number of *instituteurs* and *moniteurs* (primary level teachers).

Teacher training schools

So many children are now attending primary schools that the teacher training courses cannot turn out enough trained teachers. It has therefore been necessary to employ students who have obtained the *brevet élémentaire*, *brevet d'études du 1er cycle* or *baccalauréat*. The vocational training classes in the teacher training courses for boys have been replaced by two teacher training centres which can take 200 to 250 student-teachers each year. This rate of training is believed to be adequate for the country's present needs.

Training courses for technical school teachers are now being organized.

TRENDS AND PROBLEMS

Present trends in the Republic of Senegal include the expansion of existing secondary schools and the decentralization of education, the latter with a view to obtaining a better balance between the different regions. At the same time a major effort is being made to train the teachers needed by the country, and Senegal is studying all possible means of producing the higher grade staff it requires for its industrial, administrative and agricultural development.

Such is the object of the following principles of action laid down by the Directorate of Technical and Vocational Education: 'To supply the number and quality of workers and administrative staff needed for the organization and development of the general economy, and at the same time to facilitate that development by training, professionally and socially, as many individuals as possible to take part in it'. The Directorate, which has now taken over the responsibilities of the Accelerated Vocational Training Service, is endeavouring to find 'a satisfactory blend of

techniques and methods of vocational training and technical instruction'. The organization of an Information, Vocational Guidance and Work Psychotechnical Centre has just been completed.

The essential problem of the Republic of Senegal is thus being tackled with lucidity, and many converging efforts are being made to resolve it.

[*Text prepared by the French National Commission for Unesco in March 1960.*]

STATISTICS

Population (mid-year 1958 estimate): 2,300,000.
Area: 76,124 square miles; 197,161 square kilometres.
Population density: 30 per square mile; 12 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment was 87,644, or about 4 per cent of the total population. The primary schools enrolled 92 per cent of these pupils, some 6 per cent of them were in secondary schools and slightly over 1 per cent each in vocational schools and at the University of Dakar. The teaching staff in public schools (not including the university) totalled 2,053 members; in the primary schools there were about 43 pupils per teacher and 31 in the secondary schools. Between 1953 and 1957, total enrolment increased by 56 per cent. (See Table 3.)

Enrolment trends in secondary education, 1950–57. Enrolment in general secondary schools more than doubled between 1950 and 1957, while that in vocational schools quadrupled between 1950 and 1956. For the period 1955–57 the average secondary enrolment represented 4 per cent of the estimated population 15–19 years old. (See Table 4.)

Examination results in secondary education, 1953–56. The annual number of certificates awarded increased from a total of 724 in 1953/54 to 1,489 in 1956/57. The increase was notable in all categories except the leaving certificates from industrial and commercial schools, where a slight reduction occurred after 1954. (See Table 2.)

Educational finance, 1958. The budget estimate for education in 1958 amounted to 3,711 million French francs; if the 266 million francs allocated for 1958/59 from the Investment Fund for Economic and Social Development (FIDES) be added, the total expenditure for education (not including the university) was over 3,977 million francs, averaging about 1,730 francs per inhabitant. (See Table 1.)

Source. France: Ministère de la France d'Outre-Mer, *Enseignement Outre-Mer.*

1. EDUCATIONAL FINANCE, 1958 (in thousand French francs)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**3 977 310**
Government of Senegal	3 711 110
Investment Fund for Economic and Social Development (FIDES)[3]	266 200

B. GOVERNMENT EXPENDITURE BY LEVEL AND TYPE OF EDUCATION[2]

	Amount	Per cent
Total expenditure by Government[2]	[4 5]**3 711 110**	**100.0**
Primary education	1 895 330	51.1
Secondary education	930 500	25.1
Vocational education	135 000	3.6
Physical training and sports	48 740	1.3
Subsidies to private education, etc.	127 000	3.4
Miscellaneous, not specified	574 530	15.5

1. Official exchange rate (1958): 100 French francs = 0.24 U.S. dollar (approx.).
2. Budget estimate.
3. FIDES allocation for 1958/59, which includes 50,200,000 francs for private education.
4. Includes expenditure for equipment amounting to 147 million francs.
5. Owing to rounding of figures, the total does not correspond exactly to the sum of the components.

2. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–56

Type of diploma or certificate granted	School year							
	1953/54		1954/55		1955/56		1956/57	
	Total	Female	Total	Female	Total	Female	Total	Female
Lower secondary certificate (BE or BEPC)	342	...	431	...	475	...	493	...
Baccalauréat								
First part	165	...	148	...	230	...	482	...
Second part	126	...	149	...	134	...	362	...
Commercial or industrial certificate *(brevet)*	27	...	29	...	24	...	21	...
Vocational proficiency certificate (CAP)	64	...	83	...	113	...	131	...

3. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary[1]	Primary schools, public	1957/58	365	1 884	...	68 393	18 865
	Primary schools, private	1957/58	69	...	...	12 080	5 128
	Total	**1957/58**	**434**	**[2]1 884**	**...**	**80 473**	**23 993**
	,,	1956/57	368	[2]1 220	...	69 966	20 394
	,,	1955/56	337	[2]1 283	...	62 097	17 510
	,,	1954/55	307	[2]1 216	...	55 554	14 480
	,,	1953/54	276	[2]1 153	...	50 339	12 331
Secondary							
General[3]	Secondary schools, public	1957/58	10	134	...	4 151	1 102
	Secondary schools, private	1957/58	5	...	...	915	478
	Total	**1957/58**	**15**	**[2]134**	**...**	**5 066**	**1 580**
	,,	1956/57	15	[2]122	...	4 560	1 463
	,,	1955/56	17	[2]168	...	4 822	1 272
	,,	1954/55	18	[2]153	...	4 431	1 271
	,,	1953/54	19	[2]145	...	3 996	1 140
Vocational	Technical college, public	1957/58	1	35	...	774	303
	Apprenticeship centres, public	1957/58	3				
	Apprenticeship centres, private	1957/58	4	...	...	262	147
	Total	**1957/58**	**8**	**[2]35**	**...**	**[4]1 036**	**450**
	,,	1956/57	10	[2]82	...	2 183	400
	,,	1955/56	8	[2]58	...	2 066	517
	,,	1954/55	13	[2]45	...	1 792	410
	,,	1953/54	11	[2]34	...	1 469	353
Higher	University of Dakar						
	Total	**1957/58**	**1**	**44**	**...**	**1 069**	**178**
	,,	1956/57	1	47	...	498	65
	,,	1955/56	1	41	...	488	64
	,,	1954/55	1	33	...	407	59
	,,	1953/54	1	43	...	392	56

1. Including kindergartens.
2. Public schools only.
3. Including teacher training.
4. Not including some apprenticeship sections included under 'Primary'.

4. TRENDS IN SECONDARY EDUCATION, 1950–57

School year	Number of students enrolled by type of education				Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational				
	Total	Per cent female	Total	Per cent female			
1950	2 288	23	522	7			
1951	2 974	29	1 263	15			
1952	...	...	...	...	4.7	164	*2.9*
1953	3 996	29	1 469	24			
1954	4 431	29	1 792	23			
1955	4 822	26	2 066	25			
1956	4 560	32	2 183	18	6.9	174	*4.0*
1957	5 066	31	...	...			

1. Including teacher training.

REPUBLIC OF SUDAN[1]

THE EDUCATIONAL SYSTEM

Education is organized on the same lines as in France. There was never any racial discrimination in the former French Union; French was the only official language, and public education was undenominational. This being so, neither racial, linguistic nor religious considerations have in any way influenced the organization of education. There are few private schools. One apprenticeship centre has been established by a semi-official body, namely, the Railways Administration of French West Africa. The Catholic Church has also opened a number of schools.

THE DEVELOPMENT OF SECONDARY EDUCATION

French West Africa, including French Sudan, which became the Republic of Sudan in 1958, was not established until 1904. Since instruction in all educational establishments was given in French, that language had to be widely enough known for general and technical secondary education to be organized.

The first stage in the development of secondary education was after the 1914–18 war, when the educated citizens who now hold administrative positions were trained.

The second stage was reached after the 1939–45 war. Assistance for the construction of school buildings was provided through grants from the Investment Fund for Economic and Social Development (FIDES). The existence of a school population of tens of thousands of pupils in primary schools justified the establishment of educational institutions at the secondary level.

Before 1939, there was only one institution providing a general secondary education—the Terrasson de Fougères Upper Primary School, at Bamako; it was converted into a *collège* in 1945 and a *lycée* in 1947. A *collège* for girls was opened in 1952. Technical education was first given at the vocational school at Bamako, which, in 1923, was transformed into an Apprenticeship Centre attached to the upper primary school. The Sudanese Crafts Centre was set up in 1932, and in 1939, the advanced technical school, which in 1950 became the Federal School of Public Works. The Frédéric Assomption Teacher Training School was founded in 1934; after a transitional period during which student-teachers (*moniteurs*) were trained, the courses offered at this school assumed their present form in 1952. In 1957, the first public complementary course (*cours complémentaire*), the first private *collège* and the first private teacher training course (*cours normal*) were opened.

Legal basis

The main laws at present in force are:

Order of 6 December 1949, modifying the organization and operation of the Sudanese Crafts Centre.

General Order of 8 March 1952, organizing teacher training courses.

Order of 12 July 1952, reorganizing agricultural education in French West Africa.

Annex to Order of 1 August 1951, defining the status of teacher training schools (*écoles normales*).

Decree of 8 August 1959, organizing complementary courses.

Law of 28 December 1959, creating the Teacher Training School at Katibougou as a Mali federal establishment.

Decree of 25 August 1959, creating an Educational Advisory Council.

Administration

Educational matters which are of purely local concern, such as development plans, are dealt with by the Ministry of Education of the Republic of Sudan, and matters of common interest by the Ministry of Education and Health of the Federation of Mali.

The Republic of Sudan is a centralized State, and the central administration has direct authority over the head teachers of educational establishments.

The Minister of Education is assisted by an *Inspecteur d'Académie*, who is responsible for the technical aspects of the education service and presides over the boards of examiners, a technical adviser on secondary education and a departmental head of technical education.

In all important matters such as development plans, the establishment of standard regulations and the organization of teaching, the Ministry of Education follows the advice of the Educational Advisory Council. *Ad hoc* commissions consisting of the *Inspecteur d'Académie*, technical advisers and qualified members of the teaching staff study questions submitted to them, such as changes in the curricula or guidance methods, under the supervision of the Minister of Education.

The Agricultural Technical School and the Agricultural Apprenticeship Centre are administered by the Ministry of Agriculture.

Private schools are subsidized by the Government, and are subject to supervision. They may be inspected by public education inspectors, and they have to submit an annual report on their work, together with statistics, to the Minister of Education.

Inspection. Inspection of general and technical secondary schools is carried out by inspectors-general from the French Ministry of Education, who are sent on inspection tours at the request of the Sudanese Government, by the *Inspecteur d'Académie* of the Republic of Sudan, and

1. Written in the early part of 1960 this text contains references to the Federation of Mali, formed by the Republics of Senegal and Sudan in 1959. Senegal withdrew from the Federation on 18 August 1960 and in September 1960 the Republic of Sudan became the Republic of Mali.

by primary school inspectors (who inspect primary teachers of complementary and teacher training courses).

Finance. The country's budget provides for the operation of general and technical secondary schools. In 1960, 493,604,000 French African Area francs were set aside for this purpose.

The federal budget of Mali provides for the operation of the only federal educational establishment, the School of Public Works.

Building and equipment are financed through the local (or federal) budget and by outside assistance, in the past, FIDES and today the *Fonds d'Aide et de Coopération* (FAC—Assistance and Co-operation Fund) and the *Fonds Européen de Développement des Territoires d'Outre-mer* (FEDOM—European Fund for the Development of the Overseas Territories).

At present, teachers are civil servants of the French Republic, seconded for technical assistance, or engaged under contract. In the first instance, they are paid by the French Republic, the Republic of Sudan reimbursing part of their salaries; in the second instance, they are paid by the Republic of Sudan, the French Republic reimbursing part of their salaries.

Public education is free. The great majority of pupils attending general and technical secondary schools in 1960 held scholarships. A sum of 10,400 French African Area francs is provided for scholarships for pupils in these schools, and the number of scholarship holders is 3,237.

Buildings and equipment. The standards observed are the same as in France, with certain modifications to suit local conditions, where necessary.

School welfare services. Medical inspection is organized in every type of school. An infirmary and an isolation ward are available for all boarders. Teachers and members of their families receive free medical treatment from doctors attached to the medical service.

TYPES OF SECONDARY EDUCATION

Admission to a general or technical secondary school is by competitive examination held at the end of the 5-year primary school course.

Educational guidance is first given by primary school head teachers in consultation with the parents. Plans now nearing completion will enable pupils to change direction at the end of the sixth class i.e., the first year of secondary schooling,[1] all sixth classes will have the same programme, and will provide opportunities for discovering the aptitudes and interests of the pupils. The work of the University Statistics Bureau, which is similar to the Bureau in France, makes it easier for a pupil to change his course, especially at the end of the first cycle (i.e. at the end of the third class). This bureau provides parents with all necessary information on the courses open to their children.

At the conclusion of the secondary school course, pupils take the *baccalauréat;* they can then enter one of the preparatory classes for the *grandes écoles* (higher professional schools) or other higher educational establishments and work for a *licence* (first degree), a doctorate, an *agrégation* (competitive degree examination) or an equivalent diploma.

The school year begins on 15 October and ends on 13 July. It is divided into three terms, separated by the winter holidays (8 days) and the spring holidays (11 days). The other school holidays are the Tabaski or Aïd el Saghir, at the end of the month of Ramadan (2 days), the Korite or Aïd el Kabir (2 days), the Maouled or anniversary of the Prophet's birth (1 day), All Saints, 11 November, 17 January (National Day), Easter Monday, 1 May, Ascension and Whit Monday. There is no school on Sundays or Thursday afternoons.

General secondary schools

'Lycées' and 'collèges' (long course). The long course lasts 7 years and is divided into two cycles (4+3). The purpose of these establishments is to give pupils the kind of education which will enable them to understand the most important problems facing mankind or having arisen throughout its history, to give pupils enough specialized knowledge to enable them to embark on higher education, to make them better human beings and good citizens, and to provide them with a proper physical training. At the end of this course, pupils sit for the *baccalauréat.*

Two examples of the amount of hours allotted per week to the different subjects in the curriculum, are as follows.

Philosophy class (seventh year): philosophy, 9; literature, 1; first foreign language, 1½; second foreign language or classical language (optional), 1½; history, 2; geography 2; mathematics and cosmography, 1½; physics, 2; natural science, 2; physical education, 2; drawing (optional), 2; music (optional), 2; handwork for girls (optional), 2; i.e., 23 hours of compulsory subjects.

Third class (fourth year): French, 3½; Latin, 3½; Greek, 3; civics, ½; modern language, 3; history and geography, 3; mathematics, 3; practical science, 1; physical education, 2; drawing, 1; music, 1; handwork, 1; a total of 25½.

To be promoted to the class immediately above, pupils must have obtained a satisfactory average mark at the tests held each term.

There are three categories of teaching staff: *chargés d'enseignement* (assistants), who hold the *baccalauréat; adjoints d'enseignement* (assistant secondary teachers), who have a *licence;* and *professeurs* (secondary teachers), who have a diploma or an *agrégation.*

Collèges (short course) and cours complémentaires. As these schools do not go beyond the third class (fourth year of secondary studies), their function is to give pupils a good general education and to prepare them for the second cycle of the secondary course. The certificate awarded at the end of these courses is the *brevet d'études du premier cycle* (BEPC)—the lower secondary school certificate.

The categories of teaching staff in *collèges* offering a short course are the same as those in a *lycée.* Teachers in *cours complémentaires* are trained either for post-primary work or for primary work, and they should preferably have

1. Classes are numbered progressively from 6th to 1st, with a terminal (7th-year) class.

passed in one or more subjects at university level. Two examples of the hours allotted each week to the different subjects in the curriculum of the third-year class are as follows.

Collège (short course): French, 5½; civics, ½; first foreign language, 3; second foreign language, 4; history and geography, 3; mathematics, 3; practical science, 1½; physical education, 2; drawing, 1; music, 1; handwork, 1, a total of 25½ hours.

Cours complémentaires: French, 6; civics, 1; foreign language, 5; history and geography, 3; mathematics and geometrical drawing, 4; practical science, 1½; physical education, 2; freehand drawing, 1½; music, 1; handwork, 2; a total of 27 hours.

Vocational and technical schools

Collège Technique d'Industrie. This school prepares pupils for the *brevet d'enseignement industriel* (industrial certificate) in automobile mechanics and electricity, and provides partial training for the *brevet d'enseignement commercial* (commercial certificate), covering the work of the third-year class.

The curriculum includes general subjects and vocational training. The following example shows the number of periods per week allotted to the various subjects in the fourth-year technical trade school class.

Humanities: French, 4; history, 1; geography, 1; English, 2; moral training, 1.

Scientific subjects: mathematics, 4; physics, 3; hygiene, 1.

Vocational subjects: technical drawing, 6; building technology, 1; technology of special subject, 1; general technology, 1; workshop practice, 14; physical education, 2; a total of 42 periods per week.

To be promoted to the class immediately above, pupils must have obtained a satisfactory average for the year or a favourable report from the teachers' council which meets at the end of the year.

The teaching staff consists of the following categories: secondary school teachers with a qualifying certificate and a *licence*, technical school teachers, assistant technical school teachers, primary school teachers and post-primary school teachers.

The Vocational Training Council and the Governing Board of the Technical Trade School include representatives of industry.

Industrial Apprenticeship Centre (with commercial section). This centre trains specialized workers, and prepares pupils for a vocational proficiency certificate (*certificat d'aptitude professionnelle* or CAP) in the following subjects: welding, reinforced concrete work, metal construction, electrical fitting, carpentry and joinery, motor car repairs, and office work. The curriculum includes scientific instruction and vocational training. The following example shows the number of weekly periods allotted to the different subjects taught in the first-year class.

Humanities: French, 4; history, 1; geography, 1; moral training, 1.

Scientific subjects: mathematics, 3; physics, 2.

Vocational subjects: technical drawing, 4; general technology, 1½; technology of special subject, 1½; workshop practice, 19; physical education, 2; a total of 40 periods per week.

Federal Public Works School. This school trains technicians for the Public Works Department, the Railways Administration and the Ordnance Survey. Pupils are selected by competitive examination at the end of the fourth secondary school year (third class) and, in exceptional cases, from those who hold the *brevet d'enseignement industriel probatoire* (industrial certificate), according to the number of vacancies.

It is a 4-year course. The curriculum includes general subjects—French, history, geography, mathematics (arithmetic, algebra, trigonometry and geometry), physics and natural science; technical training—(a) topography (surveying, drawing, land property law), (b) public works technology (roadworks construction, accountancy, strength of materials, drawing, general mechanics, hydraulics, workshop practice, etc.); and physical education.

To be promoted to the class immediately above, pupils must have obtained a satisfactory average for the year (12 out of 12) at the end of the first 2 years, and must have passed the first part of the final examination held at the end of the third year (general subjects and a technical test). The second part of the final examination consists entirely of technical work.

The teaching staff is made up of the following categories: secondary school teachers with qualifying certificate, teachers of technical subjects, public works engineers or engineer surveyors, and assistant teachers of technical subjects.

Agricultural Technical School (collège), *Katibougou.* This school trains 'agricultural leaders', who are responsible for an agricultural sub-section or an agricultural centre. Pupils who obtain the *brevet d'enseignement agricole* (agricultural certificate) (Part II) may take the entrance examinations for the tropical agriculture course (Paris), the *écoles techniques* (Le Havre and Versailles) and the national schools of agriculture (after 2 years' preparation).

The entrance examination for this school at Katibougou is open to holders of a lower secondary certificate, either the *brevet élémentaire* or the *brevet d'études du premier cycle.* The course lasts for 3 years. The curriculum covers general subjects: French, geography, history, arithmetic, algebra, geometry, physics, chemistry, natural science; and technical subjects—agricultural technology, technology of agricultural industries, geology, botany, systematic zoology and physiology, human and animal anatomy, general and specialized agriculture (the study of the different plants), comparative agriculture (different agricultural systems, the study of regions, crop rotation), agricultural implements, horticulture, arboriculture, zootechnics, veterinary science and rural economy.

Supervised work is arranged outside the school, and takes the form of practical training periods (between the second and the third years) in agricultural centres and departments.

To be promoted to the class immediately above, pupils must have obtained a satisfactory average (10 out of 20). Those who do not reach this average are either dismissed from the school or allowed to repeat the year, on the advice of the teachers' council.

Agricultural Apprenticeship Centre (*M'Pessoba*). This centre trains agricultural instructors (*moniteurs*). Each instructor is put in charge of a *centre d'encadrement rural*, a district agricultural centre serving several villages, which has the task of spreading agricultural knowledge among the people. The first five pupils among those who have obtained the vocational proficiency certificate (CAP) in agriculture are allowed, for a transitional period, to attend the Agricultural Technical School.

The competitive entrance examination for the M'Pessoba Centre is open to holders of the primary school certificate. The course lasts for 3 years. The curriculum covers general subjects (the curriculum for classes 6, 5 and 4 and part of the curriculum for class 3 in *lycées*), theoretical technical subjects (general and specialized agriculture, plant husbandry, surveying, agricultural technology, zootechnics, banking, mutual insurance, agricultural co-operatives, etc.) and practical instruction given on farms, designed to teach pupils the elements of agricultural work—how to use implements and machinery. The pupils take part in the farm's activities. Thus, by doing periods of practical training, they learn the principles of organizing and directing agricultural work and acquire a sense of initiative and responsibility.

Sudanese Crafts Centre (*Bamako*). The purpose of this institution is to preserve and restore local applied art techniques. Pupils are selected by examination, or on the basis of qualifications in the case of those who hold a primary school certificate. Adult craftsmen may follow courses without sitting for the examinations. The subjects taught are French, mathematics, drawing and a technical subject—jewellery, weaving and upholstery, ironwork, leatherwork (shoemaking and leather goods), woodwork (cabinet-making and carving). The main emphasis is placed on workshop practice. Every article is hand made by the pupil and bears the imprint of his personality.

Apprenticeship Centre for Railway Rolling Stock and Traction (*Toukoto*). This is a private institution, attached to the Mali Railways Administration. It trains qualified workers for the maintenance of locomotives and rail cars.

Teacher training schools

Ecole normale. The structure of this institution is similar to that of the upper cycle of the *lycée;* pupils are selected by competitive examination and are placed in the second class (fifth year). After passing the *baccalauréat* pupils do a year's vocational training and take the examination for the *certificat de fin d'études normales.*

The *école normale* has the same aims as the *lycée*, but pupils are prepared for work as primary school teachers instead of for higher education. Here, members of the teaching staff have the same qualifications as those in *lycées.* Vocational training is entrusted to a primary school inspector.

Cours normaux. Teacher training courses (*cours normaux*) are at the same level as *cours complémentaires*, and what has been said of the latter applies to the former. The difference between the two is that after 4 years of general post-primary education, leading to the elementary certificate (*brevet élémentaire*), pupils in teacher training courses receive a year of practical training for work as assistant primary school teachers and take the examination for the *certificat de fin d'études des cours normaux.*

Out-of-class activities

The difficulty in this sphere of education is the lack of suitable premises; as the number of pupils grows, less space can be set aside for assembly halls and recreation facilities. This state of affairs, however, is temporary.

There are two film clubs, but owing to the remoteness of Sudan it has not been possible to arrange a satisfactory system of loans and exchanges of films.

Each school has its own library, and there are school sports teams (football, basket-ball and athletics), which are affiliated with the Office du Sport Scolaire et Universitaire (OSSU) (School and University Sports Bureau).

Pupils elect representatives to put their case to the authorities, and in teacher training courses the pupils themselves are partly responsible for class discipline.

TRENDS AND PROBLEMS

The main problems awaiting solution are as follows: to increase the number of places available in the one school providing a full secondary course (the *lycée* at Bamako) and ultimately to establish another *lycée;* gradually to convert the girls' *collège*, which offers a short course, into a *collège* with a full course and subsequently into a *lycée;* to develop the present *cours complémentaires* and establish additional schools of this kind; to provide more places in teacher training courses, in order to meet the growing demand for well qualified primary teachers; to improve technical education, by converting the *collège technique* into a *lycée technique* and adjusting technical education more and more to the country's needs; to develop local arts and crafts through the Sudanese Crafts Centre.

Ideally, too, classes should be smaller, so that the teaching can become more effective and greater attention be devoted to individual pupils. Since the number of pupils is bound to rise, more school buildings and more teachers will be needed.

To solve all these problems will require a substantial outlay, and the Sudanese Government, which is already spending 19 per cent of its budget on education, will be unable to finance it without outside assistance.

The Government of the Republic of Sudan is aware that the development of the country requires qualified staff and workers, trained at general and technical secondary schools; it therefore attaches great importance to all educational questions.

[*Text prepared by the Ministry of Education, Bamako, and transmitted by the French National Commission for Unesco in May 1960.*]

STATISTICS

Population (mid-year 1958 estimate): 3,700,000.
Area: 464,874 square miles; 1,204,021 square kilometres.
Population density: 8 per square mile; 3 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, the total enrolment of 44,800 pupils represented slightly over 1 per cent of the total population. Nearly 94 per cent of the pupils were receiving primary education. The pupil-teacher ratio was 40 in public primary schools and 16 in public secondary schools. The proportion of girls was 23 per cent in both the primary schools and the secondary schools, but only 5 per cent in vocational education. Between 1953 and 1957, total enrolment increased by 31 per cent. (See Table 3.)

Enrolment trends in secondary education, 1950–57. Total enrolment in secondary education nearly doubled between 1950 and 1957. However, in relation to the estimated population 15–19 years old, the total secondary enrolment ratio remained at less than 1 per cent. (See Table 2.)

Examination results in secondary education, 1953–56. The total number of certificates awarded in 1956 was half as many again as in 1953. There was an increase in each category except the *baccalauréat*, first part. (See Table 4.)

Educational finance, 1958. The 1958 budget of the Sudanese Republic contained 2,639 million French francs for education. With the addition of the 1958/59 allocation from the Investment Fund for Economic and Social Development (FIDES) of about 120 million francs, the total was nearly 2,759 million francs, averaging about 750 francs per inhabitant. Subsidies to private education amounted to about 122 million francs. (See Table 1.)

Source. France: Ministère de la France d'Outre-Mer, *Enseignement Outre-Mer.*

1. EDUCATIONAL FINANCE, 1958 (in thousand French francs)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**2 758 770**
Government of the Republic of Sudan	2 639 270
Investment Fund for Economic and Social Development (FIDES)[3]	119 500

B. GOVERNMENT EXPENDITURE BY LEVEL AND TYPE OF EDUCATION[2]

	Amount	Per cent
Total expenditure by Government[2]	**[4]2 639 270**	**100.0**
Primary education	1 353 900	51.3
Secondary education	845 380	32.0
Vocational education	273 070	10.3
Physical training and sports	8 010	0.3
Subsidies to private education, etc.	72 290	2.7
Miscellaneous, not specified	86 620	3.3

1. Official exchange rate (1958): 100 French francs = 0.24 U.S. dollar (approx.).
2. Budget estimate.
3. FIDES allocation for 1958/59, which includes 49,500,000 francs for private education.
4. Includes expenditure for equipment amounting to 280,500,000 francs.

2. TRENDS IN SECONDARY EDUCATION, 1950–57

School year	Number of students enrolled by type of education				Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational				
	Total	Per cent female	Total	Per cent female			
1950	942	10	543	3			
1951	945	20	587	3			
1952	...	...	...	...	1.7	278	*0.6*
1953	1 147	23	660	3			
1954	1 264	24	725	11			
1955	1 334	25	799	9			
1956	1 444	26	981	8	2.4	295	*0.8*
1957	1 790	23	959	5			

1. Including teacher training.

3. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	247	925	...	37 000	7 000
	Primary schools, private	1957/58	30	...	...	5 052	2 623
	Total	**1957/58**	**277**	**[1]925**	**...**	**42 052**	**9 623**
	„	1956/57	260	[1]840	...	41 205	9 939
	„	1955/56	239	[1]889	...	36 775	8 498
	„	1954/55	214	[1]820	...	35 234	8 018
	„	1953/54	206	[1]678	...	32 397	6 830
Secondary							
General[2]	Secondary schools, public	1957/58	7	57	...	1 657	344
	Secondary schools, private	1957/58	3	...	...	133	62
	Total	**1957/58**	**10**	**[1]57**	**...**	**1 790**	**406**
	„	1956/57	7	[1]59	...	1 444	373
	„	1955/56	8	[1]47	...	1 334	339
	„	1954/55	8	[1]45	...	1 264	301
	„	1953/54	8	[1]39	...	1 147	264
Vocational	*Collèges techniques*, public	1957/58	2				
	Apprenticeship centres, public	1957/58	2	93	...	786	—
	Vocational courses, public	1957/58	2				
	Other schools, public	1957/58	2				
	Apprenticeship centres, private	1957/58	2	...	...	173	47
	Vocational courses, private	1957/58	1				
	Total	**1957/58**	**11**	**[1]93**	**...**	**959**	**47**
	„	1956/57	19	[1]93	...	981	78
	„	1955/56	16	[1]69	...	799	69
	„	1954/55	19	[1]58	...	725	80
	„	1953/54	14	[1]49	...	660	23

1. Public schools only.

2. Including teacher training.

4. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–56

Type of diploma or certificate granted	School year							
	1953/54		1954/55		1955/56		1956/57	
	Total	Female	Total	Female	Total	Female	Total	Female
Lower secondary certificates (BE or BEPC)	147	...	109	...	165	...	175	...
Baccalauréat								
First part	61	...	58	...	54	...	59	...
Second part	28	...	32	...	35	...	38	...
Commercial or industrial certificate *(brevet)*	12	...	16	...	19	...	65	...
Vocational proficiency certificate (CAP)	20	...	47	...	35	...	71	...

REPUBLIC OF THE UPPER VOLTA

THE EDUCATIONAL SYSTEM

The educational system in the Upper Volta is based on that of France, with various adjustments relating chiefly to primary school enrolment, the training of primary school teachers, and certain forms of vocational education. The organization of secondary general and technical education is similar to that in France.

Education, culture and research are controlled by the Ministry of National Education of the Government of the Upper Volta Republic. In addition to state schools and institutions, there are private schools and institutions run by the Catholic and Protestant missions; these schools are subsidized by the State, which pays a proportion of the staff salaries.

The nature of the aid and technical assistance furnished by the French Republic to the Upper Volta Republic, and the procedure for providing them, are defined and regulated by: (a) a general Convention of 21 July 1959 'relating to the provision by the French Republic of personnel to assist in the operation of the public services of the Upper Volta Republic'; (b) and an 'annexed Convention on aid and co-operation between the French Republic and the Upper Volta Republic in the educational and cultural fields', the purpose of which is to make available to the Upper Volta such administrative and teaching staff as it may need; to co-ordinate the teaching provided in the schools of the Upper Volta with the teaching provided in those of the French Republic, and to organize in the Upper Volta examinations leading to the acquisition of the diplomas, certificates and qualifications existing in the French Republic.

The principal factors affecting the provision of education have been as follows.

Ethnical. The population of the Upper Volta comprises many races (Bobo, Lobi, Mossi, Gourounsi, Gourmantche, Peuhl), all of them in favour of school attendance; there are thus no special difficulties, except in regard to the unsettled or nomadic Peuhl tribes.

Social. In certain thinly populated areas, school enrolment is difficult because the inhabitants are so widely scattered.

Religious. The first Muslim school in the Upper Volta was opened in 1959; it is a private institution, for boys only. Private schools are comparatively numerous in the areas influenced by the Catholic and Protestant missions, which pay special attention to the education of girls.

The Central Government, through its Ministry of National Education, controls the development of education at the various levels (plans for school enrolment, opening of private schools). It administers, supervises and finances state education and supervises private education, for which it provides grants.

The regional authorities (at the level of the *cercles*) participate, in co-operation with the central administration, in the enrolment of pupils and the construction and upkeep of school buildings (paid for out of the *taxes de cercle*) and exercises administrative supervision over the teaching staff.

The local communities sometimes contribute to the construction of school buildings.

Parents' associations help to improve the conditions in which the schools operate, while youth movements and sports and cultural associations carry out educational work in liaison with the schools.

THE DEVELOPMENT OF SECONDARY EDUCATION

Until 1950, secondary education was controlled by a Directorate-General of Public Education, with headquarters at Dakar, which was responsible to the Ministry for Overseas France and the Ministry of National Education of the French Republic.

An education office (*académie*) for French West Africa was instituted by the Decree of 27 November 1950. This provided for a *Recteur*, appointed by inter-ministerial decree (Ministries for Overseas France and National Education) to take charge of education under the authority of the High Commissioner of the French Republic in French West Africa.

Under the *Loi-cadre* of 23 June 1956 and the Decrees of 4 April 1957 relating to the new institutions in French West Africa, important powers were conferred upon the governments of the territories composing the French West African group. The *académie* of French West Africa continued to exist, but by an Order of the High Commissioner of the Republic, dated 26 December 1957, it was transformed into a service operated jointly by the French West African Territories and responsible for the co-ordination of education, culture, etc., throughout those territories. The *Recteur* was at the head of this joint service, and was assisted by various advisory councils and technical services, while each of the territories had an *Inspecteur d'Académie* who acted as head of the Territorial Education Service, and was appointed by the Chief of the Territory in consultation with his Government Council.

In 1958, all the powers of the *Recteur* of Dakar *Académie* in the field of secondary education were transferred to the Government of the Upper Volta.

It should, however, be noted that the *baccalauréat* examination, which concludes the classical and modern secondary school courses, and higher education are under the authority of the *Communauté*.

Legal basis

In secondary education the Government of the Upper Volta applies the laws in force in the French Republic with regard to the classification of schools, qualification of staff, organization of teaching and administration, curricula, time-tables, school attendance and certificates.

Administration

Secondary education is planned and organized by the Government of the Upper Volta, acting on the proposals of the Minister of National Education, assisted by an *Inspecteur d'Académie*, on secondment from France, who acts as Director of Education, by the Council of Heads of Schools, and the management boards of the various schools.

On questions of technical and vocational education, the Minister is assisted by an advisory council, which also gives advice on employment problems.

The Ministry of Education exercises authority and control over secondary schools through the Director of Education, who is the immediate superior of the heads of schools. It is also through the Director that the Minister exercises general control over private schools.

Inspection is carried out entirely by civil servants with authority to inspect and assess the administrative and teaching staff of schools. These officials comprise, in addition to the Director of Education, inspectors-general of public education of the French Republic, sent on missions of inspection at the request of the Upper Volta Government, primary school inspectors, responsible for supervising primary school teachers seconded to secondary schools, and an inspector who supervises physical training and sports activities in the schools.

Finance. The running expenses of secondary schools are met from the state budget. Appropriations are made for each school. Accounts for expenditure undertaken by the schools are paid by the government's financial services. The only money actually handled by the schools is the petty cash account (a fund exists in each school to provide advances).

From 1948 to 1949 the construction of secondary schools was financed by a special fund set up by the Government of the French Republic—the Investment Fund for Economic and Social Development (FIDES). Since the French Community came into being, this agency's name has been changed to Assistance and Co-operation Fund (FAC). Another source of finance is the European Development Fund for Overseas Countries and Territories (FEDOM, set up by the European Economic Community.

Local teachers in state schools are paid out of the state budget, while since 1 January 1960, technical assistance personnel have been paid entirely out of the Budget of the French Republic (Secretariat of State for Relations with the States of the *Communauté*). Private schools receive state grants for the payment of teachers' salaries. No fees are paid by day pupils in the state schools.

Living expenses of scholarship holders in secondary schools are defrayed by the State. The cost of this in 1959 amounted to 150 million C.F.A. francs (or one-sixth of the National Education budget).

Buildings and welfare services. The buildings are of various types. The average accommodation is as follows: classrooms, 1.50 square metres per pupil; dormitories, 3.50 square metres per pupil.

Every school has an infirmary, with a sick room for minor cases, a first-aid room, and an isolation ward for contagious cases. Medical inspection is entrusted to school medical inspectors, who are responsible to the Ministry of Health.

TYPES OF SECONDARY EDUCATION

General secondary education comprises a long and a short course of study.

The long course (*enseignement long*) covers 7 years, the first 4 of which (first cycle) lead to the lower secondary school certificate (*brevet d'études du premier cycle* or BEPC), and the following 3 years (second cycle) to the different *baccalauréats*. The long course offers a choice between classical studies, where literature predominates and the curriculum includes Latin, with Greek as an optional subject, and modern studies, which provide a more balanced education including both literature and science, and where the study of the classical languages is replaced by that of a second modern language and more time is given to mathematics and science.

The short course (*enseignement court*) is a modern course, lasting 4 years and leading to the BEPC or the elementary certificate (*brevet élémentaire* or BE).

Technical education is represented in the Upper Volta chiefly by *centres d'apprentissage*, vocational training institutions where the course leads, as in France, to a vocational proficiency certificate (*certificat d'aptitude professionnel* or CAP); these centres include commercial and industrial sections. The creation of a *collège technique* where pupils will be able to study for technical certificates or technical *baccalauréats* is now being studied.

After the entrance examinations to the secondary schools, a vocational guidance committee makes proposals for the future of the pupils on the basis of their school records and the results they have obtained in these examinations. These proposals are transmitted to the pupils' families, to assist them in selecting a branch of study.

Moreover, during the first term of the first year the work is specially organized so as to help the teachers to discover the aptitudes of the pupils. At the end of this observation period further proposals are made to the families if this is deemed advisable. Advice of this nature may also be given at the end of the first, second and fourth years of study should a change of direction seem desirable.

The *baccalauréat*, followed by one year of teacher training, serves as a qualification for primary teaching and also gives admission to institutions of higher education. At present the Upper Volta has no establishments at this level, with the exception of the National College of Administration, but African students are admitted to French universities, specialized schools and institutes.

Organization of the school year

The school year lasts 9 months. The opening date is between 1 and 15 October, and the closing date between 1 and 13 July.

The year is divided into three terms, separated by two short holiday periods (8 to 10 days), the first of which covers Christmas and New Year, while the second falls at Easter.

The principal classes are held in the morning, between 7 a.m. and noon, the afternoon being usually reserved, after a siesta from 1 to 3 p.m., for practical work, supervised activity and occupations requiring less mental concentration. Physical training is given during the coolest part of the day, in the early morning or late afternoon. Thursday afternoon and Sunday are holidays.

General secondary schools

The admission of pupils to the various types of secondary school is governed by the results of a selective examination aimed at ascertaining the level of the candidates' general knowledge (completion of primary school studies) and their capacity to benefit by secondary school teaching. Candidates must be 11 years of age, though a margin of one year in either direction is sometimes allowed.

The types of school are: (a) *lycées* and *collèges* (general secondary schools maintained by public authorities, the similar private institutions being known as *cours secondaires*). These schools provide the long course and draw their pupils from all parts of the territory of the Republic. (b) *Cours complémentaires.* These, of which it is proposed to open a certain number at the beginning of the 1960 school year, will give a short modern course, comprising a general section leading to the lower secondary school certificate (BEPC), and possibly agricultural, commercial and other sections, corresponding to local needs and employment facilities. Pupils will be accepted only from the area surrounding each school.

The following table gives examples of the way in which the weekly time-table is divided between the subjects in the curriculum of the *lycées* and *collèges.*

WEEKLY TIME-TABLES OF FOURTH AND FIRST CLASSES OF 'LYCÉES' AND 'COLLÈGES'

(in hours per week)

Subject	First cycle—3rd year of study (4th class)		Second cycle—6th year of study (1st class)[1]	
	Classical	Modern	Classical (B)	Modern (M')
French	3½	5½	4	4
Latin	3½	—	3	—
Citizenship teaching	½	½	—	—
Modern language I (English)	3	3	3	3
Modern language II (Spanish)	3	4	4	2[2]
History and geography	2½	2½	3½	3½
Mathematics	3	3	1½	4
Observation science	1½	1½	—	—
Physical sciences	—	—	2¼	4½
Natural sciences	—	—	—	3
Drawing	1	1	1	1
Musical education	1	1	1[2]	1[2]
Handicrafts	1	1	1[2]	1[2]
Physical training	2	2	2	2
Total	25½	25	26¼[3]	29[4]

1. Preparing for the first part of the *baccalauréat.*
2. Optional.
3. Two of which are optional.
4. Four of which are optional.

The teaching methods employed in the Upper Volta are those recommended in the Instructions of the Ministry of National Education for the different subjects concerned. Considerable prominence is given, particularly in scientific teaching, to inductive and active methods based on observation and experiment.

An average of 90 per cent of pupils are promoted to higher classes each year; about 70 per cent of the pupils enrolled for the first year of the primary course complete that course. The percentage eliminated is approximately the same in the second cycle, and 50 per cent of the pupils admitted to general secondary schools eventually sit for the *baccalauréat.*

Teaching staff in the general secondary schools is almost entirely European. It comprises: (a) civil servants from the Ministry of National Education of the French Republic, made available to the Upper Volta Government under the heading of technical assistance (teachers holding an *agrégation*, a *certificat* or a *licence*, assistant teachers holding a *licence*, and junior teachers with no *licence*). Their career follows the same lines as those of the group of officials in metropolitan France from which they have been seconded; (b) personnel under contract, recruited in France or other States of the *Communauté* who hold a teaching *licence*, higher educational certificates, or an engineering diploma (for mathematics and science). Many of these have considerable teaching experience, but they are not established civil servants making their career in this branch.

Vocational and technical schools

Apprenticeship Centre. This is a state school, providing: (a) a full-time study cycle, either in the industrial sections, which give a 3-year course leading to a vocational proficiency certificate (*certificat d'aptitude professionnelle* or CAP) in some branch of the building trade (mason, carpenter or locksmith) or the car repair industry (auto mechanic) or a 4- or 5-year course in the commercial sections, leading to the CAP in book-keeping, office work or shorthand and typing; (b) evening classes for in-service vocational training (shorthand, typing, book-keeping, industrial draughtsmanship, auto mechanics).

Pupils in the industrial sections must pass an entrance examination designed to determine their general knowledge (primary school certificate) and their aptitude for manual work. Candidates must be between 14 and 18 years of age. Pupils in the commercial sections must pass the examination for admission to the first-year class of a *lycée* or *collège.*

The final choice of course for pupils in the industrial sections is made at the end of a trial period lasting 3 months, during which the pupil spends a period in each of the different workshops. The subjects taught in these sections are those of the apprenticeship centres in France. Contact with industrial and commercial firms is established at meetings of the school's administrative board, at which such firms are represented.

The evening courses are intended for those who are already in employment and wish to improve their qualifications.

Centre for intensified training in the building industry. This centre trains masons (1-year course). Candidates must pass

a general knowledge examination. The subjects taught are bricklaying, the use of reinforced concrete, and draughtsmanship.

Private establishments. There are private establishments for boys which provide industrial training similar to that given in the industrial sections of the apprenticeship centres; there are also establishments providing training in rural handicrafts of a practical nature adapted to the environment.

For girls there are domestic training schools with a 4-year course leading to the CAP in domestic arts. The curriculum includes general subjects (French, arithmetic, history and geography, citizenship and law), together with theoretical and practical vocational training (domestic economy, hygiene and child-care, housekeeping and dressmaking).

Agricultural Apprenticeship Centre (Ministry of Agriculture). Candidates must take a competitive examination (equivalent to the primary school certificate). At the end of the 3-year course a certificate in agriculture may be obtained which qualifies for employment as an agricultural monitor. The general education gives prominence to the physical and natural sciences, while the theoretical and practical vocational training includes general and specialized agriculture, horticulture, plant conservation, zootechnics, mechanization of agriculture, topography, credit institutions and co-operatives, and agricultural crafts.

The school is directed by an agricultural engineer, assisted by secondary school teachers and agricultural technical assistants.

Forestry School of the Upper Volta (Ministry of Animal Husbandry and Forestry). Admission is by competitive examination (level of primary school certificate). Candidates must have completed their military service. The course lasts 1 year and comprises general subjects (French, arithmetic), theoretical study (botany, zoology, geology, arboriculture, the economics of forestry, forestry law, topography) and practical training (arboriculture, pisciculture, mechanics, agricultural mechanization, fieldwork).

The school trains forestry officials (superintendents). It is directed by an engineer from the Forestry Department.

School of Veterinary Assistants (Ministry of Animal Husbandry and Forestry). Admission is by a competitive examination (level of primary school certificate). Candidates must be between 17 and 22 years of age. The course lasts 1 year, and is exclusively vocational. It comprises theoretical studies (histology, physiology, contagious and non-contagious pathology, therapeutics and pharmacy, zootechnics, parasitology, products of animal origin) and practical training (clinical and minor surgical work, supervision of slaughtering). At the end of the course, a veterinary assistant's diploma may be obtained, which qualifies for posts in the Animal Husbandry Department. The school is directed by a veterinary surgeon assisted by technicians.

The 'Centre Muraz' School for Male Nurses (Ministry of Public Health). This inter-state school, directed by a medical officer of the Military Health Service, trains subordinate staff for the campaign against sleeping sickness. Admission is by competitive examination (level of primary school certificate). Candidates must be between 16 and 25 years of age. The course lasts 2 years.

School for Male and Female Nurses of the African Medical Service (Ministry of Public Health). Admission is by competitive examination (level of primary school certificate). Candidates must be between 16 and 25 years of age. A selection is made on the basis of a test held at the end of the first 3 months.

The curriculum (covering 2 years) comprises anatomy, hygiene, medicine and minor surgery, ophthalmology, and for girls, child care, gynaecology, obstetrics and pediatrics. The students spend periods of practical training in hospital centres. On passing out they receive the nursing diploma of the Medical Service.

The school is directed by a doctor of medicine assisted by women nurses holding state diplomas and monitresses holding the nursing diploma of the African Medical Service.

School for Women Social Assistants (Ministry of Social Affairs, Housing and Labour). Admission is by competitive examination (level of the fourth secondary school year). Candidates must be between 16 and 21 years of age.

The curriculum (2 years of study) comprises general education, the study of labour legislation, and practical training; it consists of 1 year of health training (a period of practical training at the school of nursing) and 1 year of social welfare training (domestic economy, child-care, household activities). On passing out, students receive the social worker's diploma. The school is directed by a woman social worker holding the state diploma.

Teacher training schools

The Upper Volta has no schools corresponding to the French *écoles normales*. The setting up of a school of this type is under consideration.

Primary school teachers are trained at junior teacher training courses (*cours normaux*), at lower secondary level. The period of study is 5 years, comprising 4 years of general education, leading to the *brevet élémentaire*, and a fifth year of teacher training divided between theory (general and special pedagogy, school legislation and professional ethics, supplementary general education) and practical work (periods in practice schools and 4 months as a trainee in a state school; specialized courses of physical training, adult education and, for girls, social welfare training).

The entrance examination is the same as that for admission to the *lycées* and *collèges*. Boys must be between 13 and 15 and girls between 13 and 16 years of age. Pupils receive state scholarships and undertake to work as teachers for a period of not less than 10 years.

The director and teachers are recruited from the teaching staff of *cours complémentaires* in France and are thus seconded civil servants; they are assisted, in some cases, by young African secondary school teachers, holders of the *baccalauréat*, who come to them for a course of training.

Other specialized schools

African Preparatory Military School. This school prepares pupils for the training schools for African non-commissioned officers. It comprises classes equivalent to the final primary classes and the early secondary classes. Admission is by competitive examination. The school comes under the authority of the Military Commandant of the Upper Volta, and is directed by an army officer, with the assistance of a post-primary teacher for the organization of studies.

Out-of-class activities

In the secondary schools various responsibilities are entrusted to the pupils, for educational reasons; some are class monitors (*chefs de classe*), responsible for order and discipline, others act as librarians, or are responsible for the tidiness of the school premises, or for giving first-aid. In suitable cases, these pupils are admitted to meetings of the staff council. In each school the pupils form sports clubs affiliated to the Office of School and University Sports.

TRENDS AND PROBLEMS

There are at present four basic problems:

1. The psychological and social problem caused by the uprooting of pupils from their homes, which may lead to a break with the original family and social environment. The remedy might be to decentralize secondary education by opening schools smaller than the *lycées* and *collèges*, with pupils drawn from a restricted area. This consideration has prompted the forthcoming opening of *cours complémentaires* (establishments corresponding to the first secondary school cycle).
2. The social problem of finding employment for pupils who leave school before completing their studies. Some of these, but only a few, are sent to the training schools for subordinate technical posts in the Health, Animal Husbandry, Agriculture and Forestry Departments. A similar problem arises in finding employment for pupils who complete their vocational training at the Apprenticeship Centre. Owing to the backwardness of industrial development in the Upper Volta, only a small number of these pupils can find work bearing some relation to the qualifications they have acquired. Studies are in progress with a view to co-ordinating the programme for the extension of education and the plans for economic development.
3. The social and educational problem of adapting the curricula more completely to African life and to the country's economic circumstances.
4. Lastly, there is the problem of training African staff. Assistance provided by the French Republic includes the organization in France of training courses for African teachers, inspectors and educational administrators.

[*Text prepared by the Ministry of National Education, Ougadougou, and transmitted by the French National Commission for Unesco in May 1960.*]

STATISTICS

Population (mid-year 1958 estimate): 3,736,000.
Area: 105,839 square miles; 274,122 square kilometres.
Population density: 35 per square mile; 14 per square kilometre.

Summary of school statistics, 1955–59. In 1959/60, there were 43,549 pupils enrolled in all schools, not including some 3,000 persons attending adult classes in primary schools. This means a school-going population of slightly over 1 per cent of the total population. Girls were 28 per cent of the primary school enrolment and 30 per cent of the secondary enrolment. The average number of pupils per teacher was 42 in primary schools and 20 in secondary schools. Between 1955 and 1959, primary school enrolment increased by two-thirds and secondary enrolment more than doubled. (See Table 1.).

Enrolment trends in secondary education, 1950–59. Enrolment in general secondary schools in 1959 was nearly four times as high as in 1950. Vocational school enrolment increased even more rapidly from 89 pupils in 1950 to 506 in 1959. Average total secondary enrolment for the period 1955–59 was less than 0.5 per cent of the estimated population 15–19 years old.

Examination results in secondary education, 1953–57. The number of lower secondary certificates (BE and BEPC) granted in 1957 was two and a half times as high as in 1953. There was also a rapid increase in the number of pupils passing the two parts of the baccalaureat, although only one girl passed the first part in 1956 and one in 1957. The number of vocational certificates (CAP) sharply declined after 1955/56. (See Table 2.)

Educational finance, 1959. The education budget for the fiscal year beginning in January 1959 amounted to 1,148.5 million C.F.A. francs (including the allocation from the Investment Fund for Economic and Social Development (FIDES), as well as other revenues), which represented an average expenditure of about 300 francs per inhabitant. (See Table 3.)

Source. Republic of the Upper Volta, reply to Unesco questionnaire.

1. SUMMARY OF SCHOOL STATISTICS, 1955–59

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Infant classes in primary schools, public	1959/60	5	5	...	223	107
	Infant classes in primary schools, private	1959/60	6	6	3	336	179
	Total	**1959/60**	**11**	**11**	**...**	**559**	**286**
	,,	1958/59	7	7	...	419	211
	,,	1957/58	7	7	...	548	323
	,,	1956/57	6	6	...	[1]205	[1]96
	,,	1955/56	11	11	...	400	206
Primary	Primary schools, public	1959/60	185	574	...	23 554	6 050
	Primary schools, private	1959/60	103	383	92	16 989	5 344
	Total	**1959/60**	**288**	**957**	**[2]92**	**40 543**	**11 394**
	,,	1958/59	267	865	[2]85	38 062	10 902
	,,	1957/58	225	759	[2]73	32 017	8 807
	,,	1956/57	207	667	[2]70	28 884	7 694
	,,	1955/56	167	601	[2]62	24 170	6 316
Secondary *General*	Secondary schools, public	1959/60	2	34	18	809	103
	Secondary schools and *Cours complémentaires*, private	1959/60	5	24	6	561	199
	Total	**1959/60**	**7**	**58**	**24**	**1 370**	**302**
	,,	1958/59	7	42	7	988	257
	,,	1957/58	7	35	12	853	201
	,,	1956/57	7	31	...	759	206
	,,	1955/56	6	28	...	550	137
Vocational	Apprenticeship centre, public	1959/60	1	15	4	156	5
	Vocational training centres, private	1959/60	2	14	7	350	230
	Total	**1959/60**	**3**	**29**	**11**	**506**	**235**
	,,	1958/59	3	22	8	355	...
	,,	1957/58	2	13	1	216	...
	,,	1956/57	2	12	—	213	...
	,,	1955/56	2	12	—	222	...
Teacher training	Teacher training courses, public	1959/60	3	27	14	489	119
	Teacher training courses, private	1959/60	1	6	6	82	82
	Total	**1959/60**	**4**	**33**	**20**	**571**	**201**
	,,	1958/59	4	27	16	431	148
	,,	1957/58	4	23	...	353	129
	,,	1956/57	4	23	...	478	109
	,,	1955/56	3	18	...	301	52
Adult	Adults classes in primary schools						
	Total	**1959/60**	**72**	**72**	**...**	**3 229**	**...**

1. Public schools only.

2. Private schools only.

2. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
	1953/54		1954/55		1955/56		1956/57		1957/58	
Lower secondary certificate (BE or BEPC)	90	...	86	...	107	14	139	13	227	25
Baccalauréat										
First part	1	...	6	...	16	—	29	1	24	1
Second part	—	—	1	...	11	—	12	—	20	—
Vocational proficiency certificate (CAP)	24	...	35	...	41	—	14	—	18	2

3. EDUCATIONAL EXPENDITURE, 1959 (in thousand C.F.A. francs)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**1 148 532**
Government of the Upper Volta	989 063
Local authorities (*taxes de cercles*)	62 469
Special budget	25 000
Investment Fund for Economic and Social Development (FIDES)	72 000

B. TOTAL EXPENDITURE BY LEVEL AND TYPE OF EDUCATION[2]

	Amount		Per cent	
Total expenditure[2]		**1 148 532**		**100.0**
Central administration		37 847		3.3
Instruction		1 048 976		91.3
Primary education	531 430		46.3	
Secondary education	449 044		39.1	
General	204 432		17.8	
Vocational	114 160		9.9	
Teacher training	130 452		11.4	
Adult education	13 200		1.1	
Other education	55 302		4.8	
Vocational guidance	5 830		0.5	
Physical training	49 472		4.3	
Other recurring expenditure, not specified		61 709		5.4

1. Official exchange rate: 100 C.F.A. francs = 0.405 U.S. dollar (approx.).

2. Budget estimate.

FEDERAL REPUBLIC OF GERMANY AND WEST BERLIN

The use of the term 'secondary education' (*weiterführendes Schulwesen*) to denote all forms of education following the conclusion of basic primary schooling (*Grundschule*) has not yet been universally accepted in the Federal Republic of Germany. The continuation, in three different types of schools, senior primary (*Volksschuloberstufe*), intermediate (*Mittelschule* or *Realschule*), and high school (*höhere Schule* or *Gymnasium*) of the 4- or 6-year *Grundschule* course is still often regarded as a vertical division of the educational system into three independent branches—popular, practical and theoretical, and academic—differing in length and standard. Since, however, compulsory education for everyone from 6 to 18 years of age, without exception, was established as a principle in 1919 (Weimar Constitution), was enforced, with certain restrictions, by the *Reichsschulpflichtgesetz* (Reich Compulsory Education Law) from 1938 onwards, and has been fully applied since 1945 as a result of laws passed by the *Länder*, and since the length of the course in all three branches is roughly the same, it is gradually being realized that, despite all their differences, they represent a unified stage in education. This applies particularly since the weekly hours of school work for more than 2 million boys and girls in the part-time vocational schools (*Berufsschulen*) have begun to go up from 6 to 8, to 10 or even 12, and the number of supplementary advanced courses and full-time vocational schools (*Berufsfachschulen*) has been increasing rapidly.

The senior departments of primary schools (*Volksschuloberstufen*), which take pupils who have completed the first 4 or 6 years of primary studies and keep them up to the age of 14 or 15, should logically be included in a description of secondary education, but as they have already been dealt with in the preceding volume[1] they are omitted from this report. The advanced full-time technical or vocational school (*Fachschule*) which begins at the end of the *Mittelschule*, *Berufsfachschule* or *Berufsschule* must also be counted as secondary education, although some of these schools, notably the schools of engineering (*Ingenieurschulen*), come close to the university level. On the other hand, the training of teachers for primary, intermediate and vocational schools, as well as for academic high schools (*Gymnasien*), comes under the heading of higher education since, in the Federal Republic, completion of studies at a secondary school is a prerequisite for admission to any kind of teacher training.

'Secondary' education in the statement which follows will thus cover: (a) general education provided in inter-

1. *World Survey of Education: II—Primary Education*, Paris, Unesco, 1958.

mediate schools (*Mittelschulen* and *Realschulen*), and in academic high schools (*Gymnasien*); (b) vocational education up to the school leaving age, provided by the part-time *Berufsschulen* and the full-time *Berufsfachschulen;* and (c) vocational education beyond the period of compulsory education in the full-time *Fachschulen.*

THE EDUCATIONAL SYSTEM

Under Article 146 of the Constitution of the German Reich of 11 August 1919, access to every form of secondary education was guaranteed to all young people, without distinction of race, social status or religion.

The Basic Law of the Federal Republic of Germany, dated 8 and 24 May 1949, contains only one sentence dealing with the subject of education (Article 7, paragraph 1): 'The whole school system is under the supervision of the State'. The 11 member States (*Länder*) of the Federal Republic have therefore re-stated in their constitutions and educational laws that all young people have an equal right to education according to their intellectual abilities, and that all schools, both public and private, are subject to state approval and supervision. There is no Federal Ministry of Education. Each individual *Land* is responsible for its own educational system. A voluntary confederation of the Ministers of Education of the *Länder*, known as the Standing Conference of Ministers of Education (*Ständige Konferenz der Kultusminister*) in Bonn, endeavours to ensure that education, throughout the Federal Republic, develops at an even rate.

In the various divisions of the *Länder*, the educational departments of the District Presidents (*Regierungspräsidenten*), on behalf of the Minister of Education, are responsible for the local supervision of schools. District and local community authorities (*Kreise* and *Gemeinden*) play their part, as specified by law, in the organization and administration of secondary education. Private organizations which, in accordance with the requirements of the legislation governing private education, maintain their own schools, have power of decision in matters affecting the external affairs and administration of their schools, but here, as well as more particularly in the matter of internal affairs, are subject to the supervision of the state educational authorities.

The structure of the school system is shown in the diagram on page 569.

THE DEVELOPMENT OF SECONDARY EDUCATION

At the beginning of the twentieth century, there were four separate school systems in Germany: the 8-year primary school course (*Volksschule*), the 9-year intermediate school course (*Mittelschule*) provided either in an independent 9-class school or in a 5-class school based on 4 years of primary schooling, the 10-year girls' high school (*höhere Mädchenschule*), also either an independent 10-class school or organized as a 6-class school based on the fourth primary school class, and the 9-year academic high school course (*Gymnasium*), which began after 4 years of primary schooling and consisted of 9 classes (making 13 years in all) or started off with 3 preparatory school classes of its own (making 12 years in all).

The decisive move towards bringing into being a uniform educational system took place, as already stated, with the Constitution of the German Reich (*Verfassung des Deutschen Reiches*) of 11 August 1919, which provided for compulsory schooling for all up to 18 years of age; a basic primary school course (*Grundschule*) which was compulsory and the same for all; and, for pupils having completed 8 years of primary schooling and embarking on a practical career, attendance at a continuation school until the end of the period of compulsory schooling. Since then, the system of separate, parallel courses of study, or 'isolation system' (*Isolationssystem*) has changed into a 'branched system' (*Gabelungssystem*), in which the *Grundschule* is the common stem, ramifying, at the stage of secondary education, into the senior primary school course, together with part-time or full-time attendance at a vocational school; the intermediate school course; and the academic high school course.

After the *Grundschule* had been established throughout the country by the Federal Law of 28 April 1920, no national regulations concerning the organization of the next stage in education were issued; the matter was left

GLOSSARY

Berufsfachschule: full-time vocational secondary school.

Berufsschule: part-time vocational school offering 6 to 12 hours per week of schooling; attendance is compulsory for all young people under 18 years of age who are not enrolled in some other type of school.

Fachhochschulen: specialized colleges (higher education level) at which instruction is given in only one or two branches of learning, e.g. commerce, economics, agriculture and forestry, etc.

Fachschulen: advanced full-time vocational training schools.

Gymnasium: general secondary school differentiated by curriculum and length of course, but in every case preparing for higher education.

Gymnasium altsprachig: course includes Latin, Greek, and one modern language.

Gymnasium mathematisch-naturwissenschaftlich: course including two foreign languages and emphasizing instruction in mathematics and science.

Gymnasium neusprachig: course includes Latin and two modern languages.

Kurzform: the 'short form' of *Gymnasium* (6–7 years).

Langform: the 'long form' of *Gymnasium* (9 years).

Hochschulen: institutions of higher academic and professional education.

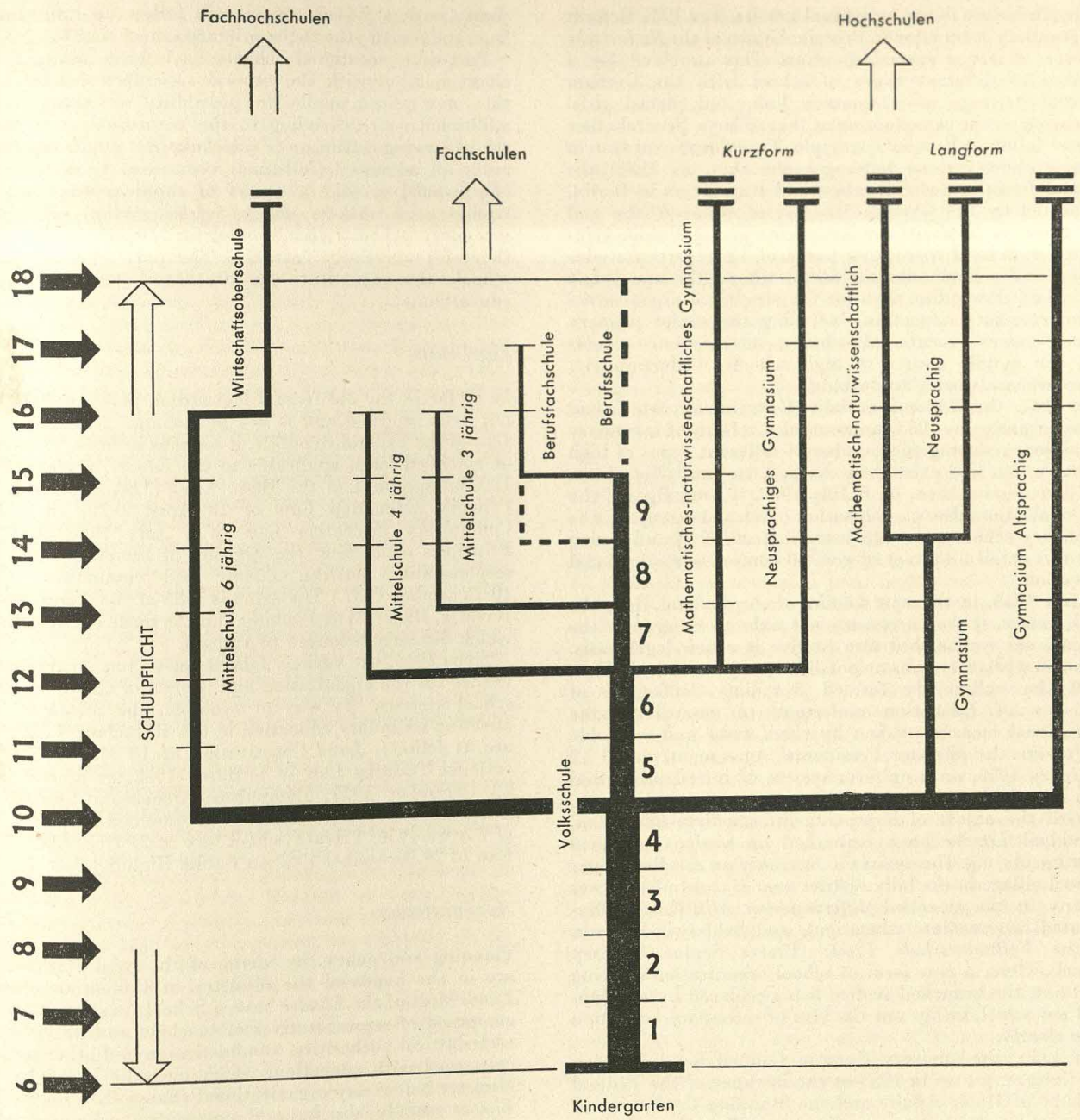
Kindergarten: pre-primary school.

Mittelschule: general secondary school, with varying length of course, viz. 3, 4, or 6 years.

Schulpflicht: compulsory education period, which begins when the child turns 6 and continues to the age of 18.

Volksschule: primary school.

Wirtschaftsoberschule: commercial college.


Fachhochschulen
Hochschulen
Fachschulen
Kurzform
Langform
Wirtschaftsoberschule
Berufsfachschule
Berufsschule
Mittelschule 4 jährig
Mittelschule 3 jährig
Mittelschule 6 jährig
Mathematisches-naturwissenschaftliches Gymnasium
Neusprachiges Gymnasium
Mathematisch-naturwissenschaftlich
Neusprachig
Gymnasium
Gymnasium Altsprachig
SCHULPFLICHT
Volksschule
Kindergarten
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to the discretion of the individual *Länder*. The 1925 Reform of Secondary Education in Prussia, known as the *Richertsche Reform*, deserves special mention. This provided for a number of different types of school with the German cultural heritage as a common link, and placed girls' education on the same footing as that of boys. Several other *Länder* followed Prussia's example. The educational system became, however, so heterogeneous that, in 1931, the Central Institute for Education and Instruction in Berlin, supported by the German Ministry of Home Affairs and the Prussian Ministry for Art, Science and Public Education, convened a working party of 15 experts on education and school administration, who, after one year's work, laid down directives for the structural organization of intermediate education, including the senior primary school classes, vocational schools, intermediate schools and the middle classes of high schools. Unfortunately, these proposals came to nothing.

In 1937, the National Socialist Government, which had come to power in 1933, announced a reform of secondary education, reducing the number of different types of high school which had existed in the past to two: *Oberschulen* and *Gymnasien;* then, on 6 July 1938, it promulgated the National Comulsory Education Act, shortening the secondary school course (8 years instead of 9) and laying down in detail a system of general compulsory vocational education.

After 1945, in the new *Länder* of the Federal Republic of Germany, it was necessary not only to reorganize the educational system, but also to give it a new legal basis. To begin with, there was no possibility of joint consultation, until the voluntarily formed Standing Conference of Ministers of Education undertook to co-ordinate the educational measures taken by the *Länder* and was able to prepare the Minister Presidents' Agreement, dated 17 February 1955, on a uniform system of intermediate and high school education.

With the object of improving intermediate education, individual *Länder* have embarked on various practical experiments, e.g. Hessen in the *Schuldorf an der Bergstrasse* (School village in the hilly district near Darmstadt), Lower Saxony in the so-called *differenzierten Mittelbau* (differentiated intermediate education), and Schleswig-Holstein in the *Volksoberschule Preetz* (Preetz Senior Primary School). Here, a new form of school organization is being tried out, the branched system being replaced by a graduated one which brings out the idea of secondary education more clearly.

In 1959, the advisory German Council for Education and Culture, set up in 1954 at the instance of the Federal Ministry of Home Affairs and the Standing Conference of Ministers of Education, outlined a 'Plan for the Reorganization and Unification of General Public Schools'. According to this plan (which excludes vocational schools), the four junior primary school classes are to be followed by a 2-year vocational guidance course, known as the 'transition course' (*Förderungsstufe*), which will serve as a preparation for the *Hauptschule* (senior primary school), *Realschule* (intermediate school) and 7-year *Gymnasium* (general high school), which are to be treated as secondary schools with different curricula and courses of varying lengths, whereas the classical academic high school (*altsprachliches Gymnasium*), with a 9-year course, will follow on immediately from the fourth year of the primary school course.

Part-time vocational schools have been brought into closer relation with the general secondary schools since they now afford pupils the possibility of taking certain additional courses leading to the vocational or technical school leaving certificate (*Fachschulreife*); pupils can either enter an advanced (full-time) vocational training school (*Fachschule*) or take a course of supplementary general studies at a workers' college (*Arbeiterkolleg*) or evening secondary school (*Abendgymnasium*), which will qualify them for university entrance. The part-time vocational schools thus constitute an alternative route to higher education.

Legal basis

In so far as the old federal legislation, prior to 1945, has not been repealed and is not at variance with the Basic Law of the Federal Republic, it remains in force, in original or amended form, applicable to the *Länder*, under Article 122, paragraph 1 of the Basic Law. (This applies to the Primary Education Law of 28 April 1920, the Reich Compulsory Education Law of 6 July 1938, and the Principles concerning the division of financial and fiscal responsibility between *Länder* and communes, dated 10 December 1937.) The same is true of the *Land* laws in Bavaria, Baden-Württemberg and the parts of the country which formerly belonged to Prussia.

Since 1945, the various *Länder* have enacted legislation needed for the organization and control of their respective school systems. By way of example, the principal laws affecting secondary education in the Rhineland Palatinate are as follows: *Land* Constitution of 18 May 1947; Vocational Training Law of 3 March 1952, as amended on 22 December 1955; Compulsory Schooling Law of 22 December 1955; Law on Division of Financial Responsibility of 7 April 1956; Private School Law of 21 December 1957; Law of 25 November 1958 on Public High Schools.

Administration

Planning and policy, by virtue of the legal stipulations, are in the hands of the Ministry of Education of each *Land*. Most of the *Länder* have a School Advisory Council, composed of representatives of teachers and parents, the ecclesiastical authorities, administration and other persons concerned with education, which must be heard by the Minister before any organizational changes are made. The *Länder* usually also have a representative committee of the various parents' advisory boards. The curricula of the individual schools are drawn up by the teaching staff on the basis of directives worked out by the Ministry, in cooperation with teachers and parents. Teachers are free to choose their own method of teaching, but this must be based on sound educational principles and must achieve the desired results. Before school books are introduced they must be submitted for approval to the Textbooks Committee of the Ministry; they are then entered in the official list of textbooks from which the various schools can make their choice.

Control. In public and private schools alike, the control of education is in the hands of specially trained officials of the state educational authorities. According to the size of the *Land*, control may be exercised at three levels, two levels or only one level. In Baden-Württemberg, Bavaria, Lower Saxony, North Rhine-Westphalia, the Rhineland Palatinate and the Saar, there is control at three levels. At the lowest level, in the *Kreis* (local administrative district), or municipality, the local education officer (*Schulrat*) is responsible for the administration of both primary and intermediate schools. Control at the next level is the responsibility of the Schools Department (*Schulabteilung*) of the Office of the District President (*Regierungspräsident*); in Baden-Württemberg, this department is known as the *Oberschulamt*. Officials of varying rank (*Oberregierungsräte* and *Schulräte*) from the Schools Department supervise the *Kreis* and municipal education offices (*Kreis- und Stadtschulämter*), the part-time and full-time vocational schools and sometimes the advanced full-time vocational schools; in certain *Länder* (Baden-Württemberg, Lower Saxony and Hessen) they also supervise the high schools. The Ministry, in its turn, exercises general control over all the aforesaid schools and, in the Rhineland Palatinate and the Saar, itself supervises the *Gymnasien*. In North Rhine-Westphalia and parts of Lower Saxony, the Ministry has set up a special board (*Aufsichtsbehörde*)—known as the *Schulkollegium* in North Rhine-Westphalia—to supervise *Gymnasien*. In Bavaria, certain powers of secondary school supervision are delegated to the ministry's regional commissioners. In Hessen, there is no school supervision machinery at the lowest, i.e., the local, level; in Schleswig-Holstein, there is none at the intermediate level. Berlin, Bremen and Hamburg have only one system for the control of education.

The legal and educational control of all types of school is thus the direct or indirect responsibility of the Ministry (or, in Berlin, Bremen and Hamburg, of the Senator for Public Education or for Schools and Education). In some *Länder*, however, agricultural schools are supervised by the Ministry of Agriculture, or jointly by the Ministries of Agriculture and Education. Because of their special requirements, mining schools (part-time vocational, preparatory and technical) come under the authority of the Mines Commissions, which are administrative departments of the *Land* Ministries for Economic Affairs.

So far as the State exercises control over schools, the decisions and measures which it takes are subject to examination by the judiciary.

It was already stipulated in the Weimar Constitution of 1919 that the State can delegate a share in the supervision of schools to the communes. This it has since done in two different ways. School offices may be set up by the administrative authorities of the various *Kreise*, in which the elected leader of the *Kreis* works with the state education officer on the basis of shared responsibility for external and internal school affairs, or alternatively the head of a municipal school office, or his professional colleagues, may be commissioned by the State to take over the duties of a state education officer. These cover the control of primary and intermediate schools only, however, not that of vocational schools and high schools (*Gymnasien*).

Inspection. Responsibility for inspecting education devolves upon educational officials who have been trained as teachers. They are selected from the ranks of serving teachers, the chief inspector recommending headmasters or outstandingly good teachers of the district who have proved their capacity for leadership. They are examined by senior inspectors and placed on a list, from which candidates are chosen as vacancies occur; they are then appointed on probation, being finally appointed when their services have proved satisfactory over a given period of time. No special academic training is stipulated, but increasing importance is attached to the fact that a candidate for promotion should have improved his qualifications by following courses and should have given proof, by scholarly publications, of his academic suitability for a post in the school inspection service.

Finance. Education is financed out of general tax receipts, not from special education taxes. School costs are shared by the State and those who run the schools (*Schulträger*), that is, any corporate body, organization or private person legally responsible for establishing and maintaining a school. The maintenance of schools may be on a separate or on a joint basis. In the case of 'separate' maintenance, the *Schulträger* has sole financial responsibility for the schools which it runs, even if the State makes a grant-in-aid. When maintenance is on a joint basis, which is becoming more and more common, staff costs (salaries, pensions, etc.) are borne by the State and material costs (school buildings, classroom equipment, etc.) by those who run the school. Each party, however, assists the other—the school managers the State in paying the teachers' salaries, and the State the school managers in meeting the material costs, for example, when money is required for new school premises, to meet a deficit in school funds due to the abolition of school fees, or for the provision of free school materials. The regulations differ from one *Land* to another. Intermediate, high school, vocational and technical education are already free in almost all the *Länder;* textbooks are also supplied free of charge in nearly all. Parents with small incomes are eligible for education grants on behalf of children attending high schools, provided that the latter's performance and natural ability warrant such assistance.

Buildings and equipment. Official directives governing school buildings are issued in each of the *Länder*. They provide for at least 2 square metres of floor space per pupil in the classrooms, proper ventilation, adequate daylight and artificial light, and appropriate sanitary arrangements. In secondary schools, provision is made, in addition, for the necessary workshops, laboratories and collection rooms, a gymnasium with changing-rooms, etc. and, if possible, a swimming pool, a playing field or sports ground, and a school playground allowing at least 3–5 square metres of space per pupil. If the State is to give a building grant, the building plans of the school managers must be submitted to the education authorities for examination and approval.

School welfare services. These include the school medical service, school excursions and holiday trips, the prevention

of accidents through school instructions and road security lessons, etc. For most of these activities, parents' and pupils' representatives work in co-operation with the school authorities. The provision of school meals, which had to be organized in the first years following the war, has now, with the return to normal living conditions, been confined to the supply of morning milk, particularly as the system of tuition for half the day only makes it superfluous to provide a larger meal.

TYPES OF SECONDARY EDUCATION

The time at which pupils change over to secondary education varies according to their aptitudes and particular gifts; it may be at the end of the fourth, sixth or seventh year in the case of a general secondary school (*Gymnasium* or *Mittelschule*), or at the end of the eighth or ninth year in that of a vocational secondary school (part-time *Berufsschule* or full-time *Berufsfachschule*). The earlier this changeover occurs, the more necessary it is for parents and teachers to consult. This is done at the weekly consultation hours which the teachers set aside for parents. In particularly difficult cases, the services of a specially trained school psychologist are available in many individual schools or in the larger educational centres. Before pupils embark upon practical training and enter the appropriate vocational school, specialized vocational guidance experts give talks on requirements and prospects in the various careers and, if parents so desire, give the children an aptitude test. The same is done for pupils at intermediate schools and *Gymnasien* before they complete their school education. Pupils attending vocational schools can, by following supplementary courses, qualify for admission to full-time advanced vocational or technical schools and, if their performance there is good, or if they take a course at a workers' college or at an evening secondary school, they may then go on to a university (the so-called 'second path' to higher education).

The Easter holidays, lasting about 3 weeks, mark the end of one school year and the beginning of the next. Only in Bavaria does the school year end in mid-July, the next beginning, after a 6 weeks' summer holiday, in September.

General secondary schools

The general secondary schools include *Mittelschulen* (intermediate schools) and *Gymnasien*. They may be run by the State, local authorities or private organizations.

Candidates for promotion from a primary school to an intermediate or secondary school are selected on the basis of an entrance examination or attendance at the new school for a trial period of 4 to 6 days. The first year at the intermediate or secondary school is a probationary period and pupils who fail to reach the required standard during this initial year (fifth or seventh year of schooling) have to return to the primary school.

Throughout the school course, the test method is only seldom used to determine educational progress, greater confidence being placed in the teachers' constant observation of their pupils and in their judgement of the latter's oral and written work. The half-yearly reports serve as a basis for the annual promotion of pupils, which depends not upon the results of special examinations, but upon the decisions taken by the teachers' council on the basis of directives laid down by the Ministry of Education.

Mittelschulen. These schools (in some *Länder* also known as *Realschulen*), are either organized as separate institutions or are run as special sections of the senior departments of primary schools. They generally comprise six classes, following on from the fourth primary school year. In the city-states of West Berlin, Bremen and Hamburg, there is a 4-year intermediate course, following on from the sixth primary school year; it includes a certain amount of pre-vocational training, and has hitherto been known as the *Technische Oberschule.* In Bavaria, the intermediate school course has so far been a 3-year one, beginning after the seventh primary school year, but it is now in process of being transformed into a 4-year course.

The intermediate school curriculum differs only slightly from one *Land* to another. Pupils must take one modern language, a second being optional. The following example, taken from North Rhine-Westphalia, may be considered typical, as regards both subjects and hours of work. It illustrates clearly the general nature of intermediate education, the only subjects which can be regarded as pre-vocational training being domestic science and shorthand.

TIME-TABLE FOR INTERMEDIATE SCHOOLS[1]
(in periods per week)[1]

Subject	Years of schooling					
	5	6	7	8	9	10
Religious instruction	2	2	2	2	2	2
German	6	6	5	5	4	4
English	6	6	5	4	11	11
French (optional)	—	—	4	4		
History	1	2	2	2		
Geography	1	2	2	2		
Mathematics	5	5	5 (4)	5 (4)	5 (3)	5 (3)
Physics/chemistry	—	—	1–2 (1)	3–4 (2)	3–4 (2)	3–4 (2)
Biology/horticulture	1	2	2–3 (2)	2–3 (2)	2–3 (2)	2–3 (2)
Music	2	2	1 (2)	1 (2)	1 (2)	2 (2)
Handwork/drawing	4 (2)	4 (2)	2–3 (2)	2–3 (2)	2–3 (3)	2–3 (2)
Shorthand and typing	—	—	—	— (1)	2 (1)	1 (1)
Needlework	— (2)	— (2)	— (2)	— (2)	— (2)	— (2)
Domestic economy, housekeeping	—	—	—	—	— (3)	— (3)
Gymnastics	3	3	2	2	2	2
Total	31	34	35	36	36	36

1. The figures in parentheses refer to time-tables in girls' schools; in other subjects the courses for boys and girls are identical.

The characteristic features of the teaching methods in intermediate schools are that instruction is related to everyday experience, ideas are presented clearly and straightforwardly, and the teaching is relevant to practical life.

The intermediate school leaving certificate is awarded to pupils who have reached the required standard at the end of the terminal class (tenth year of schooling), without their having to take any special examination.

Gymnasien. These schools have a special place among the general secondary schools in that they lead to the *Hochschulreife* or Higher School Certificate (which qualifies holders for matriculation at a university) and must therefore endeavour to give pupils a scholarly approach to all aspects of social and cultural life. They provide either a 9-year course, following on from the fourth primary school year, or a 7-year course, following on from the sixth primary school year.

The 9-year course (*Langform*) is of three types: (a) The classical academic high school (*altsprachliches Gymnasium*), with 9 years of Latin, 6 years of Greek and 7 years of English or French, together with mathematics, science and the other regulation subjects; a second modern language is optional. (b) The modern academic high school (*neusprachliches Gymnasium*), with 2 modern languages and Latin. The first modern language (generally English) must be studied for 9 years, while the second and third foreign languages (7 and 5 years of study respectively) may be either Latin and French (or English), or vice-versa. (c) The mathematics and science academic high school (*mathematisch-naturwissenschaftliches Gymnasium*), with 2 foreign languages (English and Latin or French)—and also a third optional language—gives pupils more advanced mathematics and science and the usual standard in the other subjects.

These three types of school exist either as separate institutions or as special sections of the same institution. When the modern and mathematics and science courses are available in the same school, the fifth to eighth classes provide a common foundation for both.

The following two time-tables (Hessen) show the curriculum and hours of work per week. In addition to the compulsory subjects, a number of optional classes of the 'tutorial' type may also be taken.

The 7-year curriculum (known as the *Kurzform* or *Aufbaugymnasium*) may be the same as that of the modern or mathematics and science high schools, or there may be some slight variation.

The curricula and hours of work per week in the *Gymnasien* also vary only very slightly from one *Land* to another. The above examples can therefore be considered typical.

Methods of instruction in the *Gymnasien* are based on the assumption that pupils are intellectually alert and have academic interests. Great importance is attached to the personal activity of the pupils, so that the outstanding characteristics of the tuition are joint work by teachers and pupils, independent study, and common discussion of problems.

At the end of the 13-year course at a *Gymnasium*, pupils take the senior school leaving examination, which consists of written papers in 4 subjects (German, two foreign languages and mathematics, or German, one foreign language, mathematics and physics or chemistry) and an oral examination in an optional number of subjects. Some *Länder* are trying the experiment of dividing the examination into two parts, the first taken at the end of the twelfth year of schooling and the second at the end of the thirteenth. The examination itself, organized by the teachers of the class concerned, takes place in the various schools in the presence of the headmaster and the whole of his staff,

TIME-TABLE FOR CLASSICAL 'GYMNASIEN'
(in periods per week)

Subject	Years of schooling								
	5	6	7	8	9	10	11	12	13
Religious instruction	2	2	2	2	2	2	2	2	2
Philosophy	—	—	—	—	—	—	—	—	2
German	5	5	4	4	4	4	4	4	4
History	1	1	2	2	2	2	2	2	2
Civics	1	1	1	1	1	2	1	2	2
Geography	2	2	1	2	1	1	1	2	—
First foreign language	6	6	5	5	5	4	5	4	4
Second foreign language	—	—	—	6	5	4	5	5	4
Third foreign language	—	—	5	3	3	3	2[1]	2[1]	2[1]
Mathematics	4	4	4	4	4	4	3	3	—
Physics	—	—	—	1	2	1	3	3	3
Chemistry	—	—	—	—	—	2			
Biology	2	2	2	—	1	2			
Handicrafts and art	2	2	2	2	2	1	1	2	1
Music	2	2	2	1	1	1	2	1	1
Gymnastics	3	3	2	2	2	2	2	2	2
Total	30	30	32	35	35	35	33	34	29
Free hour	—	—	1	1	1	1	1	1	1

1. In the upper classes of the classical *Gymnasium*, English or French may be chosen as the third foreign language.

TIME-TABLE FOR MODERN AND MATHEMATICS AND SCIENCE 'GYMNASIEN'
(in periods per week)

Subject	Common foundation						Modern			Maths-science			Modern, total (hours)	Maths-science, total (hours)
	5	6	7	8	9	10	11	12	13	11	12	13		
Religious instruction	2	2	2	2	2	2	2	2	2	2	2	2	18	18
Philosophy	—	—		—	—	—	—	—	2	—	—	2	2	2
German	5	5	4	4	4	4	4	4	4	4	4	4	38	38
History	1	1	2	2	2	2	2	2	2	2	2	2	16	16
Civics	1	1	1	2	1	2	2	2	2	2	2	2	14	14
Geography	2	2	2	2	1	2	1	2	—	1	2	—	14	14
First foreign language	6	6	4	4	3	3	3	3	3	3	3	—	35	32
Second foreign language	—	—	5	5	4	3	3	3	3	3	3	3	26	26
Third foreign language	—	—	—	—	4	4	4	4	4	—	—	—	20	8
Mathematics	4	4	4	4	4	4	3	3	—	4	4	4	30	36
Physics	—	—	—	3	1	1	3	3	3	6	6	6	9	11
Chemistry	—	—	—	—	2	1							6	9
Biology	2	2	2	—	1	3							12	16
Handicrafts and art	2	2	2	2	2	1	1	2	1	1	2	1	15	15
Music	2	2	2	1	1	1	2	1	1	2	1	1	13	13
Gymnastics	3	3	2	2	2	2	2	2	2	2	2	2	20	20
Domestic economy (for girls)[1]	+1	+1	+1	+1	+1	+1							+5	+5
Total	30	30	32	33	34	35	32	33	29	32	33	29	288	288
For girls	+1	+1	+1	+1	+1	+1							(293)	(293)
Free hour	—	—	1	1	1	1	1	1	1	1	1	1	+7	+7

1. Corresponding instruction in handwork may be provided for boys.

and with a government inspector (*Oberschulrat* or *Ministerialrat*) acting as chairman. The written papers are drawn up by the educational authorities on the basis of proposals from the school and are extracted from a sealed envelope just before the examination begins. This decentralization of the examination gives the pupil the advantage of a greater feeling of confidence, and also enables the board of examiners to form a sounder judgement of the examinees' attainments than would be possible if the setting of the examination papers were centralized. In order to lighten the burden of work when pupils are preparing for the examination during the last year at the *Gymnasium*, certain *Länder* have introduced the system of ending the study of some subjects earlier and dividing the school leaving examination into two parts, the first held at the end of the twelfth year and the second at the end of the thirteenth. Those who fail the examination can take it again the following year. The senior school leaving certificate, awarded to successful candidates and bearing the official seal of the school authorities, qualifies the holder for admission to all university faculties and academic studies.

Apart from the above-mentioned ordinary types of *Gymnasium*, there are also certain special *Gymnasien*, which either similarly qualify pupils for entrance to any institution of higher education, or else qualify them only for certain higher studies. Those qualifying pupils for any form of higher education are:

1. Evening high schools (*Abendgymnasien*), which provide a 3-year evening course occupying an average of 17 hours a week. They may be established by municipalities or private organizations, but also by the State, and are recognized by the latter. At these schools, young people who are already working and are at least 19 years of age can, in addition to their normal employment (except in the last semester), be trained for university studies and, by taking a special examination, obtain the senior school leaving certificate.
2. The workers' colleges (*Studienkolleges für Berufstätige*) (e.g. at Brunswick, Oberhausen and Wiesbaden), which are state-established residential institutes where gifted young men and women who have completed their vocational training can, on the recommendation of professional associations concerned with agriculture, crafts, industry and trade, or of trade unions, vocational schools or people's universities, take a free 2-year course of study which will enable them to sit for the higher leaving certificate. There are only 5 compulsory subjects: German, mathematics, English, history and sociology. In the second year, in addition, 2 subjects must be chosen for group study from the following fields: German, history, French, Latin, physics, chemistry, biology, geography or music.
3. Commercial high schools (*Wirtschaftsgymnasien*), which are experimental schools with a 3-year course, at present developing out of the advanced commercial colleges (*Wirtschaftsoberschulen*) (see under *Fachschulen*) and endeavouring to obtain recognition as a fourth type of *Gymnasium*. They are open to students who have completed the tenth year in an intermediate school, a higher commercial school or a *Gymnasium*, and in their curriculum, which also includes German, history, geography, two modern languages, mathematics and science, particular emphasis is laid on the various subjects covered by sociology and economics.

Institutions which do not qualify students for university entrance but only for admission to teacher training schools and art teacher training schools, are the senior girls' colleges (*Frauenoberschulen*) which now exist in some of the *Länder*. These colleges provide a 3-year course and follow on from the tenth class in the *Gymnasium*. The curriculum, in which only one modern language is compulsory, lays special emphasis on women's occupations (theory and practice of education, dietetics, hygiene, domestic economy and horticulture, music, needlework, art and handwork). By taking a supplementary examination, students can obtain the full higher leaving certificate.

Teachers in general secondary schools. Intermediate school staff are specialist teachers who must hold a teaching qualification in two subjects. The following are eligible to take the intermediate school teachers' examination: primary school teachers who have passed the second teachers' examination (in education) and have engaged in supplementary private or university studies; student teachers who have done 6 semesters of academic studies at a university and 2 semesters at a teacher training college. In some *Länder*, when primary school teachers have taken an optional subject in their first (academic) examination the taking of a second optional subject in the later examination entitles them to become intermediate school teachers. After giving suitable evidence of ability, an intermediate school teacher may be appointed headmaster of an intermediate school (*Rektor* or *Direktor*), or may become a school inspector or school administrator (*Schulrat* or *Oberregierungsrat*).

Gymnasium teachers must study two or three subjects at a university or art college and may enter for the first, academic or art, examination (fine arts or music) after 8 semesters, at the earliest. In addition to qualifying in their own particular subjects, they must also pass examinations in philosophy or psychology and the science of education. After the first examination, they take a 2-year course of educational and psychological studies at a training college. The second, or educational, examination takes place in the school itself and is intended to furnish evidence of the candidates' practical teaching ability. After the second examination, successful candidates can obtain posts as assistant secondary school teachers (*Studienräte*) and, after giving suitable evidence of ability, be promoted to the posts of assistant headmaster or headmaster (*Oberstudienrat* or *Oberstudiendirektor*). They are also eligible for appointments in school administration or inspection (*Oberregierungsräte* or *Oberschulräte*) or for transfer to the Ministry of Education.

Vocational and technical schools

Berufsschulen. These are part-time vocational schools, open to all young men and women who, after completion of their compulsory primary schooling, do not move on to an intermediate school, *Gymnasium* or other full-time school, but take up some practical career. The pupils in such schools include not only trainees in various trades,

commerce, industry, agriculture, mining and administration, but also young men and women workers without educational facilities, and even some who work at home or are unemployed. Hence the large number of 2,300,000 part-time vocational school pupils, averaging about 600,000 to 700,000 at each level from the ninth or tenth to the twelfth school year. Such schools usually have 3 classes: lower, intermediate and upper.

The aim of these part-time vocational schools is to supplement pupils' practical on-the-job training by theoretical instruction in their profession and general educational subjects (in some cases, they also receive workshop instruction in the use of modern machines). The course comprises 7 to 12 hours' work a week and, according to the number of hours, is held on 1 or 2 days of the week. The employers or parents of apprentices enrolled at a part-time vocational school are obliged by law to send them there, until completion of their compulsory schooling, without diminishing their earnings. If pupils wish to take posts as specialized workers or employees at the end of their practical and theoretical training, they must take a school leaving examination, which is organized by the representatives of the appropriate professional bodies and the vocational school teachers.

Part-time vocational schools also hold evening courses for older workers, thus providing them with an opportunity to improve their qualifications and to prepare for the examination for the title of master (*Meisterprüfung*).

Part-time vocational schools are run by communes, municipalities and local administrative districts (*Kreise*). In rural areas, the *Kreisberufschulen* serve all the village communes. There are also private part-time vocational schools, set up by large business firms (*Werkschulen*). All of them are subject to state supervision and are obliged to follow the official curricula.

Five main sections or types of school can be distinguished, which may be further sub-divided in the big cities.

Part-time agricultural schools. These schools cover agriculture, fisheries and forestry. Having regard to the urgency of the outside work to be done, the course may be run more intensively in the winter and shortened or suspended in the summer; a minimum of 280–290 hours of instruction must, however, be given in the course of the year. The curriculum in Bavarian schools of this type may be quoted as an example. The subjects taken in each of the 3 successive classes, with number of hours per week shown in parentheses, are: religious instruction (1); special branch of study (agriculture, domestic economy, or mechanics) together with rural occupations (at schools with appropriate equipment) (3); German language and arithmetic (2); civics (1); making a total of 7 hours' instruction per week.

Part-time domestic science schools. These are schools for girls who are occupied with housekeeping or have no career, and also for girl apprentices with less than 2 years' training, and unskilled workers. In Bavaria the time-table for this course, which consists of 8 hours' work a week, is as follows. In each year of the 3-year course pupils take religious instruction (1 hour per week), domestic science (3), civics (1), German (1), arithmetic (1); in addition, 1 hour per week is devoted to hygiene (including dietetics and nutrition) in the first year; to nursing, in the second year; and to care of infants and upbringing of children in the third.

Part-time commercial schools. In view of the great diversity of commercial activities, the part-time commercial schools are divided into specialized categories, for wholesale trade and retail trade, salesmanship and office work. The curricula also vary according to the pupils' previous education (primary or intermediate school). The minimum number of hours of work a week is 8 or 9; in Hamburg, according to the law, it is 12 hours. The Hamburg time-table for the course in office work for each of the 3 classes is as follows: German (2 hours per week), civics (1), geography (1), retail trade methods and correspondence (2), business accountancy (2), book-keeping (2), shorthand (2). The salesmanship course differs from that for office work in two respects: 'commodities' replaces shorthand and, in the first-year class only, advertising is taken instead of book-keeping. Typing, which is not included in the time-table, can be learnt at special evening classes. Foreign languages (English, French and Spanish) are also taught in some of these commercial schools.

Part-time industrial schools. There is an even greater number of specialized categories and different curricula in the part-time industrial schools. There are special classes, with corresponding curricula, for building, electrical engineering, metallurgy, carpentry, food production, the paper, textile and chemical industries, etc. The following general time-table (Baden-Württemberg) allows for attention to the special features of the various branches of industry.

TIME-TABLE FOR INDUSTRIAL 'BERUFSSCHULEN'
(in hours per week)

Subject	Class I	Class II	Class III
Religious instruction	1	1	1
Civics	1	1	1
German	1	1	1
Economics	1	1	1
Special branches of study (materials, professional instruction, special subjects)	2	2	2½
Special accountancy	1	1½	1½
Practical geometry	1	½	—
Technical and free-hand drawing	2	2	2
Total	10	10	10

In addition, each class does up to 2 hours' practical work (in workshops) and also gymnastics.

Part-time mining schools. There are special part-time training schools for the mining industry, which do not come under the Ministry of Education but under the Mines Commission (*Oberbergamt*), which is a Department of the Ministry of Economic Affairs. They provide 7 hours of teaching a week, based on a general scheme established by the Mines Commission. The subjects taught, with the number of hours per week shown in parentheses, are as follows: professional instruction (general, calculation and drawing) (4), civics (1), economics (1), Christian rules of life (optional) (1); total, 7 hours per week.

Part-time vocational school pupils who wish to improve their qualifications and general education can take supplementary courses, that is, either the advanced courses

(*Aufbaukurse*), which are run concurrently with the vocational training course, from the second semester onwards, and involve some 10 hours of work a week, arranged on one evening and the whole of Saturday, or else full-time advanced classes (*Aufbauklassen*) at the end of the training course. The courses include both practical and theoretical instruction. The practical part of the training is designed to improve pupils' technical skills; the aim of the theoretical part is to give pupils a more thorough theoretical knowledge of their profession and to broaden their general education. The compulsory general subjects include German, a foreign language, mathematics and science, civics and economics. At the end of this supplementary training, there is a state examination, on which the technical school leaving certificate (*Fachschulreife*) is awarded, qualifying successful candidates for admission to an advanced vocational training school. The technical school leaving certificate is equivalent to the intermediate school leaving certificate.

Berufsfachschulen. These full-time vocational schools provide courses of 1, 2 or 3 years' duration, with 30 to 36 hours of practical and theoretical instruction per week. They are run by the districts and municipalities or, in many cases, by business organizations, private bodies or individuals.

Their aim is to train promising boys and girls for senior positions in a practical occupation. If pupils, after attending such schools, have not yet completed their period of compulsory education, they are not obliged to go on to a general part-time vocational school, since the academic training given, from the point of view of standard and number of class hours, is in no way inferior to that provided by the part-time schools. On the practical side, on the other hand, pupils wishing to be classed as specialized workers or assistants, must still prove their ability by passing an examination organized by the appropriate professional body. In many cases, attendance at a full-time vocational school or intermediate school, followed by 2 years' practical experience, is enough to qualify pupils for admission to a *Fachschule.*

As shown below, there are several different types of full-time vocational school.

Full-time vocational schools for domestic economy and care of children. These include household management schools and schools for children's nurses and domestic helps. The former are very numerous, many of them being run by nuns or women's associations. The course, lasts 1 year. The subjects taught are German, civics, housekeeping, household accounting and book-keeping, cooking (including dietetics), early childhood education, housework, washing, ironing, handwork, horticulture, gymnastics and movement-games. The qualifying certificate exempts girls from attendance at a part-time domestic science school, places them on the same footing as those who have completed the first semester of training as children's nurses and domestic helps, and counts as a first step towards admission to a girls' *Fachschule.*

In the schools for children's nurses and domestic helps, the course lasts a year and a half. The curriculum, with 40 hours of work a week, includes, in addition to the subjects taught at the household management schools, educational theory, hygiene, singing and child care.

Full-time commercial schools. These schools are run by communes, business organizations or private persons. There are commercial schools (*Handelsschulen*) and higher commercial schools (*höhere Handelsschulen*). The commercial schools, which provide a 1- to 2-year course with 32 hours of instruction a week, train girls and boys for clerical posts in business firms or the civil service. The subjects taken are commercial instruction, commercial accounting, book-keeping, a modern language, economic geography, shorthand and typing; girls must also take domestic economy, if they wish to be exempted from attendance at a part-time vocational school. The qualifying certificate is equivalent to the intermediate school-leaving certificate.

Higher commercial schools, which provide 34 hours of instruction a week, are open to pupils who have completed the intermediate school course or the tenth *Gymnasium* class. Pupils study two foreign languages and receive a thorough business training. The course serves to qualify for admission to an advanced full-time commercial college (see *Fachschulen*) or commercial *Gymnasium* (see above).

Full-time industrial schools. Most of these schools have been established in recent years in order to provide particularly gifted young people with practical and academic instruction, in addition to their workshop and business training, which will equip them more thoroughly for their profession and give them a wider general education. The schools are generally established by municipalities and, in most cases, have a residential hostel annexed. The school leaving examination at the end of 3 years does not take the place of the journeyman's examination, which is organized by the appropriate professional body and is compulsory, but it is equivalent to the intermediate school leaving certificate and enables successful candidates, after 2 years' practical experience, to enter a full-time advanced technical training school (*Fachschule*).

Full-time schools of art. These schools provide instruction in the fields of music, dancing and handicrafts. Craft schools are also usually included among them, but they should really be classed as *Fachschulen* even though they are generally of the standard of *Berufsfachschulen.*

Fachschulen. These are advanced full-time vocational schools which train young people to become specialized workers, masters in their trade, technicians or practical engineers and ensure that they acquire a thorough knowledge of their particular subject and reach a high level of occupational skill. Such schools exist, not only for technical education but also for training in the fields of art, nursing and social welfare work. According to the purpose of the training, the courses range from 1 to 6 semesters in length. As a general rule, candidates for admission must be at least 18 years of age and have had adequate (2 years) practical experience. Under the heading of *Fachschulen*, there are also correspondence courses, organized by private undertakings; the correspondence lessons are very carefully prepared and the work done is scrupulously corrected. These courses give people who are already exercising a profession and are unable to attend an advanced full-time vocational training school an opportunity of continuing their education. Examinations may be organized by appropriate committees.

In order to give a general picture of the numerous types of advanced vocational training schools the following groups are listed below.

Advanced training schools for agriculture and domestic economy. These schools, which are run by the agricultural associations, include:

Farming schools (*Landwirtschaftsschulen*), with a course lasting 2 semesters and occupying 30 hours a week, generally held during the winter months.

Agricultural schools (*Landbauschulen*), providing a 2-year course of training for managers of agricultural concerns.

Higher agricultural schools (*höhere Landbauschulen*), with a 1-year course following on from the agricultural school training and leading up to an examination for the State Certificate of Farming. Successful candidates are qualified for training as teachers in agricultural schools and, if they have particularly good marks, for entrance to an agricultural college.

Country women's schools (*Landfrauenschulen*), with a lower class of 1 year and an upper class of 1 year. Those who pass the school-leaving examination qualify for the State Certificate of Household Management and are entitled to enrolment at a training school for women teachers in agricultural schools.

Advanced education and social welfare training schools (*sozialpädagogische Fachschulen*). Under this head should be grouped private educational institutions, or those run by organizations, municipalities or even the State, which cater mainly for women (but are also attended by some men) and train them for public service in the fields of education, nursing or social welfare. The following are quoted as examples:

Nursing schools, with a 2-year course in hospitals or faculties of medicine.

Gymnastics schools, training qualified teachers for private gymnastics instruction. The course lasts 4 or 5 semesters and a state examination is held at the end of it.

Welfare schools, with a 2- to 3-year course of training for employment in health services, youth welfare services and the welfare sections of various professional and industrial groups and institutions.

Schools for women kindergarten teachers, with a 2-year course of training in the education and care of small children from 3 to 6 years of age.

Advanced vocational training schools for management, administration and commerce. In addition to the special schools run by the appropriate unions for those engaged in the food and consumer goods trades, the ironmongery and household furniture trades, the book trade, the chemists' and photographers' trades, etc., there are some advanced general management training schools, such as:

Commercial academies which, in 4 semesters, train ambitious young sales people to become managers of commercial firms;

Administrative and commercial academies, which provide further training for public servants and business employees;

Advanced training schools for the Federal Postal and Railway Services, which aim at giving employees a training that will enable them to obtain promotion to senior posts in those services.

There are finally, and above all, the commercial colleges (*Wirtschaftsoberschulen*), with a 3-year course, following on from the intermediate school, commercial school (*Handelsschule*) or higher commercial school (*höhere Handelsschule*) courses, and providing instruction in economics, culture and languages, physics and mathematics, office work and gymnastics. These commercial colleges, which are generally maintained by municipalities, rank between the *Fachschulen* and the *Gymnasien*.

Schools of engineering. The schools of engineering are the most highly developed form of advanced vocational schools. They are advanced technical training institutions where qualified young people, engaged in manual occupations, after completing their apprenticeship, obtaining the technical school leaving certificate and having had the necessary practical experience, are given a 6-semester course of training as practical engineers. Schools of engineering are run by municipalities or the State; there are 79 of them in the Federal Republic and West Berlin. They provide training in the following fields: over-ground and underground building, surveying, regulation of water supplies and irrigation techniques, machine construction, electrical engineering, manufacturing techniques and industrial engineering, precision techniques, heating and ventilation, shipbuilding, chemistry and textiles. Some schools which provide training in several different fields are known as polytechnical institutes (*Polytechniken*). The course ends with a state examination. Candidates obtaining very good or good average results in the examination are eligible for admission to a college of technology (*technische Hochschule*).

Mining schools. The aims of the mining schools are similar to those of the schools of engineering. They are run by the mining employers' associations and the Mines Commissions. Their special characteristic is that the training they give is continuously linked with practical mining experience. The standard for admission is that of the technical school leaving certificate (*Fachschulreife*); there are three types of mining school, following on from one another. These are: a 2-year course of preparatory training at a *Bergvorschule*, students attending the school on 3 mornings or afternoons a week, the rest of the time being devoted to practical work; a 2½-year course of training at a *Bergschule*, for the training of foremen and mine inspectors, alternating 3 days a week with work in the pits and leading up to the foremen's examination; a 1-year course of training in the senior department of the *Bergschule*, for senior foremen and managers.

There are mining schools for coal mining, brown coal mining, ore mining, petroleum mining and salt mining, as well as for quarries and earthworks. Those who complete the mining school course and are marked 'good' in the final examination can be enrolled as regular students in the mining faculty of a college of technology.

Teaching staff in vocational training schools. The staff consists of full-time, part-time and auxiliary teachers, together with workshop instructors.

The full-time teachers have had practical experience in their own sphere of work and an academic training as vocational school teachers, lasting 4 to 6 semesters, at a vocational teacher training college or, in the case of certifi-

cated commercial teachers, of 8 semesters at a university faculty of economics. After the first teachers' examination, they teach for 1 or 2 years at a part-time or full-time vocational training school; they then take the second state examination and are thereafter appointed as head teachers in agriculture, industrial or commercial training schools. The part-time teachers give only a limited number of hours of instruction, being occupied mainly in other schools. The auxiliary teachers are specialists other than established teachers, in the field of agriculture, handicrafts, industry and trade, or else engineers. Full-time teachers, with appropriate qualifications, can become heads of departments, headmasters or school inspectors working for the intermediate and higher educational authorities.

Teacher training schools

Since teachers in schools of every kind are required to have had an academic education, there are no longer any teacher training schools at the secondary level in the Federal Republic.

Women kindergarten teachers, who do not rank as school teachers but as specialists in early childhood education, are trained in advanced full-time vocational schools (see above).

Out-of-class activities

All secondary schools have a system whereby pupils take part in the administration of the school (*Schülermitverwaltung*); such a system is prescribed by law in most of the *Länder*. It consists in allowing pupils to take part in the management of school affairs outside the sphere of actual teaching; for instance, they help to keep order, run libraries, prepare for school entertainments, excursions and other events, and also contribute to the welfare of fellow-pupils in need of assistance. Such co-operation is ensured by means of a pupils' committee (*Schülerausschuss*) composed of representatives elected by the pupils themselves.

Similarly, all schools have a parents' committee, consisting of representatives of the parents of children in the various classes. These committees are responsible for ensuring good relations between the school and the homes and for co-operating in the welfare services and other activities organized by the school.

In most of the *Länder*, each part-time vocational training school has an advisory council, composed of representatives of the parents, employers, vocational school teachers and other persons concerned with such training.

It is difficult to organize many sports and games outside the hours of actual tuition, since schools are either open for half the day only or, in the case of most part-time vocational training schools, provide each class with instruction, morning and afternoon, on one day of the week only. Many high schools (*Gymnasien*), however, have sports clubs, e.g. for ball games and rowing, which are run by the pupils themselves. Amateur theatrical and singing festivals are also very often organized, at which not only pupils from the various schools and towns but also young people from different *Länder* gather together. The hiking movement, which nearly died out in the tragic 1940s, has now taken on a new lease of life and groups of young people on their free days and during the holidays are once again roaming over the countryside and visiting foreign countries.

TRENDS AND PROBLEMS

A critical review of secondary education in the Federal Republic of Germany reveals the following outstanding characteristics: basic differentiation between general and vocational training schools; early decision on the type of secondary education most suitable for a pupil; determination of most suitable type of secondary education by selection, instead of by self-assessment; combination of professional apprenticeship and theoretical instruction in compulsory vocational training schools; maintenance of a balance between the free development of the personality and social requirements.

The basic differentiation between the two forms of education is due primarily to the history of educational development: vocational training became part of the educational system much later than general education. The differentiation is retained, in order to ensure a thorough education, but it is gradually becoming less clear-cut as a result of efforts to make vocational training open up a second avenue (known as *der zweite Weg*) to higher education and the university. Such efforts are facilitated by the fact that tuition and materials are free of charge in every type of school.

The taking of an early decision on the transfer of pupils from the primary school to the appropriate type of secondary school is opposed by some people on the grounds that it is contrary to what psychology teaches us and to the requirements of society; on the other hand, many people in intermediate school and *Gymnasium* circles consider it necessary in order to maintain the high standard of those schools. The extension of the period of basic primary schooling to 6 years has been achieved for the past 15 years in the three city states of West Berlin, Bremen and Hamburg. However, in the other *Länder* it is still a controversial question, and the idea of further extending it everywhere to 7 or 8 years without differentiation has met with general disapproval.

The assignment of pupils to the various branches of secondary education by means of selection, based either on the strict examination system or on the modified system of a week's trial attendance at school, depends solely upon the decision of the teachers. The experiment of making pupils co-operate in the process of vocational guidance and self-assessment is already being conducted in some comprehensive schools, but this system has not yet been generally introduced. For the first time, in the 1959 plan outlined by the German Council for Education and Culture, a solution on these lines is proposed for the transfer of pupils to secondary schools, with the exception of classical high schools (*humanistische Gymnasien*). This is the 'transition course' (*Förderstufe*) proposal but, here again, outside judgements carry greater weight than the pupil's own initiative. The idea of selection should be gradually superseded by that of self-assessment.

The combination of professional apprenticeship and theoretical instruction in compulsory vocational training schools gives all young people who are not already attending a full-time school (intermediate, vocational or general secondary school) the possibility of continuing their education up to the age of 18. From the educational point of view, this system is of special significance, as not only are the part-time vocational schools thinking of increasing their number of hours of instruction but the administrative authorities are also considering ways of improving industrial training. It is likewise possible for pupils, through the 'second avenue', to develop and extend their education when desired.

This combination of professional apprenticeship and theoretical instruction also ensures the necessary contact between professional life, society and the school community; general secondary schools, of course, also aim at establishing such contact, but it is more difficult for them. The principle that education should be solely conditioned by social requirements is not accepted, for it is diametrically opposed to the free development of the personality according to modern ideas. The maintenance of a proper balance between these two factors is the outstanding characteristic of secondary education in the Federal Republic of Germany.

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STATISTICS: FEDERAL REPUBLIC

Population (mid-year 1958 estimate): 52,150,000.
Area: 95,738 square miles; 247,960 square kilometres.
Population density: 545 per square mile; 210 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment (not including pre-primary and adult education, or data for the Saar and for West Berlin) was over 8.5 million, being about 17 per cent of the total population. Of these pupils, 56 per cent were in primary schools, 13 per cent in intermediate schools (*Mittelschulen* and *Realschulen*, and high schools (*Gymnasien*), 27 per cent in full-time and part-time vocational schools, 2.5 per cent in institutions of higher education, and 1 per cent in special schools. The proportion of girls was 49 per cent in primary schools, 44 per cent in intermediate schools and high schools, 46 per cent in vocational schools, 57 per cent in teacher training colleges, and 16 per cent in the universities and other institutions of higher education. The teaching staff in primary and secondary schools consisted of nearly 255,000 teachers, of whom 37 per cent were women. Between 1953 and 1957, primary school enrolment decreased by 11 per cent, secondary school enrolment increased by 2 per cent, and higher education by 36 per cent. (See Table 1.)

Enrolment trends in secondary education, 1950–57. Between 1950 and 1957, general secondary school enrolment increased by 38 per cent and vocational school enrolment by about 25 per cent. During this period the proportion of girls remained at 44 per cent in general secondary schools, but increased slightly to 46 per cent in vocational schools. The average total enrolment for the period 1955–57 was higher than for the period 1950–54, though the enrolment ratio dropped from 83 to 79, owing to an increase in the estimated population 15–19 years old. (See Table 2.)

Examination results in secondary education, 1953–57. Between 1953 and 1957, the number of certificates awarded for passing the final examination of intermediate schools increased by 77 per cent, while the final high school certificates increased by 84 per cent. Girls were more numerous

than boys among recipients of the middle school certificate, but they received only about one-third of the high school certificates each year. (See Table 3.)

Educational finance, 1957/58. During the fiscal year which began in April, 1957, total educational expenditure (not including clinics, research institutes and private schools) amounted to 5,955 million Deutschmarks, averaging 116 marks per inhabitant. This expenditure was met by receipts from the Federal Government (1 per cent), Länder governments (60 per cent), local authorities (31 per cent), tuition fees (2 per cent) and from rents and loans (6 per cent). Recurring expenditure, representing 76 per cent of the total, was distributed by level and type of education as shown in Table 4C.

Source. Federal Republic of Germany: Statistisches Bundesamt, replies to Unesco questionnaires.

1. FEDERAL REPUBLIC: SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	*Schulkindergärten*, public	1956/57	61	...	...	1 352	657
	Kindergartens, public and private	1956/57	11 056	...	...	...	...
	Total	**1957/58**	**[1]11 327**	**...**	**...**	**...**	**...**
	„	1956/57	11 117	...	...	[2]1 352	[2]657
	„	1955/56	10 923	...	...	[2]2 099	[2]1 096
	„	1954/55	10 322	...	...	680 782	[2]863
	„	1953/54	[1]10 018	...	...	[1]659 398	...
Primary	Primary schools, public	1957/58	29 535	124 491	51 319	4 753 584	2 338 493
	Primary level of 'new system' schools, public	1957/58	[3]461	[3]9 194	[3]4 514		
	Primary schools, private	1957/58	152	555	330	21 187	11 031
	Primary level of 'new system' schools, private	1957/58	[3]47	[3]989	[3]546		
	Total	**1957/58**	**[3]30 195**	**[3 4]135 229**	**[3 4]56 709**	**4 774 771**	**2 349 524**
	„	1956/57	[3]30 046	[3 4]135 307	[3 4]55 510	4 796 312	2 363 249
	„	1955/56	[3]29 949	[3 4]135 455	[3 4]54 211	4 865 491	2 397 014
	„	1954/55	[3]29 827	[3 4]136 551	[3 4]53 625	5 068 300	2 496 414
	„	1953/54	[3]29 629	[3 4]136 596	[3 4]52 836	5 381 706	2 654 716
Secondary *General*	Intermediate schools (*Mittelschulen*), public	1957/58	[5]692	[5]10 852	[5]4 105	305 495	153 137
	High schools (*höhere Schulen*), public	1957/58	[5]1 257	[5]32 720	[5]9 162	698 543	255 717
	Middle schools (*Mittelschulen*), private	1957/58	[5]159	[5]1 370	[5]1 152	32 097	27 723
	High schools (*höhere Schulen*), private	1957/58	[5]368	[5]5 842	[5]3 321	107 795	68 468
	Total	**1957/58**	**[5]2 476**	**[5 6]50 784**	**[5 6]17 740**	**1 143 930**	**505 045**
	„	1956/57	[5]2 441	[5 6]49 151	[5 6]17 108	1 153 268	510 485
	„	1955/56	[5]2 398	[5 6]46 562	[5 6]16 248	1 169 341	520 588
	„	1954/55	[5]2 332	[5 6]44 884	[5 6]15 540	1 140 230	506 781
	„	1953/54	[5]2 295	[5 6]42 642	[5 6]14 685	1 076 521	477 171
Vocational	Part-time vocational schools, public	1957/58	3 108	[7]25 916	[7]9 898	2 002 927	881 582
	Full-time vocational schools, public	1957/58	907	[7]24 643	[7]4 476	99 618	72 075
	Advanced full-time vocational schools, public[8]	1957/58	1 207	[7]9 159	[7]1 885	87 161	31 913
	Part-time vocational schools, private	1957/58	129	[7]2 215	[7]1 349	14 246	3 255
	Full-time vocational schools, private	1957/58	474	[7]1 811	[7]864	48 766	34 480
	Advanced full-time vocational schools, private[8]	1957/58	563	[7]5 013	[7]1 894	25 347	18 421
	Total	**1957/58**	**6 388**	**[7]68 757**	**[7]20 366**	**2 278 065**	**1 041 726**
	„	1956/57	6 763	[7]74 788	[7]22 143	2 451 742	1 115 365
	„	1955/56	7 164	[7]71 130	[7]21 190	2 481 637	1 128 380
	„	1954/55	7 798	[7]68 612	[7]20 654	2 413 508	1 089 467
	„	1953/54	8 262	[7]64 995	[7]20 094	2 281 930	1 024 094
Higher *Teacher training*	Teacher training colleges, public	1957/58	61	[9]1 962	[9]511	17 613	10 926
	Teacher training colleges, private	1957/58	9			298	272
	Post-graduate teacher training, public	1957/58	443	[10]1 195	[10]231	3 945	1 287
	Total	**1957/58**	**[11]70**	**[9 11]1 962**	**[9 11]511**	**21 856**	**12 485**
	„	1956/57	[11]74	[9 11]1 866	[9 11]506	19 736	10 920
	„	1955/56	[11]79	[9 11]1 734	[9 11]472	18 421	9 636
	„	1954/55	[11]84	[11]791	[11]216	17 496	8 885
	„[11]	1953/54	81	770	201	11 837	6 511

Note. Data on adult education, and those concerning the Saarland and West Berlin are not included in this table.

1. Kindergartens only, not including *Schulkindergärten*.
2. *Schulkindergärten* only.
3. Including data relating to the secondary level of 'new system' schools.
4. In addition, there were part-time teachers, who numbered 33,319 (F. 11,758) in 1957/58.
5. Not including data relating to the secondary level of 'new system' schools.
6. In addition, there were part-time teachers, who numbered 10,813 (F. 3,459) in 1957/58.
7. Including part-time teachers; in all vocational schools, their number was 34,456 (F. 6,577) in 1957/58.
8. In the previous edition, engineering schools were included under 'vocational'.
9. Including part-time teachers who numbered 1,042 (F. 270) in 1957/58.
10. Number of teachers in secondary schools who participate in the post-graduate teacher training.
11. Not including post-graduate teacher training.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Higher [cont.]							
General and technical	Universities, public	1957/58	17	...	...	106 040	25 345
	Technical colleges, public	1957/58	7	...	...	34 974	1 328
	Other colleges, public	1957/58	11	...	...	5 242	364
	Engineering schools, public[8]	1957/58	71	1 893	22	33 246	638
	Colleges of fine arts, music and sport, public	1957/58	21	...	...	6 191	2 551
	Colleges of theological philosophy, private	1957/58	7	...	...	1 071	4
	Evangelical colleges, private	1957/58	4	...	...	405	48
	Engineering schools, private[8]	1957/58	2	36	1	1 199	235
	Total	**1957/58**	**140**	**[12]1 929**	**[12]23**	**188 368**	**30 513**
	„	1956/57	141	[12]1 781	[12]20	173 253	27 002
	„	1955/56	135	[12]1 650	[12]15	156 932	23 913
	„	1954/55	132	[12]1 568	[12]16	148 845	21 699
	„	1953/54	132	12 399	578	143 030	20 198
Special	*Hilfsschulen*	1957/58	692	3 416	1 325	79 895	32 371
	schools for blind and for visually defective children	1957/58	23	134	50	1 107	487
	Schools for the deaf-mute and for children hard of hearing	1957/58	50	557	196	5 032	2 188
	Schools for crippled children	1957/58	14	44	31	980	426
	Schools for sick children	1957/58	38	67	53	2 214	1 010
	Schools for speech defective children	1957/58	11	92	24	1 497	419
	Schools in welfare institutions	1957/58	122	373	186	8 975	2 669
	Other special schools	1957/58	66	211	143	5 233	1 882
	Hilfsschul-classes in regular primary schools	1957/58	(279)	...	...	5 743	2 180
	Total	**1957/58**	**[13]1 016**	**[14]4 894**	**[14]2 008**	**110 676**	**43 632**
	„	1956/57	[13]1 008	[14]4 822	[14]2 002	109 516	43 133
	„	1955/56	[13]1 001	[14]4 798	[14]1 996	110 022	42 958
	„	1954/55	[13]942	[14]4 601	[14]1 920	110 650	43 116
	„	1953/54	[13]921	[14]4 454	[14]1 880	112 788	43 746

12. Teachers in engineering schools only.
13. Number of schools only.
14. Full-time teachers only; not including teachers in special classes attached to regular schools.

2. FEDERAL REPUBLIC: TRENDS IN SECONDARY EDUCATION, 1950–57

School year	Number of students enrolled by type of education				Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational				
	Total	Per cent female	Total	Per cent female			
1950	828 704	44	[1]1 832 414	[1]42	*3 160	3 809	*83
1951	925 796	44	[1]2 023 976	[1]44			
1952	1 000 746	44	[1]2 217 974	[1]44			
1953	1 076 521	44	2 281 930	45			
1954	1 140 230	44	2 413 508	45			
1955	1 169 341	45	2 481 637	45	3 559	4 509	79
1956	1 153 268	44	2 451 742	45			
1957	1 143 930	44	2 278 065	46			

Note. Data concerning Saarland and West Berlin are not included.

1. Including engineering schools, classified under higher education from 1953.

3. FEDERAL REPUBLIC: EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Final examination of intermediate school (*Mittelschulabschluss*)	31 028	17 459	35 282	19 896	43 035	24 707	51 145	29 339	54 987	31 326
Final high school examination (*Abitur*)	21 373	6 452	27 204	8 518	34 962	11 114	36 208	11 752	39 270	13 139

Note. Data concerning Saarland and West Berlin are not included.

4. FEDERAL REPUBLIC: EDUCATIONAL FINANCE, 1957/58
(in thousand Deutschmarks)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**5 954 915**
Federal Government	66 353
Länder	3 549 930
Local authorities	1 848 477
Tuition fees	120 843
Rents	31 023
Loans	338 289

B. EXPENDITURE BY PURPOSE

		Amount
Total expenditure[2 3]		**5 954 915**
Recurring expenditure		4 514 053
For central administration	76 666	
Salaries to teachers, etc.	2 634 526	
Other instructional expenditure / Other recurring expenditure	1 802 861	
Capital expenditure		1 305 086
Debt service[4]		135 776

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**4 514 053**		**100.0**
Central administration		76 666		1.7
Instruction		4 381 265		97.1
Pre-primary and primary education[5]	2 260 823		50.1	
Secondary education	1 678 922		37.2	
General and teacher training	1 037 833		23.0	
Vocational	641 089		14.2	
Higher education	441 520		9.8	
Other recurring expenditure, not specified		56 122		1.2

Note. Data concerning Saarland and West Berlin are not included.

1. Official exchange rate: 1 Deutschmark = 0.238 U.S. dollar.
2. Closed account.
3. Not including clinics, research institutes and private schools.
4. Local authorities, only.
5. Including special education.

STATISTICS: WEST BERLIN

Population (mid-year 1958 estimate) 2,224,000.
Area: 186 square miles; 481 square kilometres.
Population density: 11,957 per square mile; 4,624 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment (not including pre-primary and adult education) was about 340,000, representing 15 per cent of the total population. Of these pupils, 45 per cent were enrolled in primary schools, 19 per cent in general secondary schools, 27 per cent in vocational schools, 6 per cent in higher educational institutions, and 2 per cent in special schools. The proportion of girls was 49 per cent of the enrolment in primary, secondary and vocational schools and 18 per cent in higher education. Women teachers were 47 per cent of the teaching staff in the primary and secondary schools, in which the average pupil-teacher ratio was 28. Between 1953 and 1957, only vocational and higher education showed increased enrolment. (See Table 1.)

Enrolment trends in secondary education, 1950–57. Secondary school enrolment seems to have risen rapidly between 1950 and 1953, then fallen somewhat in the next 3 or 4 years. Vocational school enrolment increased steadily up to 1956, and also fell behind in 1957. The proportion of girls remained at 49 per cent in the general secondary schools throughout this period; in the vocational schools this proportion has also been maintained in the last few years. The average total enrolment in secondary education has, during this period, almost equalled the estimated population 15–19 years old. (See Table 4.)

Examination results in secondary education, 1953–57. Between 1953 and 1957, the annual number of certificates for passing the final examination of the intermediate school increased threefold, the proportion of girls remaining at about 55 per cent. For the final high school examination, the number of certificates increased only one and a half times; about 40 per cent of these were awarded to girls. (See Table 2.)

Educational finance, 1957/58. For the fiscal year which began in April 1957, total educational expenditure amounted to 327.6 million Deutschmarks, averaging 147 marks per inhabitant. Recurring expenditure represented 88 per cent of the total.

Source. Federal Republic of Germany: Statistisches Bundesamt, replies to Unesco questionnaires.

1. WEST BERLIN: SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	*Schulkindergärten*, public	1956/57	14	...	...	389	180
	Kindergartens, public and private	1956/57	278	...	...	...	...
	Total	**1957/58**	**...**	**...**	**...**	**...**	**...**
	,,	1956/57	292	...	...	[1]389	[1]180
	,,	1955/56	281	...	...	[1]342	[1]176
	,,	1954/55	277	...	...	11 791	[1]117
	,,	1953/54	272	...	...	11 454	[1]118
Primary	Primary schools, public	1957/58	294	[2]7 467	[2]3 797	148 904	72 738
	Primary schools, private	1957/58	16	[2]334	[2]235	3 483	2 001
	Total	**1957/58**	**310**	**[2]7 801**	**[2]4 032**	**152 387**	**74 739**
	,,	1956/57	315	[2]7 827	[2]4 045	157 757	77 302
	,,	1955/56	316	[2]7 936	[2]4 160	171 019	83 983
	,,	1954/55	317	[2]8 349	[2]4 383	184 662	90 794
	,,	1953/54	319	[2]8 460	[2]4 526	189 016	93 519
Secondary *General*	Secondary schools, technical branch, public	1957/58	47	[3]...	[3]...	25 894	14 041
	High schools, public	1957/58	63	[3]...	[3]...	33 748	14 980
	Secondary schools, technical branch, private	1957/58	7	[3]...	[3]...	936	622
	High schools, private	1957/58	12	[3]...	[3]...	3 099	1 613
	Total	**1957/58**	**129**	**[3]...**	**[3]...**	**63 677**	**31 256**
	,,	1956/57	130	[3]...	[3]...	70 027	34 274
	,,	1955/56	130	[3]...	[3]...	71 309	34 695
	,,	1954/55	130	[3]...	[3]...	68 662	33 565
	,,	1953/54	124	[3]...	[3]...	78 046	38 323
Vocational	Vocational part-time schools, public	1957/58	48	[4]1 301	[4]428	76 346	33 637
	Vocational full-time schools, public	1957/58	25	[4]528	[4]281	7 169	5 978
	Advanced vocational full-time schools, public[5]	1957/58	30	[4]481	[4]122	2 567	1 347
	Vocational part-time schools, private	1957/58	4	[4]18	[4]6	900	199
	Vocational full-time schools, private	1957/58	13	[4]235	[4]174	2 216	2 138
	Advanced vocational full-time schools, private[5]	1957/58	77	[4]551	[4]238	2 541	2 072
	Total	**1957/58**	**197**	**[4]3 114**	**[4]1 249**	**91 739**	**45 371**
	,,	1956/57	188	[4]3 077	[4]1 237	93 100	45 674
	,,	1955/56	175	[4]2 900	[4]1 153	87 077	42 247
	,,	1954/55	166	[4]2 579	[4]1 087	81 295	39 017
	,,	1953/54	165	[4]2 440	[4]1 072	77 476	36 721
Higher *Teacher training*	Teacher training college, public	1957/58	1	[6]125	[6]29	928	631
	Post-graduate teacher training, public	1957/58	14	[7]99	[7]26	379	163
	Total	**1957/58**	**[8]1**	**[6 8]125**	**[6 8]29**	**1 307**	**794**
	,,	1956/57	[8]1	[6 8]109	[6 8]27	1 277	749
	,,	1955/56	[8]1	[6 8]109	[6 8]24	1 125	639
	,,	1954/55	[8]1	[8]52	[8]8	924	517
	,, [8]	1953/54	1	51	8	587	325
General and technical	Universities, public	1957/58	2	...	...	18 255	3 972
	College of political studies, public	1957/58	1	...	...	401	51
	Engineering schools, public[5]	1957/58	3	176	3	2 808	99
	Colleges of fine arts and music, public	1957/58	2	...	...	1 154	504
	Ecclesiastic college, private	1957/58	1	...	...	266	72
	Engineering schools, private[5]	1957/58	2	27	2	558	18
	Total	**1957/58**	**11**	**[9]203**	**[9]5**	**23 442**	**4 716**
	,,	1956/57	11	[9]185	[9]4	20 411	4 208
	,,	1955/56	10	[9]159	[9]3	17 374	3 711
	,,	1954/55	11	[9]153	[9]3	14 597	3 003
	,,	1953/54	10	1 166	78	13 099	2 622

Note. Data on adult education have not been included in this table. In 1957/58, 185,155 adults were enrolled at folk high schools.

1. *Schulkindergärten* only; not including kindergartens.
2. Including teachers in general secondary education; in addition, there were part-time teachers who numbered 198 (F. 23) in 1957/58.
3. Included with primary education.
4. Including part-time teachers; in 1957/58, they numbered 1,213 (F. 352) in all vocational schools.
5. In the previous edition, engineering schools had been included under 'vocational'.
6. Including 71 (F. 18) part-time teachers.
7. Number of teachers in secondary schools who participate in the post-graduate teacher training.
8. Not including post-graduate teacher training.
9. Teachers in engineering schools only.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Special	*Hilfsschulen*	1957/58	25	[10]330	[10]172	5 344	2 080
	Schools for blind and visually defective children	1957/58	2	[10]24	[10]13	152	60
	Schools for deaf mute children and those hard of hearing	1957/58	3	[10]42	[10]18	310	137
	Schools for crippled children	1957/58	2	[10]11	[10]8	138	72
	Schools for sick children	1957/58	1	[10]2	[10]2	24	14
	Schools for speech defective children	1957/58	4	[10]72	[10]30	1 022	245
	Schools in welfare institutions	1957/58	6	[10]36	[10]15	529	133
	Other special schools	1957/58	4	[10]21	[10]12	316	91
	Total	**1957/58**	**47**	[10]**538**	[10]**270**	[11]**7 835**	[11]**2 832**
	„	1956/57	46	[10]544	[10]277	8 534	2 954
	„	1955/56	46	[10]544	[10]291	8 816	3 206
	„	1954/55	44	[10]536	[10]289	9 161	3 276
	„	1953/54	44	[10]533	[10]289	9 624	3 535

10. Full-time teachers only.

11. Not including special classes attached to regular primary schools.

2. WEST BERLIN: EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Final examination of intermediate school (*Mittelschulabschluss*)	2 099	1 181	4 872	2 557	5 939	3 324	6 122	3 347	6 208	3 385
Final high school examination (*Abitur*)	1 885	744	2 473	1 037	2 916	1 173	3 212	1 260	2 944	1 185

3. WEST BERLIN: EDUCATIONAL FINANCE, 1957/58
(in thousand Deutschmarks)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**327 590**
The City Government	321 583
Tuition fees	6 007

B. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2 3]		**327 590**
Recurring expenditure		287 198
For central administration	5 886	
Salaries to teachers, etc.	153 473	
Other instructional expenditure	127 839	
Other recurring expenditure		
Capital expenditure		40 392

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**287 198**		**100.0**
Central administration		5 886		2.1
Instruction		278 324		96.9
Pre-primary and primary education	104 364		36.3	
Secondary education	116 536		40.6	
General	70 107		24.4	
Vocational	46 429		16.2	
Higher education	57 424		20.0	
Other recurring expenditure, not specified		2 988		1.0

1. Official exchange rate: 1 Deutschmark = 0.238 US. dollar.
2. Closed account.
3. Not including clinics, research institutes and private schools.

4. WEST BERLIN: TRENDS IN SECONDARY EDUCATION, 1950–1957 (PUBLIC SCHOOLS ONLY)

School year	Number of students enrolled by type of education				Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational				
	Total	Per cent female	Total	Per cent female			
1950	35 642	49	[1]67 461	44			
1951	30 457	49	[1]77 661	46			
1952	58 312	49	[1]81 126	46	*129	132	*98
1953	78 046	49	77 476	47			
1954	68 662	49	81 295	48			
1955	71 309	49	87 077	49			
1956	70 027	49	93 100	49	159	161	99
1957	63 677	49	91 739	49			

1. Including engineering schools, classified under higher education from 1953.

EASTERN GERMANY

THE EDUCATIONAL SYSTEM

The present educational system began in 1945 when the Deutsche Verwaltung für Volksbildung (German Public Education Department) was set up as the central authority responsible for co-ordinating educational matters in the states of Mecklenburg, Brandenburg, Saxony, Saxony-Anhalt, and Thuringia, in the Soviet zone of occupation. In 1946, at the first Educational Congress, which was held in East Berlin, the general reorganization of the educational system was discussed. The law on the democratization of German schools (*Gesetz zur Demokratisierung der deutschen Schule*), promulgated in 1946 by the authorities of the Soviet zone of occupation, laid down the main lines of a single-ladder school system and provided for compulsory schooling; thereafter the text of this law was adopted by the five States of the zone, and in 1948 its provisions were extended to East Berlin.

On the proclamation of the German Democratic Republic (October 1949), the main provisions of the 1946 law were incorporated in the new Constitution, which in particular laid down the following general principles and aims.

'1. The arts and sciences, and education in them, are free to all.

'2. The State participates in their development and guarantees them its protection, particularly against abuse for purposes contrary to the provisions and spirit of the Constitution.' (Article 34.)

'1. All citizens have the same right to education and to a free choice of profession.

'2. The education of young people and the subsequent intellectual and vocational training of citizens are provided by public institutions in all spheres of state and community activity.' (Article 35.)

'1. Public institutions for school education, and the organization of the teaching which they provide, are the responsibility of the *Länder*.[1] For this purpose the Republic promulgates laws containing uniform basic provisions, and may also set up public educational establishments itself.

'2. The Republic likewise decrees uniform measures regarding the training of teachers. This training is given in the universities or in establishments of equivalent standing.' (Article 36.)

'Schools provide for the education of the young in the spirit of the Constitution; they aim at training men of independent mind, conscious of their responsibilities, and ready and qualified to take their place in the life of the community. As a dispenser of culture, the school has the task of bringing up the young in a spirit of peaceful and friendly co-operation between the peoples, and of true democracy.

'The parents shall take part in the school education of their children through the establishment of parents' councils.' (Article 37.)

'Every child must be given the opportunity to develop

1. In July 1952, the 5 *Länder* were replaced by 15 regions (*Bezirke*). The regions are divided into districts (*Kreise*). There is a further division of rural districts (counties) into communes (*Gemeinden*) and of urban districts (cities) into wards (*Stadtbezirke*).

his physical, intellectual and moral capacities to the maximum. The school careers of children must on no account depend on the social and economic conditions of their parents. Indeed, children who are at a disadvantage because of social conditions are to be given special care. Gifted pupils from all classes of the population must be given the opportunity to attend vocational schools, secondary schools and university.

'Tuition is free of charge. Textbooks and educational equipment used in compulsory schools are supplied without cost; in case of need, scholarships and other measures will promote attendance at vocational schools, secondary schools and university.' (Article 39.)

'Religious instruction is the concern of religious societies. The exercise of this right is guaranteed.' (Article 40.)

A leading role in the formulation of educational policy and the preparation of legislation is played by the Central Committee of the Socialist Unity Party (*Sozialistische Einheitspartei Deutschlands* or SED). Laws and decrees are passed by the parliament (*Volkskammer*) and issued by the Council of Ministers. Under the Council of Ministers the Ministry of Public Education (*Ministerium für Volksbildung*) is the highest authority for the control of general education, teacher training, vocational education provided in the various part-time vocational schools (*Berufsschulen*), and adult education. Technical education in full-time technical schools (*Fachschulen*) and all types of higher education except teacher training come under the State Secretariat for Higher Education (*Staatssekretariat für Hochschulwesen*).

THE DEVELOPMENT OF SECONDARY EDUCATION

The legislation of 1946, confirmed by Article 38 of the Constitution of 1949, established an 8+4 pattern of general education, a unitary 8-year school (*Grundschule*) compulsory for all, followed by a 4-year high school (*Oberschule*) which prepared students for university entrance. Education was made compulsory up to the age of 18, so that pupils who did not go on to the *Oberschule* or other full-time (public) school were obliged to attend a part-time vocational training school. Alongside the *Oberschule* there grew up a 10-year school covering 8 primary (*Grundschule*) and 2 middle school (*Mittelschule*) grades. External examinations were taken after grade 8 (*Abschlussprüfung der Grundschule*), grade 10 (Middle School Maturity examination or *Prüfung der mittleren Reife* and grade 12 (High School Maturity examination or *Reifeprüfung*). In accordance with the requirements of the Constitution, provision was made for students who had not followed the regular *Oberschule* course to study for university entrance in part-time schools and courses.

The subsequent history of general secondary education has been characterized by two main trends: (a) the development and extension of the 10-year school; (b) the transformation of the programme of general education into one of general and polytechnical education with vocational experience. Some of the principal events in this movement have been as follows:

30 July 1951. Resolution of the Third Party Congress of the SED on the introduction of 10-year schools.

1 November 1951. Adoption of the first five-year plan, with a substantial increase (48 per cent) of expenditure on education.

29 July 1952. Resolution of the Central Committee of the SED on the objectives of education and steps required to improve educational methods.

21–23 May 1953. Conference convened by the Central Pedagogical Institute to discuss the theoretical and practical aspects of polytechnical education.

May 1956. Fifth Pedagogical Conference; the conference expressed its approval of the universal development of polytechnical education as 'the main link in the chain for raising the level of educational work in the schools and as a major objective assigned to the school by society, to bring about the rapid development of socialist production and technology'.

September 1958. The subject 'Introduction to socialist production' included in curricula of middle and high schools.

June 1959. Fourth Conference of the Central Committee of the SED. The Conference laid down that the 10-year school, followed by vocational training, should be the principal educational ladder leading to technical and university education.

12 November 1959. Ordinance introducing a uniform system of general education.

2 December 1959. Law on the Socialist Development of Education in the German Democratic Republic.

Under this recent legislation attendance at the 10-year general and polytechnical school will be compulsory for all children by the school year 1964/65.

As regards the vocational education system, combining apprenticeship training with theoretical instruction in *Berufsschulen*, the foundations were laid in the Law for the Democratization of German Schools, of 1946. In 1954 a separate Ministry of Labour and Vocational Training was established, but in 1958 responsibility for the general supervision of *Berufsschulen* reverted to the Department of Vocational Education of the Ministry of Public Education. The whole system of vocational training was reorganized following the Resolution of the Council of Ministers of 28 June 1956: in particular this created a new type of industrial training school, the *Betriebsberufsschule*, in which the school itself, the workshops allocated to the school and the students' living quarters are in a single training centre under the supervision of the manager of the factory.

The responsibilities of the State Secretariat for Higher and Technical Education were defined in a decree of the Council of Ministers issued on 13 February 1958. These include determining the principles, content and structure of technical education, issuing directives for its organization (school regulations, teachers' salaries, selection and admission of students, etc.), planning and distribution of funds, etc. The technical schools themselves may be operated by other 'technical' ministries, although many of the latter (e.g. Ministry for Heavy Machinery Construction, Ministry for Light Industry, Ministry for the Food Industry) were abolished by the Law of 11 February 1958; the technical schools they had been operating were placed under the direct control of the State Secretariat for

Higher Education, or combinations of national industries or the Departments of Technical Education of district councils.

Administration

The Minister of Public Education is assisted by an advisory council (*Kollegium*) comprising both senior officials and prominent educationists outside the Ministry. There are several technical agencies attached to the Ministry, notably the Central Pedagogical Institute (*Deutsches Pädagogische Zentralinstitut*), which acts as a documentation and research centre, prepares syllabuses for general schools and, in collaboration with the publishing house of Volk and Wissen Verlag, is responsible for the production of all textbooks and various teachers' publications. Another central agency prepares and distributes audio-visual equipment and materials. The Department of Vocational Education, working in association with state industries, is responsible for the organization of vocational schools and their programmes. In devising educational policy, the Ministry ascertains the opinions of the educational authorities and the teaching profession by means of pedagogical conferences, which meet to review questions concerning education as a whole or particular problems.

At the local level the work of the Ministry of Public Education is carried out by the departments of education of the regional and district (county and city) councils; these departments are responsible both to the Ministry and to their respective councils. Regional departments are advised by offices of public education (*Volksbildungsämter*). Individual schools are placed under the control of district councils, except the primary teacher training schools (*pädagogische Institute*) which are administered by the regional authorities.

Parents' councils. According to Article 37 of the Constitution, 'the parents shall take part in the school education of their children through the establishment of parents' councils'. There is at least one elected member for each class in the school; council elections are organized by the director of the school and parents who have children at the school take part both as voters and as candidates.

The council also includes representatives of industries and firms, the Pioneer leader of the general primary school or the Free German Youth secretary in the middle and secondary schools, and representatives of the Democratic League of Women.

Parents are also kept informed of their children's academic progress by being invited to regular meetings held at the school and by receiving visits at home from the teachers.

Supervision and inspection. The functioning of the schools is supervised by education inspectors serving under the Ministry of Education. There are three categories of education inspector: principal inspectors (*Hauptschulinspektoren*); regional inspectors (*Bezirksschulinspektoren*); district inspectors (*Kreisschulinspektoren*).

Education inspectors exercise supervision with regard to material condition of schools, compliance with ministerial regulations, conformity to curricula, methods used, school administration, etc.; in addition, the inspectors ensure the harmonization of school activities with the interests of the State.

Teachers are directly under the authority of the heads of the establishments in which they teach; heads of schools are personally responsible to the Government for the satisfactory functioning of their schools. In schools with four or more teachers, the head is assisted by a pedagogical council comprising the first assistant and all other teachers, the school leader of the Pioneer movement or the secretary of the Free German Youth, and a representative of the parents' council. In schools with fewer than four teachers, the staff meets in regular pedagogical conferences.

The teachers must adhere to curricula and syllabuses prepared by the Ministry.

Finance. The state budget is prepared annually, taking into account the requirements of long-range economic development plans. It embodies the central government budget and the budgets of the 15 regions; each regional budget is made up of the budget of the regional council and of the districts in that region; each district budget similarly incorporates the budget of the administrative units (rural counties or city wards) in the district. Each level of government has some responsibility for the financing of education. The Central Government has direct responsibility for the construction of school buildings and for higher and technical education; the regions are directly responsible for primary teacher training schools. Salaries of teachers and administrative staff are paid by the district authorities, while local communities or city wards pay for such current requirements as supplies, teaching materials, cleaning, etc.

Attendance at the 10-year general polytechnical school, the *Oberschule* (grades 9 to 12) and vocational schools is free. Children from poorer families qualify for a monthly allowance of up to 60 marks per pupil in the 9th and 10th grades, and up to 80 marks in the 11th and 12th grades.

Buildings and equipment. Buildings are constructed according to model plans laid down by the central authorities. In particular these plans allow for a surface area of 1.4 square metres per pupil in classrooms and 1.8 square metres in workshops, laboratories, etc., the normal number of pupils per room being taken as 36. Lighting is provided on the basis of 100 luxes per pupil. New schools are equipped with shower-rooms.

School welfare services. Section 35 of the school regulations prescribes careful attention to matters of hygiene and health. Pupils are examined at regular intervals by school doctors and dentists and if necessary are sent on to specialists or institutions coming under the Ministry of Health. Teachers are also examined regularly, the expenses of treatment and convalescence being borne by the Teachers' Federation.

TYPES OF SECONDARY EDUCATION

General secondary schools

It is intended that by September 1965 the new type of 10-year general polytechnical school with an integrated

programme will be compulsory for all children, and that this school, followed by a period of vocational training, shall be the principal path to higher and technical education. The 4-year high school (grades 9 to 12) and to a decreasing extent the separate middle school (grades 9 and 10) continue to exist side by side with the newly-formed 10-year schools.

The school year begins in September and lasts until the end of June, and comprises 38 weeks—30 weeks to carry out the syllabus and 8 weeks for revision. The school week consists of 5½ days; the usual class period is 45 minutes. Christmas holidays are from 24 December to 3 January, and there is a 2-week holiday at Easter.

High school (*Oberschule*). This school provides a 4-year course from grade 9 to 12 and leads directly to university education. There are three types of *Oberschule*, emphasizing respectively the study of modern languages (A), mathematics and science (B), and classical languages (C). The curricula and time allotted to the various subjects in these three types of *Oberschule* are given in the following table.

TIME-TABLE FOR OBERSCHULEN
(in 45-minute periods per week)

Subject	Year of schooling											
	9			10			11			12		
	A	B	C	A	B	C	A	B	C	A	B	C
German language and literature	5	5	5	4	4	4	4	4	4	4	4	3
Russian	3	3	3	3	3	3	3	3	3	3	3	3
Second foreign language	5	2	6	4	3	4	5	3	4	4	3	4
Third foreign language	—	—	—	4	—	4	4	—	8	4	—	7
Mathematics	3	5	3	3	4	3	3	6	3	3	5	3
Physics	2	3	2	2	3	2	2	3	2	2	3	2
Chemistry	1	2	1	1	3	1	1	3	1	2	3	2
Biology	2	2	2	2	2	2	2	3	2	2	3	2
Geography	2	2	2	2	2	2	1	1	—	1	1	—
History	2	2	2	2	2	2	2	2	2	3	3	3
Civics	1	1	1	1	1	1	1	1	1	1	1	1
Technical drawing	1	1	1	1	1	1	—	—	—	—	—	—
Introduction to socialist production	4	4	4	4	4	4	4	4	4	4	4	4
Drawing	1	1	1	1	1	1	1	1	1	1	1	1
Music	1	1	1	1	1	1	1	1	1	1	1	1
Physical education	2	2	2	2	2	2	2	2	2	2	2	2
Total	35	36	36	37	36	37	36	37	38	37	37	38

The work of the pupils is checked by means of written and oral tests during the year and their progress is recorded on individual record cards. The decision to promote a student is taken at a meeting of the teachers who taught him during the year, and is subject to confirmation by the headmaster. If a student fails twice he must leave school.

The Maturity (university entrance) examination taken at the end of the 4-year course consists of four written and at least two oral examinations. One of the oral examination subjects must be history or current events, the other is related to the career or occupation the candidate proposes to take up on leaving school. The candidate may be required to take oral examinations in additional subjects to a maximum of five. A pass in the Maturity examination is subject to confirmation by an Examination Commission which has voting and advisory members. The voting members are the chairman of the commission, the head of the school, the teacher in charge of the pupil's class, and all the teachers who taught in the class; the advisory members include among others representatives of the parents' council, youth organizations, the Teachers Union, and the universities.

Middle schools (*Mittelschulen*). This 2-year school (grades 9 and 10) is now being reorganized in view of the establishment of the new 10-year schools. The curriculum and time allotted to the various subjects, as laid down in an official instruction for the year 1957/58, were as follows (figures indicate the number of periods per week in each of the 2 years): German, 4, 4; Russian, 3, 3; mathematics, 5, 5; physics, 3, 3; chemistry, 2, 3; biology, 2, 2; geography, 2, 2; history, 2, 3 (first semester only); civics, 1, 3 (second semester only); art, 1, 1; music, 1, 1; physical education, 3, 3; totals, 29, 30. In addition pupils could take as elective subjects a second foreign language (3, 2), and shorthand (1, 1). All pupils devoted 250 hours per year to the subject 'Introduction to socialist production' and to productive work. This time-table should be compared with the study plan for the new 10-year schools, which is given below.

Ten-year general polytechnical secondary school (*Zehnklassige allgemeinbildende polytechnische Oberschule*). This is the name given to the new 10-year school. It comprises a preparatory or elementary section (grades 1 to 4) for children aged 6 to 9, and an upper section (grades 5 to 10) for children aged 10 to 16; these two sections are stages in a single and continuing course.

A new curriculum and detailed subject syllabuses were issued by the Ministry of Public Education on 20 June 1959, with effect from the following September. Polytechnical education and training begin in the elementary section with handicrafts in the classroom. In the 5th and 6th grades this includes an initiation into gardening and agriculture. Beginning at grade 7 pupils spend 3 or 4 consecutive periods, 1 day a week, at a factory or other place of employment in the socialist economy and participate in productive work. They thus acquire a basic knowledge of the construction and use of the most important tools, machines and instruments, and of technological processes and economic organization. What they learn in their mathematics, science and social studies lessons is thus clarified and extended through the opportunity to see the practical application of such knowledge. The pupils also acquire an understanding of the place of human labour in society, and a respect for the labourer. After leaving this school the pupils can obtain their skilled worker's diploma by following a 2-year course in a vocational school; they may at the same time study for the Maturity examination, in which case the course lasts 3 years. They also have the possibility of entering employment and studying for higher qualifications (general and vocational) in factory schools, evening schools, workers' colleges, etc.

TIME TABLE
OF 10-YEAR GENERAL POLYTECHNICAL SCHOOLS
(in 45-minute periods per week)

Subject	Year									
	1	2	3	4	5	6	7	8	9	10
German	9	12	14	16	7	6	5	5	5	4
Russian	—	—	—	—	6	5	4	3	3	3
Mathematics	5	6	6	6	6	6	6	5	5	5
Physics	—	—	—	—	—	3	2	3	3	4
Astronomy	—	—	—	—	—	—	—	—	—	1
Chemistry	—	—	—	—	—	—	2	3	3	4
Biology	—	—	—	—	3	2	2	2	2	2
Geography	—	—	—	—	2	2	2	2	2	1
Practical subjects	1	1	1	2	2	2	—	—	—	—
Sewing	—	—	1	1	—	—	—	—	—	—
Technical drawing	—	—	—	—	—	—	1	1	1	1
Introduction to socialist production	—	—	—	—	—	—	3	4	4	4
History	—	—	—	—	1	2	2	2	2	2
Civics	—	—	—	—	—	—	—	—	1	2
Drawing	1	1	1	1	1	1	1	1	1	—
Music	1	1	1	1	1	1	1	1	1	1
Physical education	2	2	3	3	3	3	2	2	2	2
Total	19	23	27	30	32	33	33	34	35	36
Electives										
Second foreign language	—	—	—	—	—	—	4	3	3	2
Sewing	—	—	—	—	1	1	—	—	—	—

Teaching staff. Teachers for secondary classes (grades 5 to 12) are trained in pedagogical institutes, university faculties of arts and science, the College of Education at Potsdam, the Physical Education College in Leipzig and the College of Music at Weimar. Candidates for teacher training at this level must hold the Maturity Certificate. Their studies last 4 years and comprise specialization in 2 subjects, including the teaching of these subjects, training in social sciences and polytechnical education, and education and psychology including practice teaching.

Vocational and technical schools

Vocational schools (*Berufsschulen*). These schools provide part-time instruction, usually 14 periods a week spread over 2 days, in connection with apprenticeship training in a factory or other enterprise. Administratively they may be categorized as schools run by a municipality or rural district, factory schools (which have been referred to above), and central schools, which cater for trades in which the number of apprentices in any particular locality would be quite small.

Until the new 10-year general polytechnical school has been made compulsory for all, these schools still admit pupils who have completed 8 years of general education. The training usually lasts 2 to 3 years, according to the trade. The subjects taught include trade technology, mathematics and science, German and foreign languages, civics and physical education.

The final examination consists of a written part and a practical part, the latter being carried out in front of a 5-member examination commission, the chairman of which must have had at least 6 years' experience in the trade and 3 years' teaching experience in a vocational school.

Technical schools (*Fachschulen*). These are full-time schools for the training of technicians who will occupy intermediate positions of responsibility, between the skilled workers with apprenticeship and *Berufsschule* training and professional staff trained at institutions of university level. There are technical schools not only for all the various branches of the agricultural and engineering industries but also for commerce, medicine (technical assistants, dieticians, midwives, etc.), foreign languages, library science, graphic arts, arts and crafts, music, dramatic arts, etc., and a school for planning and statistics.

Until recently the principal avenues giving access to the technical schools have been (a) completion of 8-year *Grundschule* and vocational training as a skilled worker, or (b) completion of middle or high school (Middle School Maturity or High School Maturity Certificate). When the change-over to the compulsory 10-year general polytechnical school has been completed the requirements for admission will be completion of the 10-year school and a minimum of 2 years' vocational training.

A full-time technical school course usually lasts 3 years (6 semesters). The basic pattern of the curriculum varies slightly according to entrance qualifications of the students; the present time-table for pupils who have completed middle school or high school (10 or 12 years' schooling) is given in the following table.

It is also possible to complete a technical school course by evening or correspondence courses. These part-time courses last 5 years.

TIME-TABLE OF FACHSCHULEN
(in periods per week)

Subject	Semester						Total hours
	1	2	3	4	5	6	
Social studies	5	5	4	4	2	—	380
German	2	2	1	1	—	—	114
Russian	2	2	2	2	—	—	152
Technical subjects	27	27	27	27	30	34	3 268
Industrial economics (included in 'technical subjects')	—	—	(3)	(3)	(3)	(3)	(228)
Physical education	2	2	2	2	2	—	190
Total	38	38	36	36	34	34	4 104

During his period of study in a *Fachschule* the student has to complete a one-month's practicum in a state-owned industry. The final examination consists of written examinations in social studies, German, Russian, and from two to four technical subjects, and of an oral examination in two technical subjects. Each student is also given a project to carry out in his own time; the project is designed to test his ability to master the various political, economic and technical problems concerned.

The examination is carried out by a commission. The chairman is usually the director of the school (he may also be a person appointed by a state-owned industry or by the district school authority). The commission consists of the examining teachers, two or three representatives of industries related to the particular technical field of the school and a representative of the Free German Youth.

Students who have successfully passed the examination receive certificates saying they have completed the required courses. Those who have achieved particularly good results are given a diploma. Holders of such diplomas are given preferential treatment in their professional careers.

Teacher training schools

Teacher training institutions below higher education level are the institutes of teacher training (*Institute für Lehrerbildung*) and the pedagogical institutes (*pädagogische Institute*). The former train teachers for the lower classes (grades 1 to 4, ages 6 to 10) of the *Grundschule* or 10-year school. The course lasts 4 years and is open to pupils who have completed grade 8. The latter train teachers for grades 5 to 8 (ages 11 to 14) of the general school; they recruit pupils who have completed secondary school and offer a 3-year course. Youth leaders are also trained in the *Institute für Lehrerbildung*.

Out-of-class activities

There are two principal organizations providing opportunities for the social and intellectual development of students; the Free German Youth (*Freie Deutsche Jugend* or FDJ) which caters for young people from 14 to 26, and the Pioneer Organization 'Ernst Thaelmann' for children from 6 to 14. Members of these movements are expected to support actively the work of the Government and the SED and by their conduct and the quality of their work to set an example to others. The movements organize sports, games, excursions, dances, etc. There are also various clubs within the schools: 'young scientists', 'young historians', 'young artists', 'young technicians', 'skilful hands'.

[*Text prepared by the Unesco Secretariat in May 1960 from official sources listed in the bibliography.*]

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STATISTICS

Population (mid-year 1958 estimate): 17,355,000.
Area: 41,635 square miles; 107,834 square kilometres.
Population density: 417 per square mile; 161 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment of about 2.9 million pupils (not including students enrolled in correspondence courses, nor adults in folk high schools and in workers' and peasants' faculties) represented one-sixth of the total population. However, the total enrolment figure for 1957 was about 13 per cent below the high level reached in 1953, partly due to a reorganization of the school system, whereby a number of primary schools were transformed into lower secondary schools (*Mittelschulen*). Of the total enrolment in 1957, nearly 12 per cent was in kindergartens, 37 per cent in primary schools, 24 per cent in secondary schools (*Mittelschulen* and *Oberschulen*), 23 per cent in vocational and teacher training schools (*Fachschulen* and *Berufsschulen*), 2 per cent in special education. The average pupil-teacher ratio was 23 in primary schools and 24 in secondary schools. (See Table 2.)

Educational finance, 1958. The provisional budget of the State for education in 1958 amounted to 2,812 million East Deutschmarks, averaging 172 marks per inhabitant. (See Table 1.)

Source. Deutsche Demokratische Republik: Staatliche Zentralverwaltung für Statistik, *Statistisches Jahrbuch*, volumes for 1955–58.

1. EDUCATIONAL FINANCE, 1958
(in thousand East Deutschmarks)[1]

Total expenditure by level and type of education[2]	Amount	Per cent
Total expenditure[2]	**2 812 441**	**100.0**
Pre-primary education	179 768	6.4
Primary education[3]	902 412	32.1
Secondary education	1 088 985	38.7
General	94 988	3.4
Vocational and teacher training	993 997	35.3
Higher education (Universities and colleges)	503 318	18.0
Other expenditure	135 958	4.8
Subsidies to private education	1 784	0.1
School supplies	11 621	0.4
School meals	80 078	2.8
Other expenditure, not specified	42 475	1.5

1. Official exchange rate: 1 East Deutschmark = 0.45 U.S. dollar.
2. Provisional budget of the State.
3. From 1957/58 secondary education (*Mittelschulen*), has been included at this level; also includes special education, board and lodging.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1957/58	6 535	16 530	...	276 245	...
	Kindergartens, private	1957/58	1 291	4 493	...	72 671	...
	Total	**1957/58**	**7 826**	**21 023**	**...**	**348 916**	**...**
	„	1956/57	7 560	20 781	...	334 148	...
	„	1955/56	[1]6 468	19 254	...	308 929	...
	„	1954/55	6 931	21 170	...	291 599	...
	„ [2]	1953/54	7 179	*23 200	...	324 312	...
Primary	Primary schools, public	1957/58	7 161	36 700	...	871 611	...
	One class schools, public	1957/58	23				
	Central schools (rural primary), public	1957/58	1 148	9 392	...	203 668	...
	Total[3]	**1957/58**	**8 332**	**46 092**	**...**	**1 075 279**	**...**
	„	1956/57	9 418	65 197	...	1 632 920	...
	„	1955/56	9 557	64 446	...	1 702 500	...
	„	1954/55	9 706	67 639	...	1 839 830	...
	„	1953/54	9 909	67 437	...	1 981 028	...
Secondary *General*	Middle schools (*Mittelschulen*), public	1957/58	1 150	23 713	...	611 383	...
	High schools (*Oberschulen*), public	1957/58	373	5 807	...	91 311	...
	Total[3]	**1957/58**	**1 523**	**29 520**	**...**	**702 694**	**...**
	„	1956/57	1 302	8 440	...	145 026	...
	„	1955/56	824	7 517	...	128 400	...
	„	1954/55	624	7 511	1 713	124 615	...
	„	1953/54	616	7 010	...	122 966	...
Vocational and Teacher training	Technical schools (*Fachschulen*), public[4]	1957/58	307	[5]6 004	...	[6]115 753	[6]37 325
	Part-time vocational schools (*Berufsschulen*), public	1957/58	1 345	15 319	...	545 600	...
	Total[4]	**1957/58**	**1 652**	**[5]21 323**	**...**	**661 353**	**[7]37 325**
	„ [4]	1956/57	1 618	[5]22 408	...	736 715	[7]46 085
	„ [4]	1955/56	1 613	[5]20 365	...	738 785	[7]23 840
	„ [4]	1954/55	1 704	[5]21 818	...	792 125	[7]20 460
	„ [4]	1953/54	1 758	[5]22 240	...	833 473	[7]17 832
Higher *Teacher training*	Teacher training college	1957/58	1	[8] ...	...	[9]1 280	[9]560
	Teacher training institutes	1957/58	7	[8] ...	...	[9]4 815	[9]3 254
	College of Physical Education	1957/58	1	[8] ...	...	[9]574	[9]290
	Total	**1957/58**	**9**	**[8] ...**	**...**	**[9]6 669**	**[9]4 104**
	„	1956/57	8	[8] ...	...	[9]5 099	[9]3 122
	„	1955/56	8	[8] ...	...	[9]5 823	[9]3 505
	„	1954/55	8	[8] ...	...	[9]5 377	[9]2 918
	„	1953/54	8	[8] ...	...	[9]3 417	...
General and technical	Universities	1957/58	6			[9]33 424	[9]12 996
	Colleges	1957/58	21	[8]2 764	...	[9]24 964	[9]2 908
	Colleges of fine arts	1957/58	9			[9]1 561	[9]543
	Total	**1957/58**	**36**	**[8]2 764**	**...**	**[9]59 949**	**[9]16 447**
	„	1956/57	37	[8]2 690	...	[9]58 812	[9]16 123
	„	1955/56	37	[8]2 535	...	[9]54 325	[9]14 145
	„	1954/55	37	[8]2 640	...	[9]52 161	[9]13 245
	„	1953/54	28	[8]1 839	...	[9]43 687	[9]10 828
Special	Schools for handicapped children						
	Total	**1957/58**	**616**	**3 922**	**...**	**51 497**	**...**
	„	1956/57	623	3 767	...	51 793	...
	„	1955/56	626	3 609	...	52 500	...
	„	1954/55	631	3 500	...	55 000	...
	„	1953/54	592	3 027	...	49 400	...

1. Not including kindergartens maintained by enterprises owned by the people (*volkseigene Betriebe*); their number was 1,135 in 1954/55.
2. Including data on *Kinderhorte*, institutions where children attending regular schools can spend their free time; enrolment includes, therefore, double-countings.
3. Owing to school system reorganization a number of primary schools were transformed into secondary schools (*Mittelschulen*), hence the decrease in primary education figures.
4. Including teacher training schools in which there were 17,288 (F. ...) full-time students enrolled in 1957/58.
5. Not including assistants, who numbered 364 in 1957/58.
6. Including 21,021 (F. ...) students in correspondence courses and 28,943 (F. ...) in evening schools.
7. Not including girls enrolled in vocational part-time schools (*Berufsschulen*).
8. Teachers in higher teacher training institutions are included with those in higher general education.
9. Full-time students only; in addition to the total enrolment in all institutions of higher education there were students enrolled in correspondence courses: they numbered 19,111 (F. 1,528) in 1957/58; 16,641 (F. 1,563) in 1956/57; 14,594 (F. 1,491) in 1955/56; 13,128 (F. 1,263) in 1954/55; 10,121 (F. 886) in 1953/54.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Adult	Folk high schools	1957/58	...	...	...	147 770	...
	Workers' and peasants' faculties	1957/58	15	682	...	7 259	1 582
	Total	**1957/58**	[10]**15**	[10]**682**	**...**	**155 029**	[10]**1 582**
	,,	1956/57	[10]15	[10]836	...	195 416	[10]2 074
	,, [10]	1955/56	15	905	...	11 265	2 666
	,, [10]	1954/55	14	995	...	12 427	3 005
	,, [10]	1953/54	13	954	...	12 689	3 429

10. Not including folk high schools.

GHANA

EDUCATIONAL SYSTEM

The Government exercises general control of the educational system through laws passed by the Ghana Parliament and regulations based upon them issued by the Ministry of Education and Information. Two main Ordinances—the Teachers' Pensions Ordinance and the Education Ordinance—which date from the period before Independence are still in force and form the legal basis for educational administration; a new Education Ordinance is being prepared. There are no racial, cultural or social restrictions affecting admission to schools.

The role of voluntary agencies in maintaining and running schools is considerable, although the Government now undertakes the main financial burden. The majority of these agencies are mission societies and churches recognized as educational units for purposes of administration and responsible to the Government for their educational work. They are under the general supervision of the Ministry of Education and receive grants in aid from the Government for the payment of teachers' salaries. In recent years local authorities have assumed increasing responsibility for primary schools, both financially and in management. Local authorities pay a small proportion of teachers' salaries and some run schools on their own, thereby ranking as educational units. There is thus a dual system existing where some schools are managed by mission bodies and a few by local authorities; the majority of local authorities exercise merely administrative control with actual management left to voluntary agencies.

In this pattern of divided responsibility advisory bodies play an important role. The Central Advisory Committee existed to advise the Government on matters of general policy, and although it has been abolished it may be replaced by a similar body or an *ad hoc* committee appointed at the discretion of the Minister from time to time. Similar committees to the old Central Advisory Committee existed at regional and at district level; these are now being replaced by committees of local authorities, as part of the increasing responsibilities local authorities are assuming for the control of education in their areas.

The Government's policy in education is embodied in the Accelerated Development Plan which was adopted in 1951 by the Legislative Assembly. It lays down the general structure of the school system, outlining official policies for the development of this system, and defines the respective roles of the Government, the educational units and the local authorities. The main aim of this plan was to provide a 6-year basic course for all children at public expense, although secondary, technical and higher educational extensions were also included.

Efforts have been made to relate the school system to the country's economic and social life; in recent years the need to relate the educational work to the ethnic and cultural background of the children has been more keenly felt with the achievement of independence, and syllabuses, curricula and textbooks have been revised with a view to greater realism in education.

Educational policies are executed by instructions from the central office of the Ministry of Education and Information in Accra. In 1950 a substantial measure of devolution was introduced by setting up Regional Education Offices, one in each administrative region. The Regional Education Officers or Assistant Directors of Education (as they were formerly called) in these regions were responsible for implementing the government's policy in education. There are now six educational regions as there are six administrative regions. On 6 March 1957 the Gold Coast territory became the independent State of Ghana. There followed a 2-year period of consolidation from July 1957

to June 1959. The 5-year Second Development Plan which is now being implemented was launched in July 1959. The principles underlying this plan are similar to those of the Accelerated Development Plan but the emphasis is now on provision of more facilities for secondary and technical education.

The diagram on page 595 shows the structure of the school system in Ghana. The aim of the 6-year primary course is to provide a sound foundation for citizenship with permanent literacy in English. This is followed by a 4-year middle school course during which selection tests are held for entrance to secondary schools. Pupils admitted to the latter take a 5-year course (forms 1 to 5) at the end of which they are eligible for selection to a 2-year sixth form course. While this 6+4+5+2 plan is broadly followed, the intention is to remodel the middle school so that it may be more suited to the needs of modern Ghana. It is hoped that pupils may in due course enter secondary schools directly after the sixth and final year of the primary school. At the moment pupils are selected for the secondary school after the second or third year in the middle school. Those children who do not enter secondary schools may proceed by selection to pupil teaching (thence to training colleges), to technical institutes or general employment. Educational opportunities for secondary leavers include teacher training and, for those with the Cambridge Higher Oversea Certificate, technological training and university studies. In 1959 the University College, which is in special relationship with, and prepares students for the internal degrees of the University of London, had faculties of arts, divinity, economics, sociology, natural science, and agriculture, an institute of education, and an institute of extra-mural studies.

THE DEVELOPMENT OF SECONDARY EDUCATION

Early educational efforts in Ghana were largely the result of missionary enterprise. In 1876 the first high school for boys was opened by the Methodist Mission, but this attempt at post-primary education did not achieve permanent success until 1909 when Mfantsipim School was formed at Cape Coast by the union of the Wesleyan Collegiate School and the Fanti Public School. A grammar school was established at Accra as a private enterprise but closed down in the early years of this century.

The Prince of Wales College, now known as Achimota College, was established by the Government in 1924, consisting of the teacher training classes of the former Government Training College, Accra. In 1927 kindergarten and lower primary classes were added, followed in 1929 by upper primary, secondary and university classes. There was therefore at Achimota a complete educational ladder from kindergarten to university, with teacher training for both men and women.

In 1930 the college ceased to be a government department and was given a constitution, control passing to a council with both government and non-government representatives. In 1944 the kindergarten and primary classes were discontinued, so that Achimota then comprised a secondary school with a pre-secondary year, a teacher training college and university classes; in the same year, the training college course was changed from a 4-year course to a post-secondary 2-year course. The training college staff and students were transferred to Kumasi College of Technology in 1951, thus forming the nucleus of the teacher training department of that institution.

An Educationists' Committee appointed in 1920 submitted a clearly defined and detailed policy for expansion of educational work, at a time when a great change in the fortunes and outlook of the people of the country made the need for such a policy vitally urgent. Another systematic review of the country's educational system and policy took place in 1937–41 when an official committee prepared long-term plans. The report of this committee was as much a milestone in the history of secondary education in Ghana as was its precursor in 1920. It recommended, *inter alia*, that the secondary school curriculum should be brought into closer correspondence with the national life and needs of the country; that the Government should exercise closer control over secondary education and provide greater financial assistance, including more scholarships; that more girls' secondary schools should be established to provide a basic general education as a foundation for advanced professional training in the fields of education, medicine and social work, to mention only a few.

Little could be done to implement these recommendations during the second world war, but much preparatory work was accomplished, including a series of education surveys carried out during 1944–47. The evidence gathered in the surveys as well as the recommendations of the committee were used for the formulation of a 10-year development plan after the war, resulting in a rapid growth of education since then. In particular there was considerable expansion after the introduction of the Accelerated Development Plan for Education in 1952. In 1951 there were 13 secondary schools within the public education system and this number rose to 39 by December 1958, viz., 1 autonomous (government-endowed) school with an independent council, 2 government schools (including 1 secondary technical school), 18 assisted schools (12 boarding and 6 day schools), and 18 'encouraged' schools. Encouraged schools are secondary schools established by private enterprise, and selected in 1952 and thereafter, after not less than 3 years' existence, for assistance from central government funds. Of these 39 schools, 13 are for boys, 6 are for girls, and 20 are co-educational.

Whereas, in 1951, 2,937 pupils were receiving secondary education in public secondary schools, this number rose to 9,860 in 1957, to 10,423 in 1958, and to 11,111 pupils (8,948 boys and 2,165 girls) in 1959. With the encouragement of the more efficient of the private secondary schools the number of private institutions remaining outside the public system has decreased. Of the 49 known private secondary schools in 1951, 19 had been placed on the list of encouraged schools by the close of 1959. According to annual returns received from other private schools, 30 were known to exist in 1959. These private schools receive no assistance from central or local government sources and information about them is unreliable.

The development of sixth form work. In 1949, sixth form work was started at Achimota School. By 1957, the number of secondary schools offering facilities for advanced study had

increased to 8, this number including the Kumasi College of Technology, where sixth form work was begun in 1953. In 1959, however, the course at the Kumasi College of Technology was stopped by a decision of the Cabinet, in order that the college might concentrate on engineering and technological courses. At present 11 secondary schools (5 boys', 3 mixed, 3 girls') provide sixth form courses. The number of pupils entering sixth forms has increased from 27 boys and 4 girls in 1950 to 251 boys and 26 girls in 1959.

The provision of adequate facilities and the expansion of sixth form work is important for the development of the University College of Ghana.

Administration

The Ministry of Education is responsible for the organization of secondary education provided in schools within the public system as well as for relations between the Government and bodies performing work of an educational nature related to secondary education.

Most secondary schools within the public system are managed by missions or churches recognized by the Ministry of Education and Information for the purpose, and to which grants are paid. These educational units are responsible to the Ministry of Education and Information for conducting their schools according to the Education Ordinance and the rules made under the ordinance. A number of secondary schools are also managed by boards of governors established under the ordinance as corporate bodies. These boards are similarly responsible to the Ministry of Education and Information. Heads of schools are the executive of the management of schools. Until 1959, the Central Advisory Committee on Education's Sub-Committee on Secondary Education and Associated Teacher Training dealt with all matters on secondary education referred to it by the Central Advisory Committee and on which the Minister wanted advice. A National Teacher Training Council was set up in 1958 and charged with the responsibility of advising the Minister on all matters relating to teacher training in Ghana.

Syllabus revision and control of examinations. The content of the courses followed in the secondary schools is largely determined by the requirements of the West African School Certificate examination and The Higher Oversea School Certificate examination of the University of Cambridge Local Examinations Syndicate. The former examination is organized and conducted by the syndicate in collaboration with the West African Examinations Council. In such subjects as Latin and mathematics the syllabus closely follows that of the Cambridge Oversea Certificate, but in other subjects where a West African environment is of importance panels of teachers have been set up and keep the syllabuses under constant revision. The University of Cambridge Local Examinations Syndicate has shown itself willing at all times to make changes in examination syllabuses consistent with the maintenance of its standards to meet specially West African problems.

The Ghana Schools Examination Sub-Committee of the West African Examinations Council is responsible for conducting examinations for the Higher School Certificate, the West African School Certificate or any school certificate that may replace it, Sixth Form Entrance, and the London General Certificate of Education. The committee formulates regulations having effect in Ghana for the examinations mentioned above, and appoints examiners, revisers, moderators and awarding committees. In addition, it sets up subject panels, receives reports from these panels and authorities for the introduction of new syllabuses for subjects in the examinations it conducts.

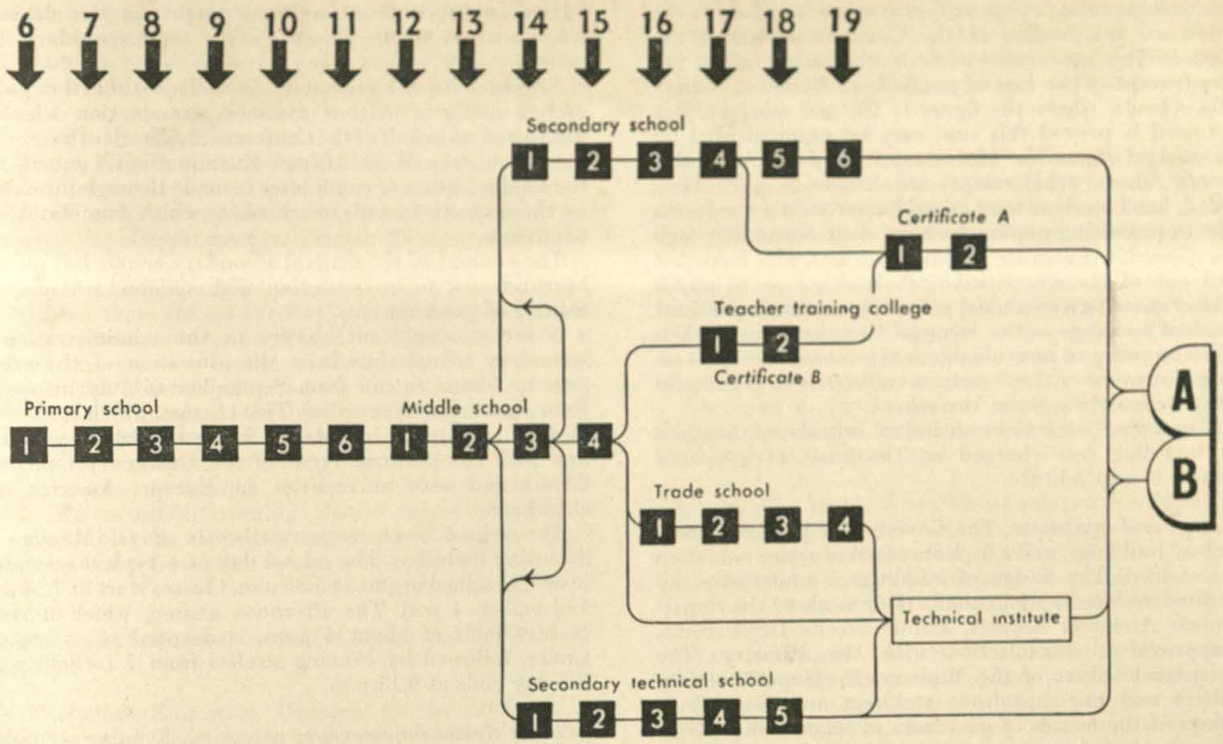
The West African Examinations Council has, however, complete control over the syllabuses for the School Certificate examination. Those in science particularly are under continuous review by panels on which the schools and subject associations are fully represented. These reviews have already dictated syllabus changes which will be implemented from 1960.

There is a need, however, to relate curricula and syllabuses more closely and purposefully to the economic, social and cultural conditions as well as the needs of the country. It is the Minister's intention to assign to a special committee the task of initiating a nation-wide investigation into this matter.

Textbooks. Textbooks used in secondary schools are selected by the head of each individual school in consultation with the specialist teachers in charge of subjects. Although the Ministry does not exercise any control over the selection of textbooks, it reserves the right of ensuring that books selected are in accordance with the syllabuses in use at the schools and are such as can be used to advantage by the pupils. Textbooks used in secondary schools are imported. With very few exceptions, textbooks written in the main Ghana languages are produced in the country. At the primary and middle school level, it is the view of the Minister that the problem of the supply of school textbooks should be tackled as soon as possible, and he has expressed his intention to set up a special committee to advise on the suitability of textbooks at present in use at these levels with special reference to the question of background.

Supervision and inspection. All secondary schools within the public education system are inspected by officers of the General Education Division of the Ministry of Education and Information. The function of the inspectorate, which is headed by the Principal Education Officer, Secondary Education, is to examine the work of the school with reference to syllabuses and curricula, and to ensure that these are followed. The inspectorate also satisfies itself that the textbooks in use are suitable, that the methods used are in accordance with modern educational thought and practice, and that the administration, discipline and the corporate life, accommodation and boarding arrangements are such as to warrant expenditure of public funds on the school. The members of the inspectorate submit reports on the subjects or aspects of the school work and life examined by them. These are collected as the official report on the school. The members of the inspectorate advise also on the methods and procedures which can help to achieve maximum results in the academic work as well as in the organization of the school generally.

Parents' committees are not a special feature of education at the secondary level. The graduate teachers' association, composed mainly of teachers in secondary schools and



GLOSSARY

Certificate A: see *teacher training college* below.
Certificate B: see *teacher training college* below.
middle school: lower general secondary school offering course with practical bias.
secondary school: general secondary school of academic type.
secondary technical school: vocational secondary school.
teacher training college: course for *Certificate A* open to secondary leavers or teachers with at least 2 years' practical experience after obtaining *Certificate B*; course for *Certificate B* open to middle school leavers who have had at least 1 year's experience as pupil teachers. Courses A and B may be provided in the same college or by separate institutions.
technical institute: vocational training school offering full-time, part-time and evening courses.
trade school (junior technical institute): full-time vocational training school.

HIGHER EDUCATION

A. Ghana University College (including an institute of education).
B. Kumasi College of Technology.

teacher training colleges, has shown active interest in secondary education, and the association makes representations and recommendations to the Ministry of Education on certain aspects of secondary education or on education in general as they affect secondary education.

Finance. The Government's financial responsibility for secondary schools is confined to teaching staff salaries and allowances, including passages for overseas staff and appointment expenses, and capital grants for developments and extensions. The costs of all other items are found from pupils' tuition fees (as distinct from boarding fees). Before 1958, pupils paid a flat rate fee of £12 per pupil annually; this has been replaced by an 'economic fee' determined by taking account of the total of general expenses, namely, salaries and wages of office staff, transport, books and equipment, furniture and building and other charges.

The management of each school decides, subject to the approval of the Minister, whether sixth-form pupils should pay a higher fee or not.

In the case of 'encouraged' secondary schools, where the schools are accommodated in rented buildings, government grants are not paid for rent of buildings or for maintenance of buildings—these are met from the fee income. Where funds permit, however, specific grants for extraordinary work are made.

Scholarships are awarded on merit, and the allocations to schools are made in proportion to the number of streams in each school. Payment is made annually by the Ministry of Education to the heads of schools.

Scholarships for a 4-year or 5-year secondary course are awarded on the results of the Common Entrance examination. The basic value of each scholarship is £30 per annum (except in the case of pupils from Northern Region middle schools, where the figure is £60 per annum); but where need is proved this sum may be supplemented by the award of bursaries. Moreover, from funds available after the above scholarships and bursaries have been awarded, head teachers may award bursaries to a maximum of £60 to promising pupils who have done reasonably well in the Common Entrance examination but who have not gained one of the competitive scholarships, or to pupils who after entering a secondary school are unable to continue because of a change in the financial circumstances of their families or owing to unavoidable fee increases. The government grant to cover these cases is calculated at the rate of £150 per class throughout the school.

The boarding sections in secondary schools are financed from boarding fees charged on the basis of approved estimates of expenditure.

Buildings and equipment. The Government provides funds for school buildings, and a high standard of accommodation is maintained. The design of buildings is undertaken by accredited architects who submit their work to the Superintendent Architect Schools, Public Works Department, for approval in consultation with the Ministry. The Development Officer of the Ministry, the Superintendent Architect and the consultant architect are co-opted to meetings of the boards of governors of schools and advise on the selection of contractors from among those who have submitted tenders. The recommendations of the board are submitted to the Ministry for approval, after which the Ministry applies to the Development Commission for funds.

In cases where schools are housed in temporary premises or where those in permanent buildings require additional accommodation, arrangements for tenancy agreements regarding privately-owned buildings are effected by the Commissioner of Lands on behalf of the Ministry.

Recommended areas have been laid down for rooms in secondary schools and training colleges: They include: general classrooms, science laboratories and lecture rooms, and libraries, 44 feet by 23 feet; large classrooms, e.g. for geography or English, and art and craft rooms, 1,200 square feet; dining rooms, 10 square feet per person; dormitories, 480 cubic feet per person; etc.

TYPES OF SECONDARY EDUCATION

Secondary (grammar) schools offer a course in general education leading to the West African School Certificate. Secondary technical education is provided at one school—the Government Secondary Technical School, Takoradi—a boarding school for boys which offers a 5-year course leading to the West African School Certificate. This institution, which was formerly the Government Technical School, has been renamed to indicate its new function. The school presented its first candidates for the West African School Certificate in December 1957.

There is no organization specially set up for giving advice or direction to pupils or parents in the choice of schools where pupils should pursue their secondary education.

Entrance to all secondary schools within the public system is by a written common examination which is conducted on behalf of the Conference of Heads of Secondary Schools by the West African Examinations Council, and the final selection of candidates is made through interviews by the respective heads of schools to which candidates seek admission.

The content of the general secondary course has already been referred to in connexion with syllabus revision and control of examinations.

A recent significant change in the administration of secondary schools has been the alteration of the school year in Ghana to run from September to July instead of from January to November. This change, which took effect in 1960, was made in order to bring the school year into line with the academic year of the University College of Ghana and with universities in Europe, America and elsewhere.

The school week is normally six days, Monday to Saturday inclusive. The school day at a typical secondary boarding school begins at 5.30 a.m. Classes start at 7.10 a.m. and end at 1 p.m. The afternoon session, which starts in most schools at about 4 p.m., is devoted to sports and games, followed by evening studies from 7 to 8.30 p.m.; the day ends at 9.15 p.m.

Evening classes for secondary education. Evening secondary schools, of which there are two in the country, recruit pupils who have completed the middle school course and who wish to continue their education but have had no chance of entering approved secondary schools. The courses provided at these schools are given in a less formal context and the curriculum and syllabus in general are based upon the requirements of the West African School Certificate. Some candidates, however, undertake the course to improve their general background without aiming at any examination.

Subjects taught include English, Latin, history, geography, mathematics, a Ghana language and religious knowledge.

Pupils are selected by means of a written examination organized by the supervisory body, followed by an interview. There is no age limit, but preference is given to candidates whose formal schooling ceased not more than eight years before the time of applying. Pupils already attending secondary school are not admitted. Private candidates who have completed their first and second forms in secondary schools are considered for entry into the appropriate form.

Vocational and pre-vocational studies are not included in the curriculum.

No particular methods are specified for teaching in evening schools, and the teachers, most of whom are graduates with previous professional experience, may adapt their methods to suit the type of pupils recruited. In the matter of guidance and direction, there is, as can be expected, a carry-over of the experience which the teachers have gained in their normal work as teachers in secondary schools to their teaching and general work at the evening secondary schools. All testing, reporting on pupils and

promotion are organized by the supervisor of the school in collaboration with his staff.

In addition to these evening classes, the People's Educational Association, a voluntary organization, organizes classes in various subjects for the general public in collaboration with the Extra-Mural Department, University College of Ghana, and arranges lectures, debates and discussions on subjects of general or topical interest on behalf of and in conjunction with various bodies, for instance, the Department of Social Welfare and Community Development. In addition, the association organizes evening classes for middle school leavers. Some of the pupils from these classes eventually enter the government evening secondary schools. These PEA classes follow a systematic syllabus towards a definite end, i.e., the pupils enter for the West African School Certificate or General Certificate of Education examination as private candidates or students of government evening secondary schools. The PEA does not compete with the government-sponsored evening secondary classes; it acts in conjunction with them. For instance, evening classes organized by the association play an especially important part in the rural areas where the Government has not yet established such classes.

Vocational and technical education under the Ministry of Education

The Technical Education Division of the Ministry of Education and Information organizes and operates a system of education and training which will produce sufficient skilled manpower, below university degree level, to meet Ghana's needs for the maintenance of existing works, services and industries and for the further development of the country.

The system designed to achieve this aim consists of programmes of education and training as follows:

Junior or pre-apprenticeship courses. Candidates are recruited from among pupils who have successfully completed the middle school.

The pre-apprenticeship courses are designed to offer to students who are below School Certificate standard a course of general education with a heavy technical bias. The subjects taught are English, mathematics, elementary science, geometrical and technical drawing, woodwork and metalwork. The end-of-course examination, set by the Ministry, is the entrance examination to craft courses and junior technical courses in government institutes.

Craft courses and advanced craft courses. The 2-year craft courses are designed to offer further instruction in English and mathematics and specialized instruction in the technologies and practices of the various crafts and trades. The entry to full-time craft courses is confined to candidates who have successfully completed junior or pre-apprenticeship courses, and is by competitive examination. The output from these courses enter industry and government departments to complete their apprenticeships and join the skilled craftsmen in the tradesmen and artisan grades.

The advanced craft courses are designed to offer further specialized instruction to craftsmen who are considered by their employers to be potential leading hands, charge hands and foremen. The instruction offered is beyond the level required for the average craftsman and the courses, which are full-time, cover 1 or 2 years, depending on the craft.

Technical courses. Students who have done exceptionally well in the examination set at the end of the pre-apprenticeship course may be admitted to a 1-year junior technical course in preparation for entry to a senior technical course.

Senior technical courses of 2 to 3 years' duration are designed to offer the technical knowledge and skill required by the technician who is the link between the technologist and the craftsman. Entry to senior technical courses is confined to holders of the School Certificate and to students who have successfully completed junior technical courses.

Advanced technical courses are designed to offer the additional technical knowledge and skill required by the high-grade technician.

Commercial subjects courses. These courses, provided at the government technical institutes, are designed to equip the students with sufficient skill in office arts and sufficient knowledge of commercial subjects to enable them to fill positions of responsibility in commerce and industry.

Courses in domestic subjects. The courses are dressmaking and needlework, domestic cookery and housecraft, and trade cookery. A combination of the last two courses forms an excellent training for young men and women who intend to enter any branch of the catering industry.

Special subject courses. These cover all courses which cannot conveniently be listed under one or other of the above headings. The courses are often designed for a specific need, e.g., a course in librarianship has been arranged in collaboration with the Ghana Library Board; a course in journalism has been arranged jointly with the Information Division of the Ministry of Education and Information; a course for examinations of the Institute of Bankers has been arranged at the request of local banks.

Technical teacher training courses. These are designed to produce technical teachers possessing a high standard of technical knowledge and skill and also a sound knowledge of teaching principles and methods. Entry is restricted to serving officers of the Technical Education Division of the Ministry and to candidates for future appointment to the Division.

Educational activities and training schemes of other ministries and departments

The following list is not exhaustive and in particular excludes numerous in-service training programmes and overseas courses.

Recruitment and Training Branch, Establishment Secretary's Office. Secretarial courses in shorthand, typewriting, office management, English and secretarial practice are provided in the government secretarial schools operating in Accra, Sekondi/Takoradi, Kumasi, Tamale and Koforidua. In

1957, 2,361 candidates, including non-civil servants, were examined for the various grades in the secretarial class. Candidates who successfully complete the courses and applicants who pass the school examinations are issued certificates of competency.

Ministry of Health. The basic training of nurses is carried out locally. Two midwifery schools operate at Kumasi and Accra. Schools of hygiene train health inspectors. Pharmacy scholars are trained at the Kumasi College of Technology. The Ministry of Health trains pupils for appointments as laboratory technicians, X-ray operators, assistant hospital welfare officers, leprosy control assistants and field assistants.

Ministry of Labour, Co-operatives and Social Welfare (Labour Division). Lectures in training-within-industry are given by an International Labour Organisation expert. This course is open to the general public.

The Youth Employment Section of the Division has a wide programme for vocational guidance, both in the urban and rural areas. Talks on traditional village occupations are given to pupils in rural areas. To supplement these talks, film shows on various topics relating to vocational guidance are given.

Ministry of Agriculture. Students are given a 3-year course at two agricultural training centres to qualify as agricultural assistants. Students attending these courses include teachers of the Ministry of Education and members of the Forestry Department. Learners from the Ministry of Agriculture are appointed Agricultural Instructors in the service of District Councils, on completing their training.

In the Cocoa Branch, Agricultural Survey Officers are given an initial training course at the Agricultural Training School, followed by one month's field attachment and a final month's instruction at Bunso.

Co-operatives Department. At the departmental training school in Accra, new management committees are taught the rudiments of the Co-operative Societies Ordinance and by-laws, general management of societies, and the conduct of meetings. At other courses, young men intending to be secretaries are trained, and established secretaries are given refresher courses.

Rural Water Department. This department operates training schemes for technical trainees and apprentices in the drilling, mechanical and civil engineering sections.

Public Works Department. Through its Training Division, the Public Works Department maintains departmental training centres at Takoradi and at Weija, near Accra. At the Weija Centre, both long and short courses are conducted in a variety of subjects, including surveying and levelling, storekeeping, plumbing, and road-building.

The Department also makes use of the training facilities offered by other institutions. Employees are sponsored for day-release and evening courses in commercial and pre-technical subjects at the Accra Government Technical Institute. Employees of clerical and executive grades respectively attend courses organized by the Civil Service Training Centre either in Accra or at regional centres. The Department also sponsors candidates for training at the Survey Department School, for a special mechanical course at the Kumasi College of Technology, and for a refrigeration course organized by the Army.

Survey Department. A 3-year post-School Certificate technical training course is given to pupil surveyors to qualify for appointment as Assistant Surveyors Grade II. In the drawing section, candidates are given training in lithography. At the Kumasi College of Technology, candidates undergo professional training for the Royal Institution of Chartered Surveyors examinations.

Local government training schools. These give effective training to local authority staff in public administration (local and central government), secretarial practice, English language, finance and accounts.

Electricity Department. The Department's training school trains apprentices for appointment in the Department. Apprentices in Accra and Takoradi are given in-service part-time training at the local government technical institutes.

Forestry Department. The Department has trained its own forest rangers for two decades. The new Forestry Training School at Sunyani provides full board and accommodation for 48 learners, efficient and modern facilities for class and laboratory work, and quarters for the teaching staff. The learners' course is of 3-years' duration, 2 years at the school and 1 in the 'bush'. Learners are selected from School Certificate holders by interview and examination and are given 3 months' field experience before they enter the school. On passing the final examination, they are appointed as forest rangers.

Geological Survey Department. This Department trains geological assistants, field assistants, draughtsmen, and drilling artisans for its own staff.

Fisheries Department. The Fisheries Department maintains a small school at Takoradi where fishermen, many of them illiterate, are taught the rudiments of seamanship and how to operate and maintain marine engines. In each case, certificates are awarded to successful students. Fishermen who purchase or charter a motor fishing vessel are trained to operate it and to fish by trawl, drag-net and hand-line. In the Northern Region, seven training camps are maintained at which local farmers are taught to weave and use cast nets and to make and set trot lines.

Broadcasting Department. School broadcasts were tried out experimentally in 1957. They included a full 8-week term broadcast to secondary schools and technical institutes. Subjects covered included pronunciation, spoken English, current affairs and singing. A similar term's broadcasts were also made for training colleges. As a result of these experiments, a regular service of broadcasts has been planned.

Ghana Information Services. The Information Services Department produces newspapers, books and booklets

and carries out widespread activities connected with informal education. Schools and members of the general public are kept informed of current events through the distribution of *New Ghana*, which has a circulation of 50,000. A large proportion of this publication goes to schools and colleges.

Of the over 2,100 films available in the film library, nearly half are circulated among schools and colleges and the other half among government departments (including Police, Prisons and Army).

The Bureau of Ghana Languages. The Bureau produces regular newspapers and booklets in the main Ghana languages. It also undertakes a large number of translations for educational institutions, government departments, commercial firms and other organizations.

Prisons Department. Schools are run for the benefit of the illiterate. Mass education methods have been introduced in almost every prison. A full-time teacher is on the staff of the Borstal Institution at Accra where school attendance is compulsory. New books and other reading materials, including primers in some of the main Ghana languages, are supplied to the prison libraries. No prisoner is restricted in his choice of books or the number he may read. The supply of reading materials is augmented periodically by the Ghana Central Library Services.

Teacher training schools

Teachers for primary and middle schools follow two types of training courses—the 2-year Certificate B course, which follows a middle school education, and a 2-year Certificate A course, which recruits students from the secondary schools and also from successful teachers who hold the B Certificate. Many teachers enter the teaching field as pupil teachers after their middle school course, and in 1954 10 pupil teacher centres were opened in order to provide a 6-weeks in-service training course for pupil teachers. The number of these centres is gradually being reduced as more training college places are provided.

Other specialized schools

Specialist courses in art, music, physical education, housecraft, were at first conducted in the teacher training department at Achimota College. In 1951 these courses were transferred to the Kumasi College of Technology but in 1958 the 2-year post-secondary courses in teacher training, art and crafts, rural science, music, physical education and housecraft were established in a separate post-secondary training college. Courses are now offered up to diploma level in music. Arrangements are being made to bring the physical education and housecraft courses up to diploma standard. A diploma course in art and crafts is now provided at Kumasi College of Technology.

Out-of-class activities

The prefect system affords the pupils a sound training in self-discipline and prepares them for integration into the social and cultural life of the community when they leave school.

School sports and games are significant features of secondary school life. The games played include association football, cricket, hockey, lawn tennis and netball. Athletic sports are encouraged and there is an annual inter-school meeting. Informal cultural education is fostered through school societies and clubs, for instance, dramatic society, Boy Scouts, and subject societies, e.g. geographical or historical societies which are affiliated to parent organizations at the national level.

TRENDS AND PROBLEMS

The problems of secondary education are naturally tied up with the expansion of educational facilities at all levels of education. However, the immediate task of the Ministry in respect of the secondary level is the provision of more secondary school places so that there will be room for approximately 10 per cent of the number of pupils in each of the six regions of the country who are potentially eligible to enter. The annual intake into government-aided secondary schools should be three times as large as the present intake. In addition, there must be appropriate sixth-form facilities in secondary schools which are already established. The shortage of sixth-form pupils, especially those who have reached acceptable standards in science subjects, has hitherto denied the University College and Kumasi College of Technology candidates of proper quality. The annual intake into sixth forms must therefore be increased by a proportionately greater figure than that represented by the increase in first forms intake into secondary schools. A certain amount of rehousing of secondary schools established in temporary premises is necessary—science subjects in particular have suffered as a result of poor accommodation.

Lack of suitable staff accommodation has sometimes been a handicap to recruitment, particularly of overseas staff. Linked with the provision of educational facilities is the concern of the Government for the education of the children of the increasing number of representatives from Commonwealth and foreign countries and from international organizations who are based at Accra. These children, by virtue of their previous education, are ready to pursue secondary schooling at the age of 11 or thereabouts.

The major problem which will face the schools in the Second Development Plan period, considering the expansion which the plan involves, will probably be that of staffing. In the interests of education and international understanding it is desirable that expatriates should continue to be employed in the field of education at the appropriate levels.

[*Text prepared by the Ministry of Education and Information, Accra, in April 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 4,836,000.
Area: 91,843 square miles; 237,873 square kilometres.
Population density: 53 per square mile; 20 per square kilometre.

Summary of school statistics, 1953–57. In 1957, total school enrolment (not including adult education) exceeded 620,000 pupils, being 13 per cent of the total population. Of these pupils, 76 per cent were in nursery and primary schools, 22 per cent in middle and secondary schools, 1.4 per cent in vocational and teacher training schools, less than 0.2 per cent in higher education. These figures are not comparable with those published in *World Survey of Education: II—Primary Education* since the method of classification has been changed. (In particular, middle schools were shown under primary education in the previous edition, but are now included in secondary education. Teacher training, previously combining secondary and post-secondary levels, is now shown separately for each level.)

The proportion of girls was 34 per cent in primary schools, 23 per cent in middle and secondary schools, 14 per cent in vocational schools, 28 per cent in teacher training schools, and 10 per cent in higher education. Women teachers were about 20 per cent of the teaching staff in the primary, middle and secondary schools. The average number of pupils per teacher was 31 in primary schools and 30 in middle and secondary schools.

Between 1953 and 1957, pupil enrolment as a whole increased by 28 per cent. The increase in primary schools was only 25 per cent, while it was 38 per cent in the middle and secondary schools and 29 per cent in the teacher training schools. Vocational schools doubled their full-time pupils during the same period. (See Table 2.)

Enrolment trends in secondary education, 1950–57. Enrolment in general secondary education (including middle schools) more than doubled between 1950 (66,122; 17 per cent F.) and 1957 (139,636; 23 per cent F.). Vocational schools, with less than 1,000 pupils in 1950, enrolled over 5,000 (including part-time) pupils in 1957. Teacher training schools, including secondary and post-secondary levels, had a total enrolment of 3,833 pupils in 1957 as compared with 1,777 in 1950.

Examination results in secondary education, 1953–57. Table 3 shows the number of middle school leaving certificates increasing between 1955 and 1956 but dropping again in 1957. The number of West African School Certificates increased almost continually between 1953 and 1957 (with a slight setback in 1956). The number of teachers' certificates, having reached a peak in 1955, declined somewhat in 1956 and 1957.

Educational finance, 1957/58. In 1957/58, total expenditure for education amounted to nearly 9 million Ghana pounds, equal to about £2 per inhabitant. Of this amount, three-fourths came from the ordinary budget of the Central Government and one-fourth from the Development Fund. Recurring expenditure, which accounted for 99 per cent of the total amount, was distributed by level and type of education as shown in Table 1C.

Source. Ghana: Ministry of Education and Information, reports; reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1957/58 (in Ghana pounds)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**8 958 688**
Central Government	
Ordinary budget	6 757 724
Development Fund	2 200 964

B. EXPENDITURE BY PURPOSE

		Amount
Total expenditure[2]		**8 958 688**
Recurring expenditure		8 900 647
Capital expenditure		58 041
Educational facilities	32 998	
Auxiliary facilities	25 043	

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent
Total recurring expenditure		**8 900 647**	**100.0**
Administration			
General expenses, management and supervision		226 930	2.6
Instruction		7 622 618	85.6
Primary education[3]	3 063 339		34.4
General secondary education	503 715		5.7
Secondary vocational education	125 234		1.4
Teacher training	974 945		10.9
Higher education[4]	2 946 385		33.1
Adult education	9 000		0.1
Other recurring expenditure		1 051 099	11.8
Salaries[5]	415 140		4.7
Scholarships, subsidies, etc.	587 172		6.6
Miscellaneous	48 787		0.5

1. Official exchange rate: 1 Ghana pound = 2.80 U.S. dollars.
2. Closed account.
3. Includes middle schools.
4. Data refer to the University College of Ghana and the Kumasi College of Technology.
5. Includes salaries to personnel of the Ministry of Education and teachers in government secondary schools, government teacher training colleges and government technical institutes.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools, private						
	Total	**1957**	**43**	...	...	**2 278**	...
	,,	1956	26	...	...	2 512	...
	,,	1955	36	...	...	2 524	...
	,,	1954	17	...	...	800	...
	,,	1953	13	...	...	640	...
Primary	Approved primary schools, public	1957	3 372	14 893	2 973	455 749	154 164
	Approved primary schools, private	1957	199	356	75	12 272	4 415
	Total	**1957**	**3 571**	**15 249**	**3 048**	**468 021**	**158 579**
	,,	1956	3 478	14 566	2 677	446 702	150 637
	,,	1955	3 394	13 750	2 446	429 518	142 464
	,,	1954	3 271	13 222	2 293	403 201	130 820
	,,	1953	3 196	...	...	375 682	119 033
Secondary *General*	Approved middle schools, public	1957	931	3 599	705	115 831	27 793
	Secondary schools, public	1957	38	603	124	9 860	1 816
	Middle schools, private	1957	200	396	26	11 686	2 556
	Secondary schools, private	1957	22	135	8	2 259	298
	Total	**1957**	**1 191**	**4 733**	**863**	**139 636**	**32 463**
	,,	1956	1 048	4 272	767	127 677	29 738
	,,	1955	1 033	4 104	699	123 906	26 897
	,,	1954	914	3 760	608	113 187	23 250
	,,	1953	862	[1]358	[1]80	100 879	19 840
Vocational	Junior technical institutes, public	1957	4	127	5	521	—
	Technical institutes, public	1957	4			[2]2 199	[2]176
	Vocational schools, private	1957	38	144	27	2 439	539
	Total	**1957**	**46**	**271**	**32**	**[2]5 159**	**[2]715**
	,,	1956	34	243	19	[2]3 330	[2]465
	,,	1955	24	163	8	[2]2 921	[2]357
	,,	1954	21	86	7	1 574	...
	,,	1953	28	...	...	1 929	...
Teacher training	Teacher training schools, public						
	Total	**1957**	**[3]30**	**[3]330**	**[3]87**	**3 588**	**1 009**
	,,	1956	[3]30	[3]328	[3]77	3 270	971
	,,	1955	[3]29	[3]318	[3]74	3 219	948
	,,	1954	[3]28	[3]315	[3]76	3 018	875
	,,	1953	[3]25	[3]254	[3]69	2 674	740
Higher *Teacher training*	Teacher training college, public						
	Total	**1957**	[4]...	[4]...	[4]...	**245**	**73**
	,,	1956	[4]...	[4]...	[4]...	243	86
	,,	1955	[4]...	[4]...	[4]...	236	81
	,,	1954	[4]...	[4]...	[4]...	254	76
	,,	1953	[4]...	[4]...	[4]...	296	91
General and technical	University College of Ghana	1957	1	144	...	424	23
	Kumasi College of Technology	1957	1	113	...	309	48
	Total	**1957**	**2**	**257**	**...**	**733**	**71**
	,,	1956	2	256	...	594	58
	,,	1955	2	229	...	521	65
	,,	1954	2	198	...	602	62
	,,	1953	2	179	...	795	58
Special	Remand homes	1957	7	...	...	880	64
	Industrial schools	1957	4	...	...	359	35
	Total	**1957**	**11**	**...**	**...**	**1 239**	**99**
	,,	1956	11	...	...	1 033	96
	,,	1955	11	...	...	1 274	107
	,,	1954	9	...	...	849	62
	,,	1953	6	...	...	783	41

1. Public secondary schools only.
2. Including part-time pupils, as follows: 1957—1,466 (F. 61); 1956—834 (F. 68); 1955—937 (F. 86).
3. Including higher teacher training.
4. Included in secondary teacher training.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Adult	Literacy classes	1957	1 351	2 723	...	30 222	...
	Extra-mural studies	1957	120	87	5	1 640	...
	Total	**1957**	**1 471**	**2 810**	**...**	**31 862**	**...**
	„	1956	1 817	4 755	...	39 996	...
	„	1955	2 600	7 310	...	70 373	...
	„	1954	3 296	12 801	...	109 074	...
	„	1953	1 596	9 451	...	74 146	...

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Middle School Leaving Certificate	...	...	...	...	12 343	...	15 656	2 669	14 568	...
West African School Certificate	667	74	806	126	941	114	930	...	1 173	...
Teachers' Certificate	1 136	237	1 466	388	1 681	486	1 624	481	1 599	429

GREECE

THE EDUCATIONAL SYSTEM

Article 16 of the Greek Constitution defines the system of education. In particular, it lays down that:

'Education is a state responsibility and shall be imparted either at state expense or at the expense of the independent local government bodies.

'The aim of the teaching in all primary and secondary schools shall be to provide a moral and intellectual education and to develop the national consciousness of the pupils in accordance with the ideological directives of Greco-Christian civilization.

'Primary education shall be free and compulsory for all. The length of the period of compulsory education, which shall not be less than six years, shall be laid down by law.

'Higher educational establishments shall be responsible for their own administration, under state supervision, and their teaching staff shall have the status of civil servants.

'Citizens possessing their full political rights, and corporate bodies, shall be entitled, with government authorization, to open schools which shall be run in accordance with the Constitution and with existing legislation.'

With the exception of certain vocational schools administered by other ministries, education is under the authority of the Minister of Education, a member of the Council of Ministers, who is responsible to Parliament. Assisted by the Higher Council of Education, the Minister exercises general supervision, and decides policy matters including problems of educational administration related to ethnic, linguistic, cultural, religious, social and other questions. In the chief town of each province, the central education administration is represented by the local prefect and by inspectors who are assisted by a council of education. Each primary and secondary school has a committee of parents which provides for school needs (*scholiki eforia*) so far as educational materials and school buildings are concerned.

The structure of the Greek educational system is shown in the diagram on page 605.

THE DEVELOPMENT OF SECONDARY EDUCATION

In conformity with the growing desire of the Greek people for education, governments since 1900 have been actively concerned with increasing the number of institutions for general and technical secondary education, with improving school equipment and teaching methods and with developing the traditional system of education by adapting it to existing needs.

There are now a considerable number of public and private schools, distributed more or less throughout the country, which provide technical education. It is difficult to generalize about the structure of this teaching, since of its very nature it differs greatly according to the professions or trades for which it offers training. Moreover, it comes under more than one Ministry, and each of these Ministries has founded and subsidized schools in the field with which its activities are concerned.

The following institutions for technical or vocational training come under the Ministry of Education: commercial secondary schools, nautical secondary schools, schools of mechanical engineering, and numerous modern language schools. Those which come under other Ministries include private technical and industrial schools (Ministry of Industry), secondary schools for agriculture, forestry and fisheries (Ministry of Agriculture), schools for nurses (Ministry of Welfare), schools for officers and engineers of the mercantile marine (Ministry of Mercantile Marine), and training schools for apprentices (Ministry of Labour).

The basic laws which govern the various types of Greek secondary education are the following:

General education

Royal Decree of 31 November 1836, establishing the middle school (*hellinikon scholeion*) with a 3-year course and the classical secondary school (*gumnasion*) with a 4-year course.

Law 4373 (1929) modified this system, introducing the *gumnasion* with a 6-year course, the modern secondary school (*lykeion*) with a 6-year course, the 2-year classical secondary school, girls' high schools and girls' city schools with 3-year courses.

Law 770 (1937), extending the classical secondary school course to 8 years.

Law 1849 (1939), re-establishing classical secondary schools with 6-year courses, and

Law 2180 (1940), introducing a differentiation into secondary education after the fourth year, it being open to pupils to concentrate either on science or on the humanities.

Law 2545 (1940), establishing the relationship between private education and the Ministry of Education in regard, *inter alia*, to the organization and running of private secondary schools.

Laws 4376 (1929) and 4630 (1930), on the establishment and organization of university experimental schools (one at Athens and the other at Salonika). Each of these schools comprises a primary school and a secondary school.

Laws 1949 (1939) and 1823 (1951), on the unification of the status of secondary school teachers.

Law 916 (1943), establishing evening classes for working students under the supervision of classical secondary schools.

Laws 2197 (1920) and 3336 (1925), on the organization and running of commercial secondary schools.

Teacher training

Laws 4367 (1929) and 4619 (1930), on the establishment of a teacher training school for infant-school mistresses and Laws 5802 (1934) and 953 (1937) replacing the teacher training schools for masters and mistresses by pedagogical academies (*paidagogiki akademia*), entrants to which must have taken a classical secondary course (*gumnasion*).

Laws 5620 (1932) and 2509 (1940), on the physical education curriculum for secondary schools and Laws 4372 (1929) and 4619 (1930) on the organization of the higher teacher training school (*Didaskaleion Messis Ekpedeusseos*) for refresher training for secondary school science and literature teachers.

Technical and vocational schools

Laws 5197 (1931) and 28 (1936), on the organization of vocational and technical training.

Law 2395 (1940), on the establishment of a school for mercantile marine officers.

Laws 214 (1943) and 1785 (1951), on the establishment of two higher schools of domestic science.

Law 3088 (1954), on the establishment of nautical secondary schools (*nautika gumnasia*).

Lastly, the establishment, in the provinces, of 6 new schools —technical schools and schools of mechanical engineering (*scholai hypomichanikon*)—is at present under consideration.

Administration

The plan for the organization of secondary education is established and kept up to date by the Ministry of Education, with the assistance of the Higher Council for Education and the directorates of secondary, private and physical education. The Higher Council for Education reports to the Minister on all questions concerning curricula, teaching methods, school textbooks, etc.

The authority of the central education administration is exercised through the inspectors-general for secondary education. The country is divided into 20 regions, at the head of each of which there is an inspector-general, assisted by a council. The inspector is responsible for the inspection of schools and for attending to most of the administrative and pedagogical questions that arise. There are also two inspectors-general for private secondary schools, and one inspector-general for foreign schools and minority schools. As all the secondary inspectors-general hold university degrees in letters, 14 additional inspectors have been appointed, representing the other branches of knowledge (natural sciences, mathematics, religious instruction and physical training). This administrative structure, whilst leaving the central authorities with the last word in the supervision of education, is steadily reducing their administrative burden.

Directors of secondary schools are selected from teachers who have a record of at least 10 years' successful teaching

at the secondary level. They are chosen by the Minister from a list of names submitted by the Higher Council for Education.

The State assumes responsibility for all expenses relating to the salaries of the staff of public secondary schools, the construction of buildings and the provision of equipment. Secondary school pupils pay a fee, although a certain percentage of pupils in each public school is exempted from this payment. Secondary school pupils also pay a small annual contribution towards the upkeep of the school buildings and the provision of supplies. In each school there is a parents' committee which is responsible for administering the sums thus collected in the best interests of the school. There is also a national organization, 'The Pupils' Friend', whose aim is to distribute textbooks free to needy pupils.

Private schools receive no state subvention, although the Ministry of Education establishes scales of fees and staff salaries.

Problems concerning the size of schools, their sanitation, safety, lighting, etc., are dealt with by the directorate of technical services of the Ministry of Education, which issues necessary instructions.

School medical officers, supervised by the directorate of school hygiene of the Ministry of Education, are responsible for health services and for the medical inspection of both pupils and teachers.

Vocational and technical education. The administration of the majority of vocational and technical schools is entrusted to other bodies, in particular, the Ministries of Labour, Industry, Commerce, Mercantile Marine, and Welfare. Nevertheless, the length of courses, the subjects taught and, in general, all questions concerning the running and organization of vocational and technical secondary education, in both public and private institutions, are dealt with by the Vocational and Technical Council, which comes under the Ministry of Education.

Vocational and technical school inspectors are graduates of the universities, the Polytechnic School or the Higher School of Economic and Commercial Science; they are responsible for the inspection and administration of vocational and technical schools.

Assistance is given to the teaching staff by various private bodies (committees of parents, professional associations, technical committees, etc.).

TYPES OF SECONDARY EDUCATION

Any pupil who has completed the primary school course can sit for the entrance examination for a general secondary school (*gumnasion*), a full-time commercial secondary school (*emporiki scholi*), or a technical secondary school (*messi techniki scholi*).

Students who work during the day may take evening classes at the general secondary school, the commercial secondary school, or the technical secondary school.

The Ministry of Education has set up a school guidance office to assist pupils in choosing the type of secondary education which is suitable for them. At the conclusion of the secondary school course, pupils may elect to follow different branches of study—humanities, science, political science, technical sciences (at the Polytechnic School), economic and commercial science, agriculture (in a higher school of agriculture); or they may go on to a military school, the school for the mercantile marine, or a teacher training school.

The school year begins on 5 September and ends on 10 July. It is divided into 2 half-years (September–January and February–June), each half-year being divided into 2 periods of 2 months each. There are written examinations, which must be taken by all pupils, at the end of each half-year. Pupils have 2 weeks' holiday at Christmas, 2 weeks at Easter and 2 months during the summer. Schools are closed also on the main religious and national holidays.

Secondary school pupils attend school 6 days a week for 6 hours each day.

General secondary schools

In the general secondary schools, the weekly time-table provides for 35 periods for first, second, third and fourth-year pupils, 36 for fifth-year pupils, and 37 for sixth-year pupils. The following subjects are taught: religious instruction, classical Greek, modern Greek, Latin, French, history, mathematics, physics, geography, domestic science (for girls), hygiene, technical subjects, singing, philosophy, civics (for boys) and gymnastics. All these subjects are compulsory.

Vocational and technical schools

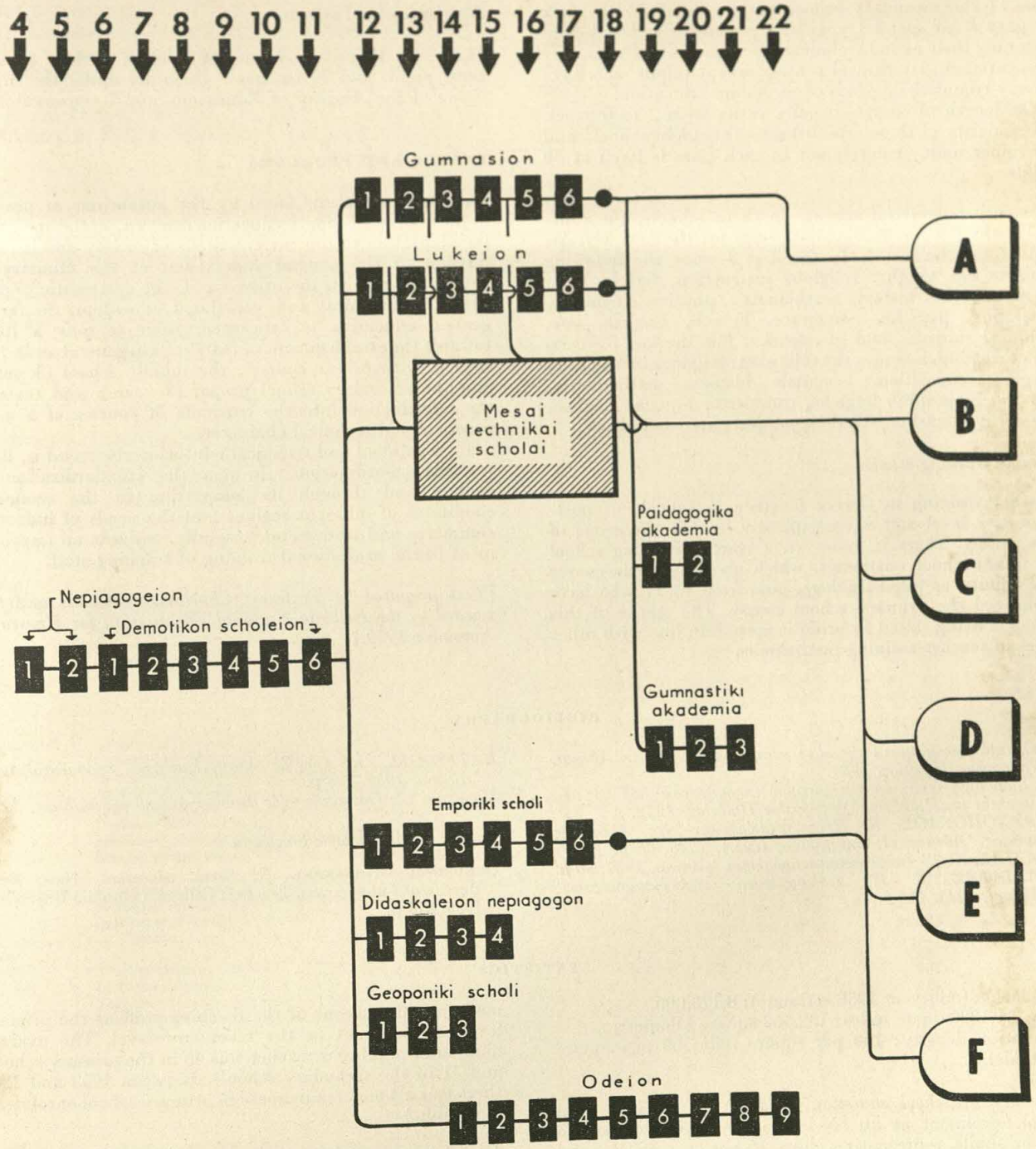
The majority of these schools are open to pupils who have completed the primary school course or the first and second

GLOSSARY

demotikon scholeion: primary school.
didaskaleion nepiagogon: teacher training school for pre-primary teachers.
emporiki scholi: vocational secondary school of commerce.
geoponiki scholi: vocational training school of agriculture.
gumnasion: general secondary school with curriculum emphasizing classical Greek and Latin studies.
gumnastiki akademia: specialized teacher training college for teachers of physical culture.
lukeion: general secondary school with curriculum emphasizing sciences.
mesai technikai scholai: vocational secondary schools of various types.
nepiagogeion: pre-primary school.
odeion: vocational training school of fine arts or music.
paidagogika akademia: teacher training college.

HIGHER EDUCATION

A. University.
B. Technical university.
C. College of fine arts.
D. Agricultural college.
E. Industrial college.
F. Colleges of economics or political science.


4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
Gumnasion
1 2 3 4 5 6
Lukeion
1 2 3 4 5 6
Mesai technikai scholai
A
B
C
D
E
F
Paidagogika akademia
1 2
Gumnastiki akademia
1 2 3
Nepiagogeion
Demotikon scholeion
1 2 1 2 3 4 5 6
Emporiki scholi
1 2 3 4 5 6
Didaskaleion nepiagogon
1 2 3 4
Geoponiki scholi
1 2 3
Odeion
1 2 3 4 5 6 7 8 9

years of the secondary school course. Pupils in the first category must spend 1 year in a preparatory class before beginning their actual technical training. A smaller number of vocational or technical schools accept pupils who have already completed 3 years of secondary education.

The length of courses usually varies from 2 to 6 years. The majority of these establishments are night schools, and the upper limit of enrolment in each class is fixed at 50 pupils.

Secondary commercial schools. In these schools, the timetable provides for 36 weekly periods for the first 3 years, and 37 for the last 3. In the first 3 years the following subjects are taught: religious instruction, Greek, composition, civics, history, mathematics, physics, chemistry, geography, hygiene, commerce, French, English, law, technical subjects, and gymnastics. For the last 3 years, the curriculum includes the following: religious instruction, Greek, composition, economic history, mathematics, physics, geography, hygiene, commerce, French, English, law and gymnastics. All these subjects are compulsory.

Teacher training schools

Teacher training in Greece is given in schools of post-secondary level and is consequently outside the scope of this survey. There is, however, a teacher training school for infant-school mistresses, which gives a 4-year course and admits, as pupil-teachers, girls from 13–17 who have completed the primary school course. The status of this school is being raised to bring it more into line with other types of teacher training institutions.

Other specialized schools

There are 40 privately-run art schools, with a total of 1,065 pupils and 99 teachers, which are under the supervision of the Ministry of Education, and 7 conservatoires.

TRENDS AND PROBLEMS

The major problems faced by the authorities at present in the field of secondary education concern, on the one hand, its adaptation to the current needs of society and its submission to the general supervision of the Ministry of Education and, on the other hand, the systematic organization of technical and vocational education. So far as general education is concerned, there is now a trend towards the establishment of two cycles in general secondary schools with 6-year courses, the middle school (3 years) and the secondary school proper (3 years), and towards the introduction into the curricula of courses of a more practical and technical character.

In vocational and technical education the trend is, first, towards co-ordination, through the standardization of courses and through its adaptation to the economic conditions of different regions and the needs of industry, commerce and trades and, secondly, towards an improvement in the professional training of teaching staff.

[*Text prepared by Professor Charilaos Kavathas and forwarded by the Hellenic National Commission for Unesco in November 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 8,173,000.
Area: 51,182 square miles; 132,562 square kilometres.
Population density: 160 per square mile; 62 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58 total school enrolment at all levels may be estimated at 1.3 million pupils, representing about 16 per cent of the total population. Enrolment in primary day and night schools accounted for three-fourths of the total enrolment. Higher education enrolled less than 2 per cent of the school-going population. The proportion of girls was 48 per cent in the primary schools, 39 per cent in the secondary schools, and 25 per cent in higher education. Women teachers made up 48 per cent of the teaching staff at the primary level, 34 per cent at the secondary level. The average number of pupils per teacher was 46 in the primary schools and 31 in the secondary schools. Between 1953 and 1957 there was a 4 per cent increase in primary school enrolment. (See table.)

Examination results in secondary education, 1953–57. The numbers of secondary school certificates granted each year from 1954 to 1957 were as follows: 1954/55, 19,562 (F. 8,317); 1955/56, 18,719 (F. 8,223); 1956/57, 20,853 (F. 8,941); 1957/58, 20,122 (F. 8,822). In addition, for 1956/57, the numbers of certificates granted for various types of vocational education were as follows: technical, 5,753

(F. 124); commercial, 1,075 (F. 440); agricultural, 585 (F. 21); domestic science, 1,026 (all F.); social services, 1,073, (F. 613); art and music, 245 (F. 151); merchant marine, 130; ecclesiastical, 430.

Educational finance, 1957/58. For 1957/58, the budget of the Ministry of National Education amounted to approximately 1,126 million drachmas, averaging 139 drachmas per inhabitant. Official exchange rate: 100 drachmas = 3.33 U.S. dollars.

Source. Greece: National Statistical Office, reply to Unesco questionnaire, International Bureau of Education, *International Yearbook of Education, 1958.*

SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary[1]	Nursery schools, public	1957/58	877	741	741	26 105	12 642
	Nursery schools, private	1957/58	171	180	180	3 805	1 637
	Total	**1957/58**	**1 048**	**921**	**921**	**29 910**	**14 279**
	„	1956/57	972	872	872	28 678	13 622
	„	1955/56	954	812	812	27 673	13 251
	„	1954/55	961	834	834	24 062	11 575
Primary	Primary day schools, public	1957/58	9 056	19 070	8 855	878 229	419 524
	Primary night schools, public	1957/58	1 097			32 332	16 910
	Primary day schools, private	1957/58	739	2 160	1 306	58 000	27 006
	Primary night schools, private	1957/58	56			3 252	1 701
	Total	**1957/58**	**10 948**	**21 230**	**10 161**	**971 813**	**465 141**
	„	1956/57	9 721	20 825	10 175	936 657	446 365
	„	1955/56	9 672	19 705	9 606	947 549	450 120
	„	1954/55	9 638	19 153	9 579	943 722	442 902
	„	1953/54	...	...	...	932 727	...
Secondary *General*	Secondary day schools, public	1957/58	307	4 604	1 448	176 098	71 193
	Secondary night schools, public	1957/58	25			8 999	1 140
	Secondary day schools, private	1957/58	166	2 400	922	26 050	11 649
	Secondary night schools, private	1957/58	34			6 160	831
	Total	**1957/58**	**532**	**7 004**	**2 370**	**217 307**	**84 813**
	„	1956/57	511	6 991	2 308	202 727	78 558
	„	1955/56	490	6 743	2 233	199 591	74 557
	„	1954/55	454	7 162	2 309	197 891	73 205
Vocational[2]	Commercial schools, public	1956/57	40	415	104	9 330	4 290
	Commercial schools, private	1956/57	2	25	4	414	86
	Commercial schools of the Ministry of Industry	1956/57	43	[3]394	[3]64	5 786	1 086
	Agricultural schools	1956/57	22	[3]95	[3]2	2 398	206
	Crafts schools	1956/57	127	[3]1 555	[3]53	25 569	472
	Domestic science schools	1956/57	23	[3]209	[3]165	2 594	2 594
	Schools of nursing, midwifery, and others	1956/57	30	[3]372	[3]107	2 420	1 791
	Schools of fine arts	1956/57	81	[3]547	[3]327	5 176	3 650
Other schools	Ecclesiastic schools and seminars	1956/57	20	200	2	2 202	—
	Merchant marine training schools	1956/57	3	39	—	132	—
	Institutes of foreign languages	1956/57	198	627	365	43 313	21 798
	Total	**1956/57**	**589**	**4 478**	**1 193**	**99 334**	**35 973**
Higher *Teacher training*	Teacher training institutes, public	1957/58	12	142	—	2 037	762
	Institute of physical culture, public	1957/58	1	19	—	107	53
	Teacher training institutes, private	1957/58	2	32	—	219	219
	Teacher training college for kindergarten teachers[4]	1957/58	1	9	7	202	202
	Total	**1957/58**	**16**	**202**	**7**	**2 565**	**1 236**
	„	1956/57	16	207	8	2 806	1 475
	„	1955/56	16	205	8	3 166	1 462
	„	1954/55	18	199	7	3 484	...
	„	1953/54	...	...	...	...	...

1. Not including public kindergartens and rural nursery schools.
2. Complete data are not available for earlier years.
3. Mostly part-time teachers.
4. This institution has a status in between secondary and higher education level; as from 1959/60 its revised status will justify its classification under higher education.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Higher [cont.] *General and technical*	Universities, public	1957/58	2	496	—	12 437	3 441
	Institute of Technology, public	1957/58	1	95	—	1 568	125
	College of Economic and Commercial science, public	1957/58	1	17	—	1 674	122
	College of Political Science, public	1957/58	1	16	—	1 849	352
	Agricultural College, public	1957/58	1	30	—	295	16
	College of Fine Arts, public	1957/58	1	11	—	132	57
	College of Industrial Studies, public	1957/58	1	44	1	1 276	151
	Total	**1957/58**	**8**	**709**	**1**	**19 231**	**4 264**
	"	1956/57	8	683	1	19 014	3 829
	"	1955/56	8	662	—	17 889	3 606
	"	1954/55	8	515	...	16 882	...
	"	1953/54	8	...	...	...	...
Special	School for abnormal children						
	Total	**1957/58**	**1**	**4**	**3**	**65**	**19**
	"	1956/57	1	7	4	72	25
	"	1955/56	1	8	5	82	29
	"	1954/55	1	8	6	91	32
	"	1953/54	...	...	...	...	...

GUATEMALA

THE EDUCATIONAL SYSTEM

The Articles relating to education in the Constitution which came into force on 1 March 1956, are to be found in Section IV, Chapter IV. Special mention may be made of the following:

'The promotion and dissemination of culture in all its forms are a primary obligation of the State. The purposes of education are to develop human personality to its fullest extent, to inculcate a respect for the rights of man and for his fundamental liberties, to bring about physical and spiritual improvement, strengthen the sense of responsibility of the individual citizen, promote civic progress and heighten patriotism' (Article 95).

'Freedom of instruction and of teaching is guaranteed. Religious instruction in official establishments shall be regulated by law; the State shall not impart such instruction, which shall be optional' (Article 97).

'Every person has a right to education. Technical and vocational education is open to all on equal terms.

'The State shall maintain and increase as far as possible establishments of secondary education; technical, industrial, agricultural, and commercial institutions; pre-vocational schools; academies; centres of artistic culture; libraries and other institutions useful for cultural purposes' (Article 100.).

'The State shall provide scholarships for advanced study or specialization for students who because of their vocation, abilities and other merits are deserving of such assistance' (Article 101).

THE DEVELOPMENT OF SECONDARY EDUCATION

The development of secondary education has been particularly marked during the present century and there have been frequent changes and reforms. Three important meetings of educators, the Convention of Santa Ana, the First Seminar on Secondary Education in Central America and Panama, and the First National Educational Congress all played a large part in giving general and vocational secondary education their present structure and content.

The Convention of Santa Ana. In 1945, school teachers from Guatemala and San Salvador met to draw up curricula for all levels of education with the exception of higher education. Among other measures this convention recommended the organization of secondary education in two study cycles, of which the first, the lower general secondary course (3 years), was intended to provide a grounding both for a 2-year course in teacher training and for the academic course, also 2 years, leading to the *bachillerato* or university

entrance examination. This lower general cycle was not included in commercial, industrial, agricultural or similar types of vocational education. Reorganization on these lines was begun in 1947 and the new study plan was introduced by stages, starting with pupils in the first grade, and remained in force until last year.

The First Seminar on Secondary Education in Central America and Panama. The Executive Board of the Union of Latin American Universities, with headquarters in Guatemala, suggested that the Ministry of Education of the Republic of Honduras assume responsibility for sponsoring and organizing this seminar. Its terms of reference were to study and examine the problem of secondary education in Central American countries and the Republic of Panama with a view to making recommendations to the participating countries on the reforms and amendments required for raising educational levels so as to bring them into line with up-to-date educational ideas. The Ministry of Education of Honduras agreed to organize the seminar, which was held at Tegucigalpa D.C. from 7 to 18 March 1953, with the participation of representatives from each of the six countries. The conclusions reached were embodied in the form of recommendations relating in particular to:

1. The adoption of the term *enseñanza media* (intermediary education) for what had previously been known in these countries as *enseñanza secundaria*, *enseñanza post-primaria* or *enseñanza liceana*.
2. The general and specific aims of secondary education.
3. Its organization in two cycles, the first of which—the pre-vocational—was to cover 3 years, with the object of continuing the general education given at the primary level, discovering a pupil's special interests and aptitudes, and guiding him towards the profession or manual or other occupation for which he was best fitted. The second cycle, the vocational, was to be of varying duration depending on the nature of the specialized studies the student wished to take up.
4. The integration of secondary with university studies.
5. The training of secondary school teachers in Central America and Panama—a matter to be brought to the special attention of the universities.
6. The systematic organization of educational and vocational guidance services in secondary schools.

The First National Educational Congress. This was held from 31 January to 6 February 1955. As regards secondary and vocational education, the main recommendations were:

1. That secondary education should comprise two cycles: (a) *General*, lasting for 3 years, in which both basic and optional subjects would be included, and which would not only extend the general education begun in primary school but would also give an opportunity for the discovery of the pupil's aptitudes and interest. (b) *Diversified*, providing training for those proposing to go to a university, become urban or rural primary school teachers or teachers in pre-primary schools, specialize in the plastic arts, music or physical training, or qualify for careers in commerce, industry, agriculture, etc.
2. That responsibility for teacher training at this educational level should rest with the Arts Faculty of the University of San Carlos de Guatemala.

Administration

Government Decree No. 558, the Organic Law on National Education—which is the basic legal text on educational matters throughout the country—came into force on 25 February 1956. Under this law general and vocational or technical education are the responsibility of the Department of Secondary Education and Teacher Training and of the Department of Vocational and Technical Training respectively. Both departments are headed by directors who are appointed under conditions of open competition. They are assisted by inspectors and administrative staff and collaborate with other appropriate technical and administrative bodies. The Director of Secondary Education and Teacher Training is responsible for both public and private secondary schools, irrespective of whether their work lies in the pre-vocational field or is concerned with the various courses leading to the university or the training of pre-primary, urban or rural primary or nursery school teachers. The Director of Vocational and Technical Education is responsible for vocational and technical training establishments of various types providing training for industry, commerce or the home, and in agriculture, nursing, social welfare, the plastic arts, music and singing, dramatics, military science, public administration, etc. These two departments issue instructions and regulations, and take any other measures necessary for the smooth functioning of the educational system.

Buildings and equipment. Secondary schools are generally accommodated in publicly owned buildings, but private buildings are sometimes used. Owing to the country's financial circumstances, it has not yet been possible to provide sufficient buildings to house all the secondary or vocational schools required, and this is one of the most urgent problems of national education, not only at secondary but also at pre-primary and primary levels. A Committee for School Building, on which the State, municipalities and the private citizens of the locality are represented, has now been set up and good results are anticipated from its activities.

School welfare services. The Ministry of Education has for many years provided scholarships for students at secondary, vocational or technical schools, the number of which varies with the depth of the state's purse. The conditions governing this type of scholarship are laid down in Government Resolution No. 578, Regulations for Secondary School Scholarships. Article 2 of these regulations provides that secondary school scholarships shall be awarded to enable pupils to begin or continue their general studies (pre-vocational education), and to enable them to begin or continue courses in teacher or vocational training. Over the last few years the number of scholarships granted by the State for secondary or vocational studies has increased considerably.

Pupil guidance, both educational and vocational, was introduced into secondary schools in February 1957, under a special department of the Technical Council on National

Education. The fundamental principles on which this service is organized are laid down in a document entitled 'Draft Programme for Educational and Vocational Guidance'. The emphasis is on meeting the pupil's educational needs and, in so doing, to help him to develop his personality and to guide him towards the sort of life to which he seems best adapted.

The headquarters staff of this service includes a director-general, who is in complete charge, a supervisory director, a psychologist, a doctor, a nurse, a welfare worker (female), and specialized inspectors.

In the schools where it exists, pupil guidance is in the hands of a programme director who is also the headmaster, and a guidance committee consisting of the director and deputy director, a technical adviser, the teaching staff and psychologists (where there are any), the school medical officer and the nurse.

Owing to the shortage of trained staff and the limited funds available, pupil guidance was first introduced into some secondary schools in the capital and in one or two provinces (*departamentos*). These schools served as pilot projects, from which the range of the service's activities has been gradually but effectively extended.

TYPES OF SECONDARY EDUCATION

The purposes of secondary education are set forth in the Organic Law on National Education as follows: (a) to meet the requirements of the student's education, and in so doing to help him to develop his personality and to guide him towards the occupation in life to which he seems best adapted; (b) to continue as a natural process the education begun at primary level to prevent the student's having doubts as to his ability to cope with the work in any particular branch of instruction; (c) to explore the student's bent and aptitudes with a view to influencing him in the direction of either practical, artistic or academic activities, and encourage him to make the best use of the educational facilities offered him at specialized institutions or universities; (d) to bring the student up to an adequate level of general culture and provide him with a liberal education; (e) to give young people a suitable preparation for taking an active part in the planning and development of a society, capable of satisfying the material and cultural needs of the population; (f) to cultivate and develop the moral qualities needed by the student for the development of a balanced personality and to enable him to become a useful member of society; (g) to create and foster a love for his country; (h) to promote the acquisition of a healthy outlook and habits; (j) to enable the student to follow the social and economic development of Guatemala so that on entering public life he may contribute to its improvement.

Article 3 of Government Decree No. 510 of 29 December 1955 provides that secondary education shall consist of two cycles: the first, extending over 3 years, is pre-vocational (general) and compulsory for all students wishing to obtain a certificate or diploma recognized by the State; the second is diversified and of varying length, depending on the scope of the course of study undertaken or the degree of professional competence the student wishes to attain.

To qualify for admission to secondary education, candidates must have completed the sixth grade of primary school; on completion of the pre-vocational cycle they are given a certificate which entitles them to enter for any of the study courses of the diversified cycle. For public secondary schools the minimum entrance fee is 1.50 quetzals per pupil.

Secondary schools may be public or private. In public schools education is free but not as yet compulsory, although the Organic Law envisages the general implementation of a pre-vocational or general course comprising 3 cycles or 9 years of study, at which attendance shall be compulsory. Pre-vocational or general secondary schools have of late been established in nearly all provincial capitals.

Private general or vocational secondary schools are allowed to function in the country provided they meet the requirements of the relevant section of the Organic Law. They are supervised by the Ministry's special inspectors. On completion of the diversified cycle, certificates or diplomas are granted which are recognized by the State, provided the preceding course of study conforms to the syllabuses and curricula issued by the Ministry of Education. Most secondary schools, whether public or private, are day schools, but there are some night schools, for the most part state maintained.

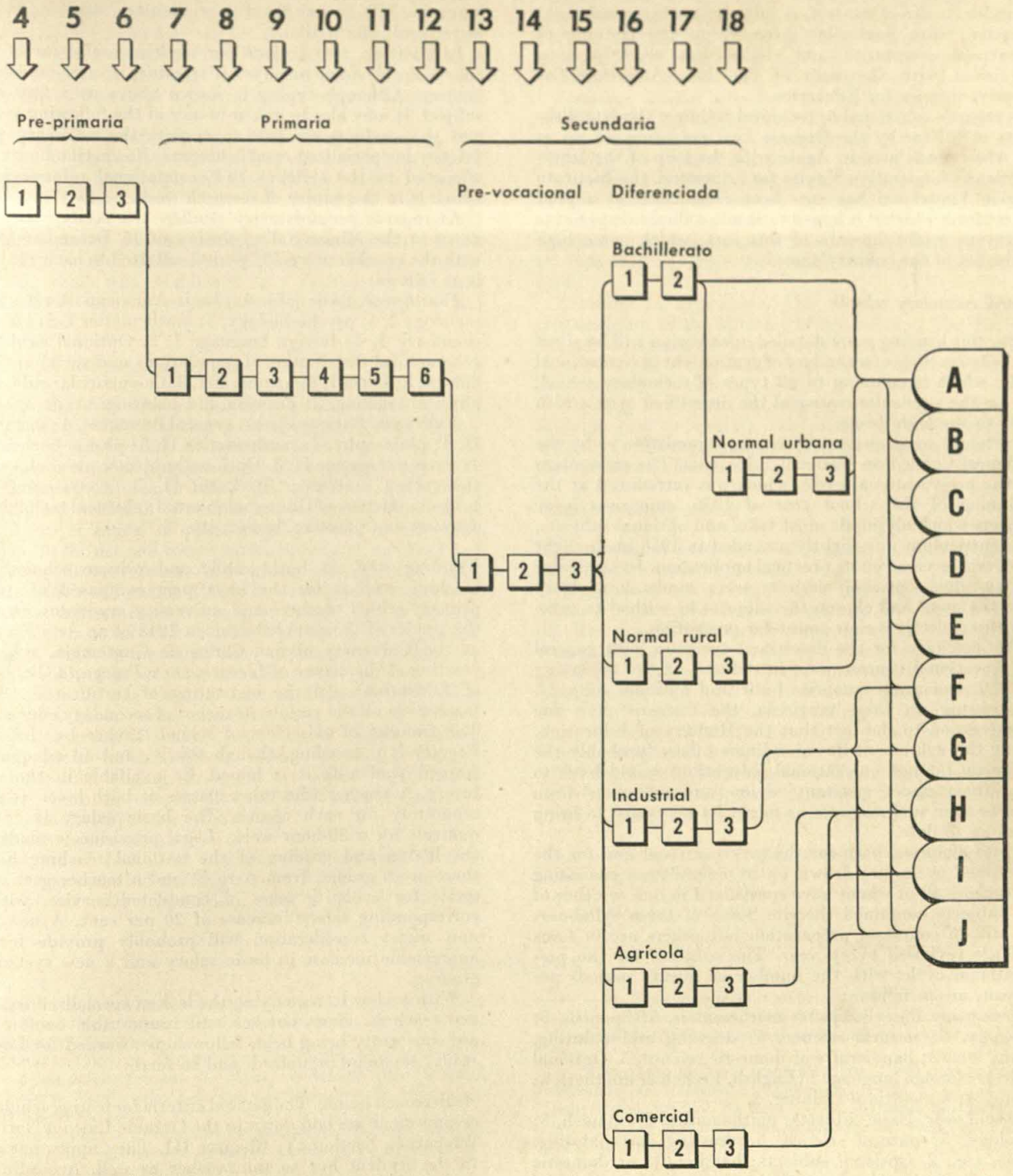
The Organic Law provides for the establishment of experimental schools (*escuelas de ensayo*), but so far the Ministry has authorized only two private establishments to function as schools of this type; these establishments

GLOSSARY

agrícola: agricultural course.
bachillerato: upper cycle of general secondary school.
diferenciada: upper cycle of secondary education, differentiated into general, vocational and teacher training courses.
comercial: commercial course.
industrial: technical course.
normal rural: rural teacher training.
normal urbana: urban teacher training.
pre-primaria: pre-primary education.
pre-vocacional: lower general secondary course common to all types of secondary education.
primaria: primary education.
secundaria: secondary education.

HIGHER EDUCATION

A. Faculty of Medicine (8 years).
B. Faculty of Dentistry (6 years).
C. Faculty of Chemistry and Pharmacy (6 years for pharmaceutical chemistry or biochemistry, 5 years for chemical engineering).
D. Faculty of Arts (4-year courses in philosophy, psychology, history, literature, education, library science, journalism).
E. Faculty of Veterinary Science (6 years).
F. Faculty of Architecture (6 years)
G. Faculty of Law and Social Sciences (6 years for each course).
H. Faculty of Agriculture (6 years).
I. Faculty of Engineering (6 years).
J. Faculty of Economics (5 years).


4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
Pre-primaria
Primaria
Secundaria
Pre-vocacional
Diferenciada
1 2 3
1 2 3 4 5 6
1 2 3
Bachillerato
1 2
Normal urbana
1 2 3
Normal rural
1 2 3
Industrial
1 2 3
Agrícola
1 2 3
Comercial
1 2 3
A
B
C
D
E
F
G
H
I
J

are under its direct control. A pilot centre for commercial education, with particular reference to the training of commercial secretaries and clerks, has recently been established with the help of the Inter-American Co-operative Service for Education.

As regards vocational or technical training, the establishments called for by the Organic Law are being set up as and when funds permit. Again with the help of the Inter-American Co-operative Service for Education, the Instituto Técnico Vocacional has now been established as a pilot project from which it is hoped to obtain valuable experience for future establishments of this sort, which come high on the list of the country's needs.

General secondary schools

Under this heading more detailed information will be given on the lower cycle of secondary education, the pre-vocational cycle, which is common to all types of secondary school, and on the particular course of the diversified cycle which leads to the *bachillerato*.

Curricula are drawn up by expert committees or by the Technical Council on National Education. The curriculum for the pre-vocational cycle, which was introduced at the beginning of the school year of 1956, comprises basic subjects which all pupils must take, and optional subjects. This curriculum was slightly amended in 1958 in the light of reports received on its practical application. In particular the so-called optional subjects were made compulsory once the pupil had chosen the subjects he wished to take, and these electives now count for promotion.

The curricula for the diversified cycles in both general and vocational courses were introduced at the beginning of 1959, and again comprise basic and optional subjects. In drawing up these curricula, the framers gave due consideration to the fact that the Ministry of Education, acting through one of its subordinate offices (probably the Technical Council on National Education) would have to keep them under constant review and introduce from time to time such changes as might be necessary to bring them up to date.

The syllabuses, both for the pre-vocational and for the diversified cycle, are drawn up by committees consisting of teachers all of whom have specialized in one or other of the subjects contained therein. Some of these syllabuses are still in course of preparation but others are in force and are reviewed every year. The subjects for the pre-vocational cycle, with the number of weekly periods per subject, are as follows:

First year. Basic subjects: mathematics, 5; Spanish, 5; sociology, 5; natural science, 5; drawing and painting, music, etc., 2; handicrafts or domestic science, 5. Optional subjects: foreign language I (English, French or another), 4; typing, 4; agricultural training, 2.

Second year. Basic subjects: mathematics, 5; Spanish, 5; sociology, 5; natural science, 5; drawing and painting, music, etc., 2. Optional subjects: handicrafts or domestic science, 5; foreign language II, 4; hygiene, 3; secretarial work, 2.

Third year. Basic subjects: mathematics, 5; Spanish, 5; sociology, 5; natural science, 5. Optional subjects: book-keeping, 3; drawing and painting, music, etc., 2; foreign language III, 4; handicrafts or domestic science, 5; occupational information.

In addition, two periods per week in each year of the course are devoted to physical training, as a co-curricular subject. Although typing is shown above as a first-year subject, it may also be taken in any of the following years, and the students are free to acquire the necessary proficiency in specialized establishments. No specific hours are allocated in the syllabus to 'occupational information', which is in the nature of research work.

As regards pre-university studies, the study plan laid down in the Ministerial resolution of 15 December 1958, with the number of weekly periods allotted to each subject, is as follows:

Fourth year. Basic subjects: Latin American literature, 4; sociology I, 4; psycho-biology, 5; mathematics I, 5; physio-chemistry I, 4; foreign language I, 3. Optional subjects: geographical distribution of populations and social anthropology, 3; Latin I, 3; handicrafts, 3. Co-curricular subjects: physical training, 2; drawing and painting, music, etc., 2.

Fifth year. Basic subjects: general literature, 4; sociology II, 4; philosophy, 4; mathematics II, 5; physio-chemistry, 4; foreign language II, 3. Optional subjects: psychology, 3; elementary statistics, 3; Latin II, 3. Extra-curricular subjects: history of Guatemalan art, 3; physical training, 2; drawing and painting, music, etc., 2.

Teaching staff. In both public and private schools the teaching staff is for the most part composed of urban primary school teachers and university graduates. One of the results of the establishment in 1945 of an Arts Faculty at the University of San Carlos de Guatemala, was the creation of the degree of *Licenciado en Pedagogía* (Bachelor of Education) and the institution of certificated school teachers in all the various branches of secondary education. The training of this class of school teacher by the Arts Faculty is proceeding, though slowly, and an adequately trained staff will, it is hoped, be available in the near future. A teacher who takes classes at both levels is paid separately for each course. The basic salary is 150.00 quetzals for a 30-hour week. Legal provision is made for the listing and grading of the national teaching body: there are 6 grades, from A to F, and a teacher goes up 1 grade for every 5 years of completed service, with a corresponding salary increase of 20 per cent. A new law now under consideration will probably provide for an appreciable increase in basic salary and a new system of grading.

With a view to remedying the lack of specialized secondary teachers, short courses and round-table conferences are constantly being held, fellowships awarded for foreign study, seminars organized, and so forth.

Achievement testing. The general criteria for testing scholastic achievement are laid down in the Organic Law on National Education, Section IV, Chapter III. They apply not only to the student but to the teacher as well. According to Article III of this law, the mechanics of achievement testing include: psycho-pedagogic and sociological record cards, general intelligence and specific aptitude tests, tests designed to reveal the causes of backwardness, criteria for judging general progress, objective achievement tests,

questionnaires and criteria for assessing vocational aptitudes and personality development, statistical methods for the quantitative assessment of scholastic achievement, etc. This system also allows for extra tuition for backward students, classes for handicapped children, summer schools, vacation courses and other activities with the same end in view.

As regards secondary and vocational education, the framing of the tests, criteria and directives relating to the assessment system is entrusted to the heads of Departments of General and Vocational Education working in close co-operation with the Assessment Section of the Department of Psycho-pedagogic Investigation of the Technical Council on National Education. This assessment section, which was established on 1 February 1958, comprises four experts in psychometry, a statistician, and clerical staff.

Vocational and technical schools

The specific aims are to raise the general cultural level of the students, while teaching them to appreciate the dignity of manual labour and occupations useful to society; to inculcate habits of hygiene and safe working; to provide the necessary training to enable the student to earn a living as a skilled workman or technician; to lay the foundations for higher technical or professional studies; to train the student in the use and conservation of natural resources and encourage improvements in working methods and techniques which will enable him to be successful in the arts or industry; and to form reserves of human capital for the country's economic and social life on the basis of general culture, while at the same time training the student for some branch of production of value to the country.

Article 67 of the Organic Law envisages the following types of schools: industrial institutes, domestic science schools, commercial schools, agricultural schools, nursing schools, social welfare schools, plastic art schools, schools for music and singing, dramatic art schools, schools for military training, schools for public administration, and other schools still to be established.

Already functioning are:

The Central Industrial Institute. This institute offers a 3- to 4-year technical training course, following the general cycle of secondary education, and a special in-service training course for skilled workmen, established under special agreements with industry. They are for varying periods and are held in the evening or at night. Tuition is given in such subjects as mechanical engineering, woodworking, electro-technics, the graphic arts and textiles.

Domestic science schools. The main function of these schools is the training of domestic science teachers (female) in accordance with an experimental 2-year programme following the general course.

Commercial schools. Commercial studies are carried out at both public and private institutes at different educational levels. There is, for instance, a 2-year course for commercial secretaries and a 3-year course for accountants, all following on after the general secondary educational cycle.

Training in agriculture. This is the almost exclusive responsibility of the Ministry of Agriculture. The National School of Agriculture takes sixth grade primary school pupils who, after successfully completing the 5-year course, are accorded the title of 'agricultural expert'.

Training in the arts. Schools providing tuition in music (instrumental or choral), the plastic arts (painting and sculpture), dancing, dramatics and declamation come under the Ministry of Education.

Teacher training schools

The training of teachers is carried out in both urban and rural teacher training schools.

The revised curriculum for the training of teachers for urban schools represents a substantial departure from the previous system. The former programme of 3 years' general tuition, followed by 2 years' vocational training, is being gradually changed to 3 years' pre-vocational education (general) followed by 2 years of study for the *bachillerato* and then 2 years' vocational training, or 7 years in all. A start was made with the new programme in 1956 and it is being introduced by stages.

The rural teacher training schools have been reorganized, and the present curriculum comprises 3 years' vocational training, following the 3-year general cycle.

[*Text prepared by the Technical Council on National Education in January 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 3,546,000.
Area: 42,042 square miles; 108,889 square kilometres.
Population density: 84 per square mile; 33 per square kilometre.

Summary of school statistics, 1953–57. In 1957, the number of pupils enrolled from the pre-primary up to and including the secondary level of education was over 272,000. If university enrolment be assumed to be about 4,000 (3,379 students were enrolled at the San Carlos University in 1954), total enrolment may be estimated as about 8 per cent of the total population. Enrolment in kindergartens was approximately 5 per cent of the total; primary school enrolment, 86 per cent; secondary school enrolment, 7 per cent; university students, 1.5 per cent. The proportion of girls was 44 per cent in primary schools, 39 per cent in general secondary schools, 41 per cent in vocational schools, and 49 per cent in teacher training schools. Women teachers made up about two-thirds of the teaching staff in primary schools, where the pupil-teacher ratio (including part-time teachers) was 27. Between 1953 and 1957, enrolment increased by 27 per cent in the primary schools and by 16 per cent in the secondary schools. (See Table 3.)

Enrolment trends in secondary education, 1950–57. Table 1 shows a doubling of the enrolment in general secondary schools between 1950 and 1957, but a drastic reduction of the vocational school enrolment after it had reached a high level in 1955. Enrolment in teacher training schools increased by 37 per cent over the same period. Average total enrolment of all types of secondary schools was slightly over 5 per cent of the estimated population 15–19 years old.

Examination results in secondary education, 1953–57. There was an increase each year in the number of certificates granted, as shown in Table 2. Altogether more girls received certificates than boys; thus in 1957, girls received 62 per cent of all certificates. The only categories in which boys received all or practically all the certificates were the diplomas of technical industrial schools (25 certificates, all boys) and the diplomas of teacher training schools for rural primary school teachers (49 certificates, of which 47 to boys).

Educational finance, 1957/58. In 1957/58, the total budget for public education amounted to 11,939,930 quetzals, an average expenditure of 3.5 quetzals per inhabitant. Official exchange rate: 1 quetzal = 1 U.S. dollar.

Source. Guatemala: Ministry of Public Education, Office of School Statistics, reply to Unesco questionnaire; report to the International Bureau of Education in 1958.

1. TRENDS IN SECONDARY EDUCATION, 1930–57: PUBLIC SCHOOLS ONLY

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1950	7 202	37	6 066	47	1 746	59			
1951	7 667	36	6 531	49	1 815	59			
1952	7 759	35	7 166	49	1 790	56	16.6	327	5
1953	8 193	33	7 351	53	1 687	57			
1954	8 375	30	7 707	54	1 987	53			
1955	8 880	31	8 199	52	2 067	51			
1956	11 896	37	5 399	46	2 218	49	19.5	369	5
1957	13 745	39	3 788	41	2 395	48			

2. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Diploma of technical industrial schools	12	—	9	—	9	—	17	—	25	—
Diploma of trade and crafts schools	97	97	147	147	145	145	100	100	102	102
Diploma of commercial schools	325	235	398	288	490	367	542	370	779	542
Diploma of fine arts' schools	—	—	5	1	—	—	4	1	—	—
Diploma of teacher training schools (for primary teachers)	412	259	551	303	595	363	675	322	861	475
Diploma of teacher training schools (for teachers in rural primary schools)	27	9	21	4	25	6	23	6	49	2

3. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1957	50	352	346	11 519	5 753
	Kindergarten, private	1957	3	133	133	3 380	1 770
	Total[1]	**1957**	**53**	**485**	**479**	**14 899**	**7 523**
	„ [1]	1956	51	473	469	14 456	7 235
	„ [1]	1955	53	443	441	13 630	6 907
	„ [1]	1954	51	428	426	13 312	6 672
	„ [1]	1953	52	419	417	12 973	6 501
Primary	Primary schools, public	1957	2 727	[2]6 522	[2]4 386	192 709	84 063
	Primary schools, private	1957	943	[2]2 264	[2]1 601	44 774	19 719
	Total	**1957**	**3 670**	**[2]8 786**	**[2]5 987**	**237 483**	**103 782**
	„	1956	3 602	[2]8 554	[2]5 843	224 299	97 602
	„	1955	3 558	[2]8 113	[2]5 536	214 101	92 037
	„	1954	3 532	[2]7 917	[2]5 353	199 072	85 520
	„	1953	3 537	[2]7 809	[2]5 210	186 468	79 906
Secondary							
General	Lower cycle (*prevocacional*), public	1957	12	[2]183	[2]65	[3]9 013	[3]3 610
	Upper cycle (*bachillerato*), public	1957	...	...	...	273	5
	Lower cycle (*prevocacional*), private	1957	9	[2]84	[2]41	[3]3 827	[3]1 670
	Upper cycle (*bachillerato*), private	1957	...	...	...	632	21
	Total	**1957**	**[4]21**	**[2 5]267**	**[2 5]106**	**[3]13 745**	**[3]5 306**
	„	1956	[4]14	[2 5]177	[2 5]67	[3]11 896	[3]4 346
	„	1955	[4]2	[2 5]27	[2 5]—	[3]8 880	[3]2 780
	„	1954	[4]2	[2 5]40	[2 5]7	[3]8 375	[3]2 551
	„	1953	[4]2	[2 5]34	[2 5]2	[3]8 193	[3]2 667
Vocational	Commercial schools, public	1957				1 542	526
	Industrial schools, public	1957	15	[2]380	[2]77	57	—
	Schools of fine arts, public	1957				771	125
	Commercial schools, private	1957				1 418	895
	Schools of fine arts, private	1957	41	[2]477	[2]216	...	...
	Total	**1957**	**56**	**[2]857**	**[2]293**	**[6]3 788**	**[6]1 546**
	„	1956	58	[2]898	[2]325	[6]5 399	[6]2 493
	„	1955	64	[2]844	[2]342	[6]8 199	[6]4 288
	„	1954	52	[2]843	[2]343	[6]7 707	[6]4 154
	„	1953	51	[2]784	[2]303	[6]7 351	[6]3 888
Teacher training	Urban teacher training institutes, public	1957	19	[2 7]776	[2 7]230	1 676	774
	Rural teacher training schools, public	1957	2	[2]31	[2]4	101	9
	School for kindergarten teachers, public[8]	1957	1	10	3	43	43
	School of physical culture, public	1957	1	[2]21	[2]3	—	—
	Urban teacher training institutes, private	1957	32	[2 7]760	[2 7]211	618	369
	Total	**1957**	**55**	**[2 7]1 598**	**[2 7]451**	**2 438**	**1 195**
	„	1956	59	[2 7]1 718	[2 7]551	2 271	1 137
	„	1955	50	[2 7]1 642	[2 7]525	2 121	1 110
	„	1954	48	[2 7]1 530	[2 7]500	2 015	1 084
	„	1953	44	[2 7]1 416	[2 7]408	1 720	996
Adult	Primary night schools						
	Total	**1957**	**113**	**340**	**110**	**6 950**	**1 092**
	„	1956	114	325	104	6 694	1 113
	„	1955	109	297	95	6 424	1 029
	„	1954	107	293	74	5 893	910
	„	1953	110	301	70	6 386	860

1. In addition, there were kindergarten classes attached to primary schools.
2. Including part-time teachers.
3. Including enrolment in the first 3 years provided in urban teacher training institutes.
4. Schools of lower stage (*prevocacional*) only.
5. Teachers of lower stage only.
6. Not including enrolment in private schools of fine arts.
7. Including personnel teaching in general education courses provided in urban teacher training institutes.
8. Post-secondary level.

GUINEA

Before becoming an independent State in 1958, Guinea formed part of French West Africa, and the educational system established there was similar to that of the other territories composing the federation.

The Constitutional Law of 10 November 1958 recognizes the right of every citizen of the Republic of Guinea to education. In July 1959, the Council of Ministers adopted an order for the reform of education. The following text is based on the provisions of this order.

THE EDUCATIONAL SYSTEM

All educational establishments in the Republic of Guinea come under the authority of the Ministry of National Education. All educational questions of national importance are submitted to the Higher Council of National Education.

Education is, in principle, compulsory for all children and adolescents from 7 to 15 years of age. The Order of July 1959 provides that all adolescents who cease, at 15 years of age, to receive ful-time education shall take continuation courses. These courses, which can be taken either at night schools or by correspondence, focus upon general culture and vocational training and are instituted in keeping with national needs.

Education at all levels is provided free of charge; during the period of compulsory schooling, school supplies are also furnished free of charge.

The language of instruction in all state schools is French.

Primary education is intended, in principle, for children from 7 to 13 years of age. The first cycle (3 years) is for children between 7 and 10, and the second cycle (also 3 years) for children between 10 and 13. Primary education may be preceded by a fairly short period of pre-primary education, given in the kindergartens, nursery schools and infant classes attached to the primary schools.

Secondary education extends over 6 years. It comprises two cycles of equal length: a first, known as the 'orientation' cycle, and a second, the 'specialization' cycle.

In 1959, Guinea had as yet no national university, and students wishing to pursue university studies were sent abroad, more particularly to Dakar or to France. Holders of the *baccalauréat* are directed either to the higher vocational schools or to higher educational establishments.

The purpose of the higher vocational schools is to train, in 2 or 3 years, specialized technicians and supervisors. The best pupils from these schools can go on to higher education.

THE DEVELOPMENT OF SECONDARY EDUCATION

Administration

The secondary level institutions in Guinea when the country achieved its independence were the boys' *lycée*, the girls' *collège* and the *collège technique*, all at Conakry, the teacher training school (*école normale*) at Kindra, *cours complémentaires*, junior teacher training courses (*cours normaux*) and various vocational schools.

Principals and assistant principals are appointed by decree, on the proposal of the Minister.

In all questions relating to material and financial management, the principal is assisted by a board of management, which can also offer advice and make recommendations on educational questions. The board consists of the principal, the assistant principal, the bursar, representatives of the local authorities and government services (mayor or district head), representatives of the elected assemblies, representatives of the trade-union organizations and representatives elected by the school staff.

The principals and the secondary and technical school inspectors keep a check on the assiduity and competence of the teaching staff. The secondary and technical school inspectors are chosen among the teachers and continue to teach.

Secondary school scholarships are granted to children of families with slender means. Pupils of the primary teacher training institutes who sign an undertaking to teach for at least 10 years receive scholarships to cover their entire education.

Secondary school pupils either live out under supervision, or are day-boarders or full-time boarders. The day-boarders and full-time boarders pay their boarding fees to the school bursar at the beginning of each term.

Pupils of the National Secondary Correspondence School pay only the costs of the correspondence and school supplies. The most deserving of them may receive state assistance if their circumstances justify it.

TYPES OF SECONDARY EDUCATION

Secondary education is intended as a general rule for young people between 13 and 19 years of age. It provides them with a complete general training designed to foster the all-round development of their intellectual faculties in preparation for the exercise of an occupation for which they are specially trained; for admission to a higher vocational school for the training of medium-grade technicians and supervisors; or for admission to an institution of higher education, where they can receive a specialized scientific or technical education.

On the completion of their primary education, when they take a preliminary test of aptitude (*examen d'orientation*), pupils pass into the first cycle of secondary education where, for 3 years, they receive a standard basic education, including practical work which varies slightly according to their presumptive bent. The final decision as to the kind of work they are suited for is not made, however,

until the end of the first cycle, when they take the examination for the *brevet d'études du premier cycle* (BEPC) (first-cycle secondary certificate). This basic course comprises a study of Negro-African literature and literature in general, mathematics, science, physical culture, civics, moral instruction, artistic training, and an introduction to the world of production and to social work.

The second 'specialization' cycle, which also lasts 3 years, comprises a vocational and apprenticeship section, and a theoretical training section.

The vocational section, while developing the pupils' aptitudes for manual and technical work, also includes 2 years of instruction to improve their general educational background. It leads to the *certificat d'aptitude professionnelle* (CAP) (vocational proficiency certificate). The best pupils of this section can go on to a higher vocational school, after a year's preparation, if they wish to.

The theoretical training section offers a choice of two main courses: general secondary and technical secondary. In this section, pupils begin to study the most important scientific theories, historical criticism, philosophical criticism and aesthetic analysis.

The general secondary side comprises two branches: Branch A, known as the literary branch, in which 'arts' subjects predominate and the pupil can continue the study of a modern language, and Branch B, the scientific branch, in which mathematics and the experimental sciences are the main subjects.

The technical secondary side comprises three branches: a 'mechanics' technical branch, in which the physical sciences, and particularly mechanics play an important part; a 'chemistry and biology' technical branch, which concentrates more on chemistry and biology; and an 'economics' technical branch, which devotes more time to the economic and social sciences.

Whenever the syllabus includes the study of languages, English is the compulsory first language, the second language being left to the choice of the pupils.

Types of schools. Secondary education is provided at: junior secondary schools (*écoles secondaires incomplètes*) or short-course colleges for general secondary education, which provide only the first 3-year cycle of secondary education, leading to the BEPC (first-cycle certificate); full general secondary schools (*lycées*), offering both cycles of secondary education leading to the *baccalauréat;* full technical secondary schools (*lycées techniques*) which prepare pupils for the technical *baccalauréat;* vocational schools, which offer only the vocational section of the second cycle of secondary education (3 years); primary teacher training institutes, which offer only the second cycle of general secondary education; evening schools; the National Secondary Correspondence School.

Teaching staff. The teachers for the junior secondary schools or short-course colleges for general education and the teachers for the first cycle of the *lycées*, are recruited among men and women instructors who hold the *baccalauréat*, priority being given to persons with a *licence* (the equivalent of a B.A. or B.Sc.).

Assistant technical teachers of the vocational schools are recruited by competition among technically qualified persons who hold a certificate of industrial education, agricultural education or commercial education or the vocational proficiency certificate, and who have had at least five years' practical experience. They must serve a year's probation before being taken on the regular public teaching staff.

Teachers for the second cycle of the *lycées* and for the primary teacher training institutes are recruited among holders of a *licence* (in education), certificated teachers and *agrégés*.

Secondary school teachers are called upon to teach for 30 hours a week.

Out-of-class activities

Every year, the pupils of each secondary school elect a committee to represent them in dealings with the school management and to contribute to the smooth running of the school. This committee's job is to develop a love of work, initiative and a sense of solidarity among the pupils, and to organize and be the moving spirit in leisure-time clubs likely to render school life more attractive.

TRENDS AND PROBLEMS

The development of education in Guinea is proceeding apace. The main task of the authorities is to translate the people's constitutional right to education into fact by coping with the shortage of school premises, textbooks and supplies and, most important of all, of qualified teachers. Other objects of the reorganization of education in 1959 were to renew African cultural values and give the Guinean population full access to scientific culture and the opportunity to acquire those techniques that the country really needs.

[*Text prepared by the Unesco Secretariat in March 1960.*]

STATISTICS

Population (1 January 1959 estimate): 2,800,000.
Area: 94,926 square miles; 245,857 square kilometres.
Population density: 29 per square mile; 11 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, enrolment in primary and secondary schools totalled 45,400 pupils, being about 1.7 per cent of the total population. The proportion of girls was 22 per cent in primary education, 11 per cent in general secondary education and 20 per cent in vocational education. Average number of pupils per teacher was 38 in public primary schools, 42 in public secondary schools, and 24 in public vocational courses. Between 1953 and 1957 there was an increase of 80 per cent in primary school enrolment, and 12 per cent in secondary school enrolment, and only in vocational courses was there a slight decrease. (See Table 2.)

Enrolment trends in secondary education, 1950–57. General secondary school enrolment increased five times between 1950 and 1957, though the proportion of girls was reduced by half. In vocational education, the enrolment more than doubled between 1950 and 1955, but dropped back somewhat in 1956 and 1957. The proportion of girls in vocational schools increased from a bare 4 per cent in 1950 to 20 per cent in 1957. Related to the estimated population 15–19 years old, the secondary enrolment ratio nearly doubled between the period 1950–54 and the period 1955–57. (See Table 3.)

Examination results in secondary education, 1953–56. Table 4 shows that the number of certificates granted each year on the completion of the first cycle of secondary studies (*brevet élémentaire* and *brevet des études du premier cycle*) increased two and a half times between 1953 and 1956. The number of vocational proficiency certificates (*certificat d'aptitude professionnelle*) more than doubled during the same period. The number of pupils passing the *baccalauréat*, first part and second part, seems to be increasing but still remains insignificant.

Educational finance, 1958. For the year 1958, budgeted expenditure for education was 2,164 million French francs, representing an average expenditure of 800 francs per inhabitant. (See Table 1.)

Sources. France: Ministère de la France d'Outre-Mer, *Enseignement Outre-Mer*, bulletin de la Direction de l'Enseignement et de la Jeunesse, Service des Statistiques d'Outre-Mer, *Outre-Mer 1958*.

1. EDUCATIONAL FINANCE, 1958 (in thousand French francs)[1]

Total expenditure by level and type of education[2]	Amount	Per cent
Total expenditure[2] [3] [4]	**2 163 950**	**100.0**
Primary education	759 610	35.1
Secondary education	765 460	35.4
Vocational education	291 000	13.4
Subsidies to private education, etc.	112 000	5.2
Miscellaneous, not specified	235 870	10.9

1. Official exchange rate (1958): 100 French francs = 0.24 U.S. dollar (approx.).
2. Budget estimate.
3. Includes expenditure for equipment amounting to 250 million francs.
4. Due to the rounding of figures the total does not correspond exactly to the sum of the components.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Pupils enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	219	843	...	31 804	7 003
	Primary schools, private	1957/58	68	...	...	10 739	2 519
	Total	**1957/58**	**287**	[1]**843**	**...**	**42 543**	**9 522**
	„	1956/57	244	[1]696	...	37 446	8 045
	„	1955/56	224	[1]671	...	33 809	7 012
	„	1954/55	208	[1]628	...	28 211	4 720
	„	1953/54	191	[1]488	...	23 541	3 320
Secondary *General*	Secondary schools, public	1957/58	16	41	...	1 733	152
	Secondary schools, private	1957/58	3	...	...	438	88
	Total	**1957/58**	**19**	[1]**41**	**...**	**2 171**	**240**
	„	1956/57	10	[1]30	...	1 548	296
	„	1955/56	10	...	...	1 319	275
	„	1954/55	9	[1]28	...	1 045	188
	„	1953/54	10	[1]14	...	1 022	176
Vocational	Vocational courses, public	1957/58	6	21	...	508	68
	Vocational courses, private	1957/58	3	...	...	167	65
	Total	**1957/58**	**9**	[1]**21**	**...**	**675**	**133**
	„	1956/57	17	[1]43	...	637	113
	„	1955/56	17	...	...	780	107
	„	1954/55	18	[1]33	...	685	69
	„	1953/54	18	[1]48	...	684	67

1. Public schools only.

3. TRENDS IN SECONDARY EDUCATION, 1950–57

School year	Number of students enrolled by type of education				Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational				
	Total	Per cent female	Total	Per cent female			
1950	430	22	375	4			
1951	552	20	367	...			
1952	...	...	...	...	1.3	201	*0.6*
1953	1 022	17	684	10			
1954	1 045	18	685	10			
1955	1 319	21	780	14			
1956	1 548	19	637	18	2.4	226	*1.1*
1957	2 171	11	675	20			

4. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–56

Type of diploma or certificate granted	School year							
	1953/54		1954/55		1955/56		1956/57	
	Total	Female	Total	Female	Total	Female	Total	Female
Baccalauréat								
First part	9	...	14	...	12	...	15	...
Second part	5	...	12	...	11	...	15	...
Certificate of lower secondary studies (*BE* and *BEPC*)	59	...	64	...	100	...	148	...
Commercial or industrial certificate (*brevet*)	4	...	2	...	3	...	5	...
Vocational proficiency certificate (*CAP*)	18	...	25	...	40	...	38	...

HAITI

THE EDUCATIONAL SYSTEM

Article 22 of the Constitution of 1955 lays down the general principles governing education in Haiti. It should be noted that these principles (free choice of education, freedom from expense, compulsory schooling) had already been stated in previous constitutional instruments. Article 22 is worded as follows: 'Freedom of choice in education shall be exercised as the law provides, under the control and supervision of the State, which shall concern itself with the moral and civic training of youth. Public education shall be the responsibility of the State and the communes. Primary education shall be compulsory. Public education shall be free of charge at all levels. Vocational and technical education shall be made available to all. Higher education shall be open on an equal footing to all, on merit only.'

The Minister of National Education, assisted by an Under-Secretary of State, is responsible for urban primary, vocational, secondary and higher education. The Ministry fixes all curricula, supervises the public examinations and awards certificates or diplomas. The Ministry of Agriculture is responsible for rural primary education.

Private schools, many of which are denominational, exist at all levels. They follow government programmes and may receive state aid.

The diagram on page 621 shows the structure of the educational system of Haiti.

TYPES OF SECONDARY EDUCATION

General secondary schools

Secondary education is given in government *lycées* and in private secondary schools. The full course of seven years after the completion of the primary course comprises a lower cycle (the sixth, fifth and fourth classes) in which all pupils take the same subjects, and an upper cycle with division of course into separate branches: Latin-Greek, Latin-science, and science-modern languages. The two parts of the *baccalauréat* are taken in the last two years of the secondary course and this certificate gives access to higher education either in Haiti or in France.

Supervision of studies and of the application of the curricula is exercised mainly by inspectors who visit all schools, both state and private.

The Directorate-General of National Education recently instructed expert commissions to revise the curricula; these commissions prepared draft curricula which are now being tried out in the secondary schools.

Since 1950, the papers for candidates in the *baccalauréat* examinations must first be approved by a special board consisting, for each subject, of four or five teachers specialized in the teaching of that subject.

Teachers for the *lycées* are trained at the Ecole Normale Supérieure (Higher Teacher Training College), which provides a 4-year course. It is hoped that all teaching posts at the *lycées* will gradually come to be occupied by specialized and certificated teachers.

Vocational and technical schools

The vocational schools come under the Vocational Section, a sub-division of Urban Education, which is under the control of the Directorate-General of National Education.

Vocational education (3-year courses) is given almost exclusively in the manual and industrial arts, such as cabinet-making, motor mechanics, tin work, mechanics and fitting, blacksmith's work, shoe-making, masonry, ceramics, cutting, weaving, basket-making, domestic arts.

This education is provided in industrial schools (boys), the vocational school of ceramics (mixed), the home economics teacher training school (girls), the schools of domestic arts (girls) and the pre-vocational and vocational boarding-schools (boys). There are also two nursing schools

GLOSSARY

NOTE. For secondary schools (*lycées and collèges*) the numbering of the classes follows the Haitian pattern, beginning at the twelfth class and going up to the first, which is followed by a terminal class shown as T.

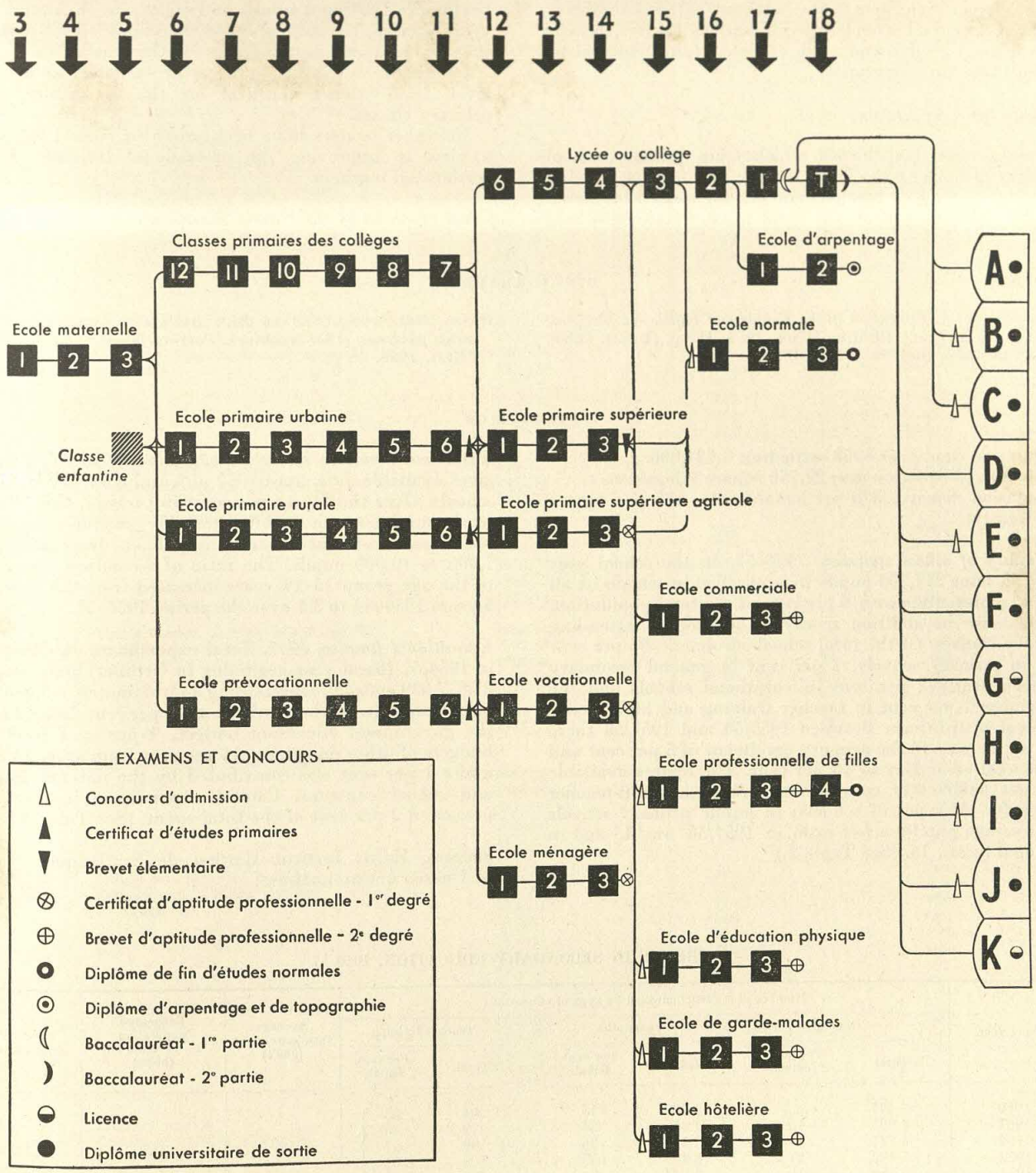
classe enfantine: pre-primary class, attendance at which is optional, attached to urban primary school.
classes primaires des collèges: primary classes attached to *collèges* (see below).
collège: private general secondary school with academic course.
école commerciale: vocational secondary school of commerce.
école d'arpentage: vocational training school for surveyors.
école d'éducation physique: vocational training school for physical education instructors.
école de garde-malades: vocational training school of nursing: comes under the Department of Health.
école hôtelière: vocational training school for workers in the hotel and catering industry; comes under the Department of Labour.
école maternelle: pre-primary school.
école ménagère: vocational secondary school of home economics.
école normale: teacher training college.
école prévocationnelle: a pre-vocational school at primary level, with curriculum emphasizing practical subjects and intended as a re-education centre for children of indigent parents.
école primaire rurale: rural primary school, offering a course with a practical bias and including agriculture as a subject.
école primaire supérieure: lower general secondary school.
école primaire supérieure agricole: lower vocational secondary school of agriculture.
école primaire urbaine: urban primary school.
école professionnelle de filles: vocational training school for girls.
école vocationnelle: vocational secondary school preparing for entry into various trades and industries.
lycée: state general secondary school with academic course.

HIGHER EDUCATION

A. *Ecole de comptabilité:* college of accountancy.
B. *Ecole militaire:* military college.
C. *Ecole de pharmacie:* college of pharmacy.
D. *Ecole polytechnique:* polytechnic for the professional training of architects, engineers, etc.
E. *Ecole d'agriculture:* college of agriculture.
F. *Ecole apostolique:* Catholic theological college.
G. *Faculté de droit:* law faculty (legal profession).
H. *Faculté de droit:* law faculty (sociology and administration).
I. *Faculté de médecine:* faculty of medicine.
J. *Faculté d'art dentaire:* faculty of dentistry.
K. *Ecole normale supérieure:* institute of education.

EXAMINATIONS

Baccalauréat—1re partie: university entrance examination, Part I.
Baccalauréat—2e partie: university entrance examination, Part II.
Brevet d'aptitude professionnelle—2e degré: higher certificate of vocational skill.
Brevet élémentaire: The 'elementary certificate', awarded on completion of course at *école primaire supérieure.*
Certificat d'aptitude professionnelle—1er degré: lower certificate of vocational skill.
Certificat d'études primaires: primary school certificate.
Concours d'admission: competitive entrance examination.
Diplôme d'arpentage et de topographie: surveyor's diploma.
Diplôme de fin d'études normales: teacher training diploma.
Diplôme universitaire de sortie: university degree or diploma.
Licence: licentiate.


3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
Lycée ou collège
6 5 4 3 2 1 T
Classes primaires des collèges
12 11 10 9 8 7
Ecole d'arpentage
1 2
Ecole maternelle
1 2 3
Ecole normale
1 2 3
Ecole primaire urbaine
Classe enfantine
1 2 3 4 5 6
Ecole primaire supérieure
1 2 3
Ecole primaire rurale
1 2 3 4 5 6
Ecole primaire supérieure agricole
1 2 3
Ecole commerciale
1 2 3
Ecole prévocationnelle
1 2 3 4 5 6
Ecole vocationnelle
1 2 3
Ecole professionnelle de filles
1 2 3 4
Ecole ménagère
1 2 3
Ecole d'éducation physique
1 2 3
Ecole de garde-malades
1 2 3
Ecole hôtelière
1 2 3
A B C D E F G H I J K
EXAMENS ET CONCOURS
Concours d'admission
Certificat d'études primaires
Brevet élémentaire
Certificat d'aptitude professionnelle - 1er degré
Brevet d'aptitude professionnelle - 2e degré
Diplôme de fin d'études normales
Diplôme d'arpentage et de topographie
Baccalauréat - 1re partie
Baccalauréat - 2e partie
Licence
Diplôme universitaire de sortie

and a school for workers in the hotel and catering industry.

The commercial schools provide various courses (lasting from 1 to 3 years) and train typists, shorthand-typists, accountants and secretaries.

Teacher training schools

There are five institutions which train primary school teachers of both sexes. These are the two teacher training schools (one for men teachers and one for women teachers), the Elie Dubois School, the rural teacher training school (created in 1954) and an arts and crafts school. After 3 or 4 years' studies, the students of these schools sit for written, practical and oral examinations for the teacher's diploma.

In certain provincial towns, other schools, at a lower level, train women teachers for the pre-primary and primary classes.

Refresher courses have been provided since 1952, with a view to improving the professional training of uncertificated teachers.

[*Text prepared by the Unesco Secretariat in January 1960.*]

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STATISTICS

Population (mid-year 1958 estimate); 3,424,000.
Area: 10,714 square miles; 27,750 square kilometres.
Population density: 320 per square mile; 123 per square kilometre.

Summary of school statistics, 1953–57. In the school year 1957/58 some 217,500 pupils were enrolled in schools at all levels, representing over 6 per cent of the total population. There were in addition nearly 17,500 adults attending literacy centres. Of the total school enrolment, 95 per cent was in primary schools, 4 per cent in general secondary schools, nearly 2 per cent in vocational schools and the remaining 1 per cent in teacher training and higher educational institutions. Between 1953/54 and 1957/58 there was an increase in the primary enrolment of 5 per cent and in general secondary of 14 per cent. The figures available are not sufficiently complete to establish pupil-teacher ratios for all types of schools; in public primary schools the average pupil-teacher ratio in 1957/58 was 45 and in national *lycées*, 16. (See Table 2.)

Enrolment trends in secondary education, 1950–57. Table 1 gives available data since 1950 on enrolment in secondary schools. Over the 7-year period 1950 to 1957, the average total enrolment in public general secondary schools, vocational and teacher training schools increased from 7,000 to 10,000 pupils. The ratio of secondary enrolment to the age group 15–19 years increased from 2.2 over the 5 years 1950–54 to 3.1 over the period 1955–57.

Educational finance, 1957. Total expenditure on education in 1956/57 (fiscal year beginning in October) amounted to 21,877,029 gourdes, representing approximately 6.5 gourdes per inhabitant. Of the total spent, 76 per cent derived from the government education budget, 9 per cent from the budgets of other ministries, 14 per cent from special votes, under 1 per cent was contributed by the national lottery and school canteens. Capital expenditure in 1957 represented 2 per cent of the total spent. (See Table 4.)

Sources. Haiti: Institut Haïtien de Statistique, replies to Unesco questionnaires.

1. TRENDS IN SECONDARY EDUCATION, 1950–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1950	3 477	...	[2]1 689	[2]15	64	53			
1951	4 025	15	1 816	24	79	56			
1952	4 727	14	2 150	25	98	67	7	315	*2.2*
1953	5 488	21	3 169	35	105	61			
1954	5 319	19	2 880	32	193	46			
1955	6 247	37	3 437	32	224	53			
1956	6 201	35	3 384	32	197	49	10	331	*3.1*
1957	6 883	41	4 073	31	195	45			

1. Public schools only.

2. Not including nursing schools.

2. SUMMARY OF SCHOOL STATISTICS, 1953/57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Congreganist urban schools, public	1957/58	282	2 173	1 579	[1]26 862	[1]15 580
	Other urban schools, public	1957/58				[1]49 597	[1]21 991
	Rural schools, public	1957/58	435	1 232	...	[1]79 283	[1]23 575
	Evening courses, public	1957/58	32	86	49	2 325	—
	Primary schools, aided private	1957/58	377	...	...	6 673	4 149
	Primary schools, unaided private	1957/58				18 358	...
	Rural parish schools	1957/58	321	341	145	19 934	8 752
	Total	**1957/58**	**1 447**	**[2]3 832**	**...**	**[1]203 032**	**...**
	„	1956/57	1 239	[2]3 669	[2]2 200	[1]202 260	...
	„	1955/56	1 374	4 443	...	[1]214 279	...
	„	1954/55	1 304	5 237	...	[1]184 508	[1]73 258
	„	1953/54	1 343	4 082	...	[1]192 465	[1]79 092
Secondary *General*	National *lycées*, public	1957/58	15	419	51	6 883	2 223
	Secondary schools, aided private	1957/58	32	...	...	[3]914	[3]550
	Secondary schools, unaided private	1957/58				[3]1 193	[3]901
	Total	**1957/58**	**47**	**[4]419**	**[4]51**	**[3]8 990**	**[3]3 674**
	„	1956/57	34	[4]405	[4]44	[3]8 841	[3]3 120
	„	1955/56	53	877	...	[3]11 810	[3]4 322
	„	1954/55	39	579	...	[3]7 150	[3]1 633
	„	1953/54	36	560	...	[3]7 893	[3]1 839
Vocational	Vocational schools, public	1957/58	16	271	...	3 170	692
	Nursing schools, public	1957/58	2			*70	*70
	School for hotel personnel, public	1957/58	1			40	30
	Commercial schools, private	1957/58	...	...	...	771	489
	Total	**1957/58**	**[5]19**	**[5]271**	**...**	***4 051**	***1 281**
	„	1956/57	[5]18	[5]314	...	3 384	1 098
	„	1955/56	[5]19	[5]294	...	3 268	1 098
	„	1954/55	[5]18	[5]277	[5]277	2 880	922
	„	1953/54	25	314	...	3 169	1 092
Teacher training	Urban teacher training schools, public	1957/58	2	39	22	103	59
	Rural teacher training school, public	1957/58	1	27	5	92	28
	Total	**1957/58**	**3**	**66**	**27**	**195**	**87**
	„	1956/57	3	66	27	197	96
	„	1955/56	3	62	25	224	119
	„	1954/55	3	62	25	193	88
	„	1953/54	2	39	22	105	64
Higher *Teacher training*	Teacher training college, public						
	Total	**1957/58**	**1**	**25**	**1**	**63**	**22**
	„	1956/57	1	25	1	68	21
	„	1955/56	1	24	...	62	18
	„	1954/55	1	20	...	80	20
	„	1953/54	1	20	...	76	27
General and technical	College and faculties, public	1957/58	9	183	...	871	82
	Colleges and faculties, private	1957/58	5	28	—	118	10
	Total	**1957/58**	**14**	**211**	**...**	**989**	**92**
	„	1956/57	14	182	...	893	75
	„	1955/56	14	161	...	797	61
	„	1954/55	14	179	...	817	60
	„	1953/54	14	179	...	872	73
Special	School for handicapped children						
	Total	**1957/58**	**1**	**...**	**...**	**125**	**53**
	„	1956/57	1	...	...	107	55
	„	1955/56	1	...	...	95	47
	„	1954/55	1	...	...	*100	...
	„	1953/54	1	...	...	*94	...
Adult	Literary centres	1957/58	269	269	...	14 007	...
	Centres of workers' education	1957/58	123	123	...	3 491	1 094
	Total	**1957/58**	**392**	**392**	**...**	**17 498**	**...**
	„	1956/57	...	...	...	16 033	...
	„	1955/56	525	...	...	17 618	...
	„	1954/55	486	526	...	18 117	...
	„	1953/54	448	463	...	18 503	...

1. Including enrolment in nursery and kindergarten classes.
2. Not including teachers in aided and unaided private schools.
3. Enrolment in private schools refers to 15 institutions only.
4. Teachers in national *lycées* only.
5. Not including private commercial schools.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
General Secondary School Certificate	293	...	274	60	269	...	226	...	299	50
Vocational School Certificate	66	...	72	39	120	77	96	54	156	59
Commercial School Certificate	90	...	74	45	76	48	38	14	60	42
Other[1]	23	22	42	42	57	47	74	74	[2]42	[2]35
Teacher Training Certificate	34	20	35	28	85	34	64	33	74	47

1. Vocational training schools for nursing and for workers in the hotel and catering industry.
2. Not including the nurses' training school at Cap-Haïtien.

4. EDUCATIONAL FINANCE, 1956/57 (in gourdes)[1]

A. RECEIPTS BY SOURCE

	Amount	
Total receipts[2]		**21 877 029**
Central Government		21 746 808
Special vote	2 980 645	
Education budget	16 653 955	
Other ministries	2 112 208	
Donations		
National lottery, School canteen		130 221

B. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2 3]		**21 877 029**
Recurring expenditure		19 628 674
For central administration	1 134 100	
For instruction		
Salaries to teachers, etc.	15 601 833	
Other instructional expenditure	406 160	
Other recurring expenditure	2 486 581	
Capital expenditure		450 779
Debt service		1 797 576

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**19 628 674**		**100.0**
Central administration		1 134 100		5.8
Instruction		16 007 993		81.6
Primary education	9 801 661		49.9	
Secondary education	4 094 032		20.9	
General	1 687 272		8.6	
Vocational	2 153 260		11.0	
Teacher training	253 500		1.3	
Higher education	1 445 960		7.4	
Adult education	411 280		2.1	
Physical training	255 060		1.3	
Other recurring expenditure		2 486 581		12.7
Rent, maintenance, etc.	541 200		2.8	
Subsidies	641 010		3.3	
Miscellaneous	1 304 371		6.6	

1. Official exchange rate: 1 gourde = 0.20 U.S. dollar.
2. Budget estimate.
3. Not including expenditure by the Haitian-American Co-operative Rural Education Service.

THE EDUCATIONAL SYSTEM

Chapter III of the Constitution of 19 December 1957 contains the following articles concerning education: 'Education is an essential function of the State, designed to preserve, promote and disseminate culture, the benefits of which must be extended to the entire community without discrimination of any kind' (Article 135).

'The State shall be responsible for the development of the basic education of the people and shall create for that purpose the necessary technical bodies, which shall be under the direct control of the Ministry of Public Education' (Article 136).

'The State shall assist and promote the organization of establishments providing pre-primary, primary and secondary education, including pre-vocational, vocational and art schools. It shall also promote the development of out-of-school education through libraries, cultural centres and other ways of disseminating culture' (Article 137).

'The State shall be responsible for the technical direction of education. Public education shall be secular and provided free of charge and primary education shall, in addition, be compulsory, its cost being covered by the State' (Article 138).

'The training of teachers is primarily the responsibility of the State' (Article 139).

'Teachers shall be entitled to such rights and privileges as are determined by law, and, in particular, to remuneration which, in view of their important mission, will assure them a dignified existence from the social, economic and cultural standpoints' (Article 140).

'The law shall establish a system of promotion for teachers which will ensure stability of employment, regular promotion and efficiency of teaching' (Article 141).

'Private education shall be subject to state regulation and inspection' (Article 142).

'The right to teach shall be subject to proof of capacity as prescribed by law' (Article 143).

'In all schools, both public and private, teaching about the Constitution, civics, national history and geography shall be imparted by teachers who are Hondurans by birth.

'Freedom of teaching is guaranteed' (Article 144).

'Moral instruction, as an independent subject, shall be compulsory in all primary and secondary schools, both public and private' (Article 145).

'The National University is a self-governing institution with legal status. It shall have the exclusive right to organize, direct and develop higher and professional education; it shall contribute to scientific research and to the general dissemination of culture and shall co-operate in the study of national problems. . . . Only the degrees and diplomas conferred or recognized by the Independent National University shall be recognized by the State. . . . Only the holders of recognized degrees and diplomas may exercise professional activities' (Article 146).

'The State shall contribute to the maintenance, development and extension of the Independent National University, as the leading cultural establishment, by granting it an annual subvention equal to 2 per cent of the national budget, excluding loans. The university shall be exempted from the payment of taxes of all kinds' (Article 147).

'The State shall grant scholarships for professional studies, instruction in popular arts and industries and for the advanced training or specialization of graduates who, owing to their aptitudes, capacities or other merits, deserve such assistance. This matter shall be regulated by law' (Article 148).

'The State shall encourage and assist schools for blind, deaf and dumb and mentally backward pupils' (Article 149).

'The State shall assist destitute pupils in accordance with a special law on the subject' (Article 150).

'The professional incorporation of teachers is obligatory; its organization and operation shall be regulated by law' (Article 151).

The powers of the President of the Republic include those of organizing, directing and promoting public education, combating illiteracy and ensuring the dissemination and improvement of agricultural, industrial and technical education in general.

The Minister of Public Education is appointed by the President of the Republic.

Private education is dealt with in Chapter XI of the Education Code comprising Articles 58 to 68, of which the following may be mentioned:

'Every one is free to establish with his own resources educational institutions and to impart in them such education as he deems fit, provided that such education is not contrary to the democratic organization of the State or to public order or morality' (Article 58).

'Private education shall be regarded as a form of co-operation in the discharge of the educational function which is under the direction and responsibility of the State. It shall be governed by the fundamental principles of national education and shall receive financial assistance from the State, except in the cases mentioned in paragraph 2 of Article 6' (Article 59).

'Educational establishments maintained by private persons shall be regarded as private institutions even if they receive subventions from the State; they shall be subject to public inspection to the same extent and in the same way as public schools' (Article 60).

'Studies at private schools shall be officially recognized if they conform to the official study plans and curricula, except in cases in which such schools are of an experimental nature and designed to apply a modern educational method or system previously approved by the competent educational authority' (Article 61).

'Private educational establishments shall be deemed to be authorized or unauthorized according to whether or not

they have been previously and expressly granted this status by the competent educational authority. In the case of private primary schools, authorization shall be granted by the Departmental Directorate of Primary Education, subject to the approval of the Directorate-General of Primary Education. In the case of other private schools, authorization shall be granted by the Executive Authority' (Article 68).

THE DEVELOPMENT OF SECONDARY EDUCATION

With a view to regulating the organization and operation of secondary schools in Honduras, in accordance with the provisions of the Public Education Code, the Ministry of Public Education approved the General Regulations of Secondary Education by Order No. 3098 of 30 June 1953.

Administration

The Directorate and Inspectorate-General of Secondary Education, as a component part of the Ministry of Public Education, is responsible for the organization, direction and control of secondary education. The duties of the Director and Inspector-General of Secondary Education include the supervision of teaching in the secondary schools and sections in the Republic; the preparation and revision of curricula and syllabuses for secondary schools in the light of modern educational thought and the needs of the country, and after due consultation with the teachers; the preparation of methodological guides for teachers; the adoption of suitable textbooks, including the sponsoring of the publication of national works and the translation of foreign works useful for the development of education in Honduras.

Candidates for the post of Director and Inspector-General must: (a) be Hondurans by birth; (b) be state secondary school teachers or primary school teachers with more than 10 years' experience as heads of secondary schools or on secondary school staffs; (c) have maintained a high standard of efficiency in carrying out their duties.

In accordance with Article 16 of the General Regulations of Secondary Education, the staff of the Directorate and Inspectorate-General of Secondary Education is organized in two sections: Technical and Cultural Extension Section, and the Administrative Section.

The Technical and Cultural Extension Section is responsible for all questions relating to legislation, the planning of reforms in secondary education, teaching techniques, curricula and syllabuses, textbooks, achievement testing, examinations for entrance to secondary schools and sections, publications, libraries, refresher courses, lectures, theatre, etc.

The Administrative Section deals with the administrative and statistical aspects of enrolment, teaching staff, examinations, income and expenditure, budgets, system of promotion, secondary schools and sections, demonstration schools, scholarship holders and boarders, graduates, etc.

Finance. Public secondary education, which is provided at the Central Institute (Instituto Central), is financed by the State; semi-public education, by funds comprising a state subvention, fees paid by the pupils' parents and, in the case of certain establishments, the proceeds from local or departmental taxes and supertaxes instituted by legislative decree. Private education is financed by income from private sources.

TYPES OF SECONDARY EDUCATION

There are four principal types of education at this level: general secondary education; vocational training; teacher training; art education.

General secondary schools

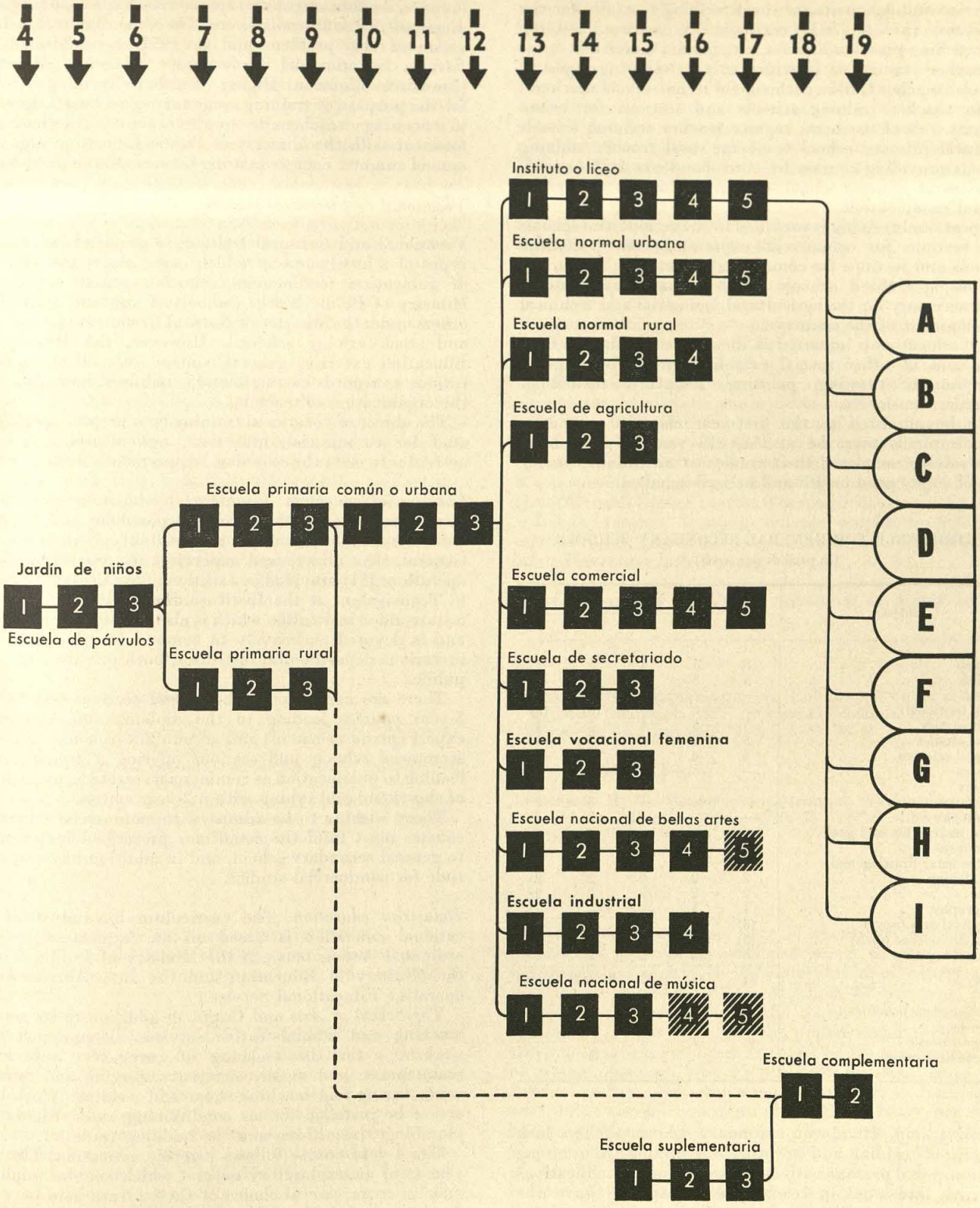
General secondary education is imparted in the secondary schools and sections; these establishments are the Central Institute in Tegucigalpa, the capital, and Departmental Institutes, which operate in certain provincial capitals and in the more important towns; sections may be organized

GLOSSARY

escuela comercial: vocational secondary school of commerce.
escuela complementaria: part-time school for adults at upper primary level.
escuela de agricultura: vocational training school of agriculture.
escuela de párvulos: pre-primary school.
escuela de secretariado: vocational training school of secretarial studies.
escuela industrial: vocational training school of applied arts and trades; one school of this type has an 8-year technical division following the basic course.
escuela nacional de bellas artes: vocational training school of fine arts.
escuela nacional de música: vocational training school of music.
escuela normal rural: teacher training school for teachers in rural primary schools (see *escuela primaria rural*).
escuela normal urbana: teacher training school for teachers in urban primary schools (see *escuela primaria común o urbana*).
escuela primaria común o urbana: complete primary school usually found in urban areas.
escuela primaria rural: incomplete primary school in rural areas.
escuela suplementaria: part-time school for adults at primary level.
escuela vocacional femenina: vocational training school of domestic science.
instituto: general secondary school.
jardín de niños: pre-primary school.
liceo: general secondary school.

HIGHER EDUCATION (FACULTIES)

A. *Humanidades:* arts.
B. *Ciencias jurídicas y sociales:* law.
C. *Medicina y cirugía:* medicine and surgery.
D. *Odontología:* dentistry.
E. *Ciencias físicas y matemáticas:* physics and mathematics.
F. *Química y farmacia:* chemistry and pharmacy.
G. *Ciencias económicas:* economics.
H. *Agronomía y veterinaria:* agronomy and veterinary science.
I. *Bellas artes:* fine arts.


4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Instituto o liceo
1 2 3 4 5
Escuela normal urbana
1 2 3 4 5
Escuela normal rural
1 2 3 4
Escuela de agricultura
1 2 3
Escuela primaria común o urbana
1 2 3 1 2 3
Jardín de niños
1 2 3
Escuela de párvulos
Escuela primaria rural
1 2 3
Escuela comercial
1 2 3 4 5
Escuela de secretariado
1 2 3
Escuela vocacional femenina
1 2 3
Escuela nacional de bellas artes
1 2 3 4 5
Escuela industrial
1 2 3 4
Escuela nacional de música
1 2 3 4 5
A
B
C
D
E
F
G
H
I
Escuela complementaria
1 2
Escuela suplementaria
1 2 3

at these establishments for those wishing to study for the *bachillerato* (pre-university certificate in science and letters), the teaching profession or for commercial activities.

Teacher training is provided at the following types of schools: teacher training schools for infant-school teachers; urban teacher training schools and sections for urban primary school teachers; regular teacher training schools for rural primary school teachers; rural teacher training schools providing courses by correspondence for uncertificated rural primary school teachers wishing to obtain the official qualification.

Vocational training is provided in the commercial schools and sections for commercial experts; in the secretarial schools and sections for commercial secretaries; and in the various specialized schools which prepare the qualified staff necessary for the agricultural, industrial and technical development of the country.

Art education is imparted at the National School of Fine Arts and at other special establishments providing instruction in drawing, painting, sculpture, modelling, ceramics, music, etc.

To be admitted to the first-year class in secondary schools pupils must be at least 13 years of age, have successfully completed their studies at an urban primary school, enjoy good health and be well-behaved.

TIME-TABLE FOR GENERAL SECONDARY SCHOOLS
(in periods per week)

Subject	Year				
	1	2	3	4	5
Spanish	5	5	5	4	4
English	3	3	3	3	3
French	—	—	3	3	3
Latin (optional)	—	—	—	(3)	(3)
Mathematics	5	5	4	4	4
Social studies	5	5	4	4	4
Natural sciences	4	4	3	2	—
Physics	—	—	—	3	3
Biology	—	—	—	2	3
Chemistry	—	—	—	3	3
Philosophy	—	—	—	3	3
Moral instruction and good manners	1	—	—	—	—
Plastic arts: drawing and modelling	2	2	2	2	2
Music	2	2	2	2	2
Calligraphy	1	1	—	—	—
Industrial arts (boys)	(3)	(3)	(3)	(2)	—
Domestic science (girls)	(3)	(3)	(3)	(2)	—
Physical training	3	3	2	2	2
Total	34	33	31	39 (42)	36 (39)
Supplementary activities					
Sports	2	2	2	2	2
Choral music	—	1	1	—	—
Orchestral music	—	—	—	1	1

Teaching staff. Honduran secondary school teachers lack specialized training and are usually recruited from among graduates and persons with other professional qualifications who are interested in teaching and prove to have the necessary ability. They include primary school teachers, lawyers, doctors, engineers, commercial experts, *bachilleros*, musicians, agriculturalists, etc. The Government has been aware of this problem and in 1957 it established the Escuela Superior del Profesorado 'Francisco Morazán' (Francisco Morazán Higher Teacher Training School) for the purpose of training secondary school staff. In order to encourage teachers to improve constantly their professional skill, the Ministry of Public Education organizes annual summer courses bearing on secondary education.

Vocational and technical schools

Vocational and technical training is provided in different types of school, some of which come under the Ministry of Education (commercial schools), others under the Ministry of Public Works (schools of arts and crafts) and others under the Ministry of Natural Resources (agricultural and stock-farming schools). However, the Ministry of Education exercises general control over all these institutions as regards curricula and syllabuses, inspection and the organization of teaching.

The object of vocational training is to prepare specialized staff for commercial, industrial, agricultural and other activities to meet the economic requirements of the country.

Commercial education. Commercial education is administered through a division of the Department of Secondary Education, under the direct responsibility of an Inspector-General, who directs and supervises its organization and operation. It is provided in a section of the Central Institute in Tegucigalpa, at the Instituto Hector Pineda Ugarte—a state-aided institution which is also situated in the capital and is devoted exclusively to commercial education, and in various departmental institutes, both private and semi-public.

There are commercial schools and sections which offer 5-year courses leading to the diplomas of commercial expert (*perito mercantil*) and accountant (*contador público*); secretarial schools and sections offering a 3-year course leading to qualification as commercial secretary, and schools of shorthand and typing with a 2-year course.

Those wishing to be admitted to commercial education courses must fulfil the conditions prescribed for entrance to general secondary school, and in addition have an aptitude for commercial studies.

Industrial education. The curriculum for industrial vocational education is based on an Agreement for Co-ordinated Action between the Ministry of Public Works, the Ministry of Education and the Inter-American Co-operative Educational Service.

The School of Arts and Crafts, in addition to its general teaching and administrative services, is equipped with workshops for the teaching of carpentry, automobile maintenance and repair, electricity, forging and foundry work, fitting and machine shop, and welding. Workshops are to be installed for air conditioning and refrigeration, plumbing, tinsmithing and the building trades.

The 4-year course follows primary education. The first year is of an exploratory nature, which enables pupils to make a more careful choice of their future field of work. At the end of the 4-year course, students obtain a diploma

certifying that they have completed their studies. Seventy-five per cent of the graduates of this school will be engaged under contract as industrial apprentices. The remaining 25 per cent will be recommended for admission to the technical division, where they will receive advanced training equivalent to the first 2 years of university education. In this division they will follow courses which will qualify them for employment as workshop foremen, workshop proprietors, industrial art instructors, etc.

The School of Industrial Arts, which was opened on 2 July 1956, replaces the Textile Technical School. The school is being equipped to provide instruction in woodwork, upholstering and reconditioning of furniture, leatherwork, pewter work, repair of jewellery, clock and watch repair, and repair of cameras, as well as the making of textiles by hand. The course, which follows primary education, lasts 4 years, the first year being of an exploratory nature.

Girls' vocational training school. Domestic science teaching comes under the jurisdiction of the Ministry of Public Education; the Directorate-General of Secondary Education is responsible for its administration and supervision. Its main object is to prepare girls for their duties as housewives and teach them how to apply scientific and artistic knowledge to domestic activities. The course, which follows primary education, lasts 3 years. Pupils who pass the final examination obtain a diploma (*capacitación para la vida del hogar*) which qualifies them as domestic science teachers in the fundamental education campaigns and in the rural welfare programmes.

Agriculture and stock-farming schools. A model farm school has been operating since 1952 and is situated at Catacamas, some 62 miles from the capital. The course of studies (agriculture, horticulture, stock-farming, etc.) lasts 3 years and follows primary education. Pupils who successfully complete the course obtain a diploma which entitles them to employment as farm managers or in the agricultural and stock-raising services of the Ministry of Natural Resources, of the Ministry of Education, etc.

The Pan-American Agricultural School, a private institution situated at El Zamorano, admits pupils who hold the *bachillerato* or have successfully passed certain secondary educational courses.

Teacher training schools

Teacher training comes under the jurisdiction of the Department of Secondary Education.

Rural teacher training schools provide a 4-year course, which follows primary education; the curriculum includes agriculture, handicrafts and rural industries.

In July 1953 the School for Rural Teacher Training by Correspondence was established in recognition of the need to raise teaching standards in the country districts; in 1956 it was considerably reorganized and became part of the Francisco Morazán Higher Teacher Training School in the capital.

Urban teacher training schools emphasize activity methods and 'globalization' (centres of interest, projects, etc.). The course lasts 5 years.

[*Text prepared by the Unesco Secretariat in March 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 1,828,000.
Area: 43,277 square miles; 112,088 square kilometres.
Population density: 42 per square mile; 16 per square kilometre.

Summary of school statistics, 1953–57. In 1957 enrolment at all levels of education, excluding adult literacy centres, was over 162,000 pupils, representing some 9 per cent of the total population. Of these pupils, under 2 per cent were in kindergartens, over 90 per cent in primary schools, 1.5 per cent in general secondary schools, 4 per cent in commercial courses, 1.8 per cent in secondary teacher training schools and the remainder, less than 1 per cent, at the national university. Girls made up 48 per cent of the enrolment in primary schools, 17 per cent in general secondary schools, 47 per cent in vocational commercial schools, 68 per cent in teacher training courses, and 12 per cent at university. The teaching staff at all educational institutions numbered 6,145, of whom 67 per cent were women. In primary schools the number of teachers increased by 12 per cent over the period under review but the pupil-teacher ratio rose from 28 to 32; the proportion of women teachers was 77 per cent in 1957. Data for teachers in secondary education are incomplete. Compared with 1953, enrolment increased at all levels of education and in particular by 27 per cent in primary schools, by 96 per cent in general secondary schools and by 46 per cent at teacher training courses. The number of students enrolled at the National University more than doubled between 1953 and 1957. (See Table 1.)

Enrolment trends in secondary education, 1946–57. Average total enrolment in all secondary schools increased steadily from 5,700 pupils in the 5 years 1950–54 to 10,900 pupils in the 2 years 1956–57, the ratio of secondary enrolment to the estimated population 15–19 years old rising from 3.6 to 6.2. Between 1946 and 1957 the proportion of girls attending general secondary schools increased from 10 to 17 per cent. (See Table 2.)

Examination results in secondary education, 1956–57. Over the 2 years for which examination results are available, the number of general secondary school diplomas granted rose from 229 to 273, the proportion of successful girl candidates being 18 per cent of the total in 1957. Commercial diplomas were awarded to 795 students of whom 58 per cent were women in 1957, representing an increase of 29 per cent on the number in the preceding year. Teaching diplomas increased from 352 in 1956 to 388 in 1957 of which 77 per cent were awarded to women candidates.

Educational finance, 1958. According to data published by the Unesco Regional Office for the Western Hemisphere in the *Boletin Trimestrial de Proyecto Principal de Educación Unesco—America Latina*, Vol. 2, No. 5 (January-March 1960), the 1958 budget estimate of the Ministry of Education amounted to 13,526,000 lempiras, of which 7,898,000 lempiras were allotted to primary education. Official exchange rate: 1 lempira = 0.50 U.S. dollar.

Sources. Honduras: Dirección General de Estadística y Censos; *Estadísticas Educacionales 1957*, *Estadísticas Educacionales y Censo Escolar 1956*, *Anuario Estadístico 1956*.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1957	18	40	40	1 470	786
	Kindergartens, private	1957	19	40	40	1 183	623
	Total	**1957**	**37**	**80**	**80**	**2 653**	**1 409**
	„	1956	34	[1] ...	[1] ...	2 519	...
	„	1955	[1] ...	[1] ...	...	[1] ...	[1] ...
	„	1954	32	56	56	1 514	777
	„	1953	27	42	42	1 385	730
Primary	Primary schools, public	1957	2 277	4 205	3 225	132 505 }	70 930
	Primary schools, private	1957	140	369	312	14 046 }	
	Total	**1957**	**2 417**	**4 574**	**3 537**	**146 551**	**70 930**
	„	1956	2 316	[2] 4 442	[2] 3 436	135 886	65 375
	„	1955	[2] 2 297	[2] 4 262	...	[2] 129 624	...
	„	1954	2 318	4 099	...	116 763	...
	„	1953	2 340	4 089	...	115 536	...
Secondary							
General	Secondary schools						
	Total	**1957**	**30**	[3] **1 305**	[3] **533**	**2 467**	**425**
	„	1956	27	[3] 1 319	...	2 035	286
	„	1955	...	...	...	...	...
	„	1954	19	277	90	1 441	204
	„	1953	17	296	74	1 261	159
Vocational	Vocational schools[4]						
	Total	**1957**	[5] **49**	[6] ...	[6] ...	[5] **6 287**	[5] **2 958**
	„	1956	[5] 49	[6] ...	...	[5] 5 211	[5] 2 464
	„	1955	...	...	...	...	...
	„	1954	32	341	92	3 494	1 276
	„	1953	28	...	...	3 759	1 647
Teacher training	Teacher training schools						
	Total	**1957**	**31**	[6] ...	[6] ...	**2 986**	**2 043**
	„	1956	30	[6] ...	...	2 797	1 990
	„	1955	...	...	...	...	...
	„	1954	27	308	142	2 646	1 910
	„	1953	23	303	144	2 052	1 444
Higher							
General and technical	National University						
	Total	**1957**	**1**	**186**	**6**	**1 185**	**142**
	„	1956	1	169	...	1 137	...
	„	1955	1	...	...	...	...
	„	1954	1	135	—	831	60
	„	1953	1	115	—	568	50

Note. In 1954, 6,533 adults (F. 2,044) were reported to be attending night schools and literacy centres.

1. Included with primary schools.
2. Including kindergartens.
3. Including teachers of vocational and teacher training schools.
4. Includes technical, vocational, commercial and agricultural schools.
5. Commercial schools only.
6. Included with general secondary schools.

2. TRENDS IN SECONDARY EDUCATION, 1946–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1946	1 163	10	[1] 1 100	46	...	...	[2] 2.4	144	[2] *1.7*
1947	1 274	10	[1] 1 354	44	...	...			
1950	1 078	13	[1] 1 469	56	1 548	71			
1951	1 069	11	[1] 2 192	44	1 662	70			
1952	1 094	9	[1] 2 935	40	1 819	72	5.7	158	*3.6*
1953	1 261	13	[1] 3 227	44	2 052	70			
1954	1 441	14	[1] 2 966	37	2 646	72			
1955	...	...	...	...	...	...			
1956	2 035	14	[1] 5 211	47	2 797	71	10.9	176	*6.2*
1957	2 467	17	[1] 6 287	47	2 986	68			

1. Commercial schools only.

2. General and vocational education only.

HUNGARY

THE EDUCATIONAL SYSTEM

After the second world war and the liberation of Hungary in 1945, a fundamental change was introduced into the Hungarian educational system. The Law of 1940 had already established the principle of compulsory primary education in the first 8 grades, but this law was never applied, even in the large towns. It is only since 1945 that children from 6 to 14 have actually been obliged to attend the 8-year general school (which follows on from the non-compulsory nursery school). For some years after 1945, however, the churches, local authorities and even private persons were entitled to maintain schools, with a consequent lack of uniformity in the teaching. The Law of 1948, on the nationalization of schools, provided for the establishment of general schools and the development of specialized education, and made possible a great increase in the number of pupils. Today, there are 6,314 general schools, and the total number of pupils exceeds by 200,000 the number of pupils between the ages of 6 and 14 in 1938.

All general schools are 8-grade schools, and it is only in the smallest centres of population that grades 5–8 are still grouped together for teaching purposes. In grades 1–4 (pupils between 6 and 10 years of age), all instruction is given by the same teacher, but in the towns these classes often have specialized teachers for certain subjects (singing, physical culture, drawing, etc.). The specialized teaching in grades 5–8 is entrusted to teachers who have been trained at the university or some other higher educational establishment. In the towns and provincial administrative centres, there are even specialized general schools where teaching is given in Russian, and general schools for the teaching of music and singing.

In 1954, on the basis of a decision taken by the Hungarian Workers' Party (MDP), a new curriculum was developed for the schools, and this is now in force. During the school-year 1958/59, practical technical activities were introduced into 500 schools of this type, with a view to initiating the development of polytechnic training.

General schools can be organized and maintained only by the State, and the teaching given in them must conform to the state curricula and textbooks. The local councils (village, town, canton and county) are responsible for the direction, supervision and upkeep of the general schools. The Ministry of Education is the state authority responsible for the direction and supervision of public education. On completing their studies at the general school, a considerable number of pupils (approximately 30 per cent) enter full-time employment. The others—i.e., the majority—continue their studies at the establishments which train specialized workers, or at secondary schools (general high schools and technical schools). Twenty-five per cent of the pupils who complete the courses at these secondary schools continue their studies at a higher educational

establishment, particularly at the university. The diagram on page 633 shows the structure of the educational system in Hungary.

THE DEVELOPMENT OF SECONDARY EDUCATION

The first law concerning secondary schools dates from 1883. This provided for two types of schools for a very carefully selected number of pupils between 10 and 18 years of age: the *gimnázium*, where teaching was based on the classical languages (Latin and Greek), and the modern school, where teaching was based on the sciences.

Both these types of school provided an 8-year course.

This system of secondary education remained in force until the first world war. A radical change was introduced into its structure and curricula by the Law of 1924, which established a modified classical *gimnázium* (where, however, fundamental importance was still attached to Latin), a modern *gimnázium*, where priority was given to the teaching of modern languages, and a modern school, where more importance was attached to mathematics and the natural sciences. The Law of 1926 provided for girls' secondary education by organizing in addition to schools corresponding to the boys' *gimnázium* and modern *gimnázium*, the girls' college (which did not prepare pupils for higher studies).

A new reform was introduced by the Law of 1934, which established a single type of secondary school, namely the *gimnázium*. The latter was an 8-grade school and provided education for a selected number of pupils between 10 and 18 years of age. Grades 1–4 shared the same syllabus; in grades 5–8, pupils were offered a choice, according to whether the emphasis was placed on Latin, modern languages or science.

This secondary school continued to operate until the Liberation, when the Government established the 8-year general school and the 4-year secondary school. Until these measures were applied, children of 10 years of age who were not admitted to the different types of *gimnázium*, could only, until the age of 14, follow the upper primary school course (4 years), or learn a trade by attending courses, where the teaching was much inferior, at the apprenticeship schools (vocational training schools). Pupils who had completed the 4 upper years at a primary school, or the first 4-year course at a secondary school, were able to continue their studies at a vocational secondary school (either a 4-year commercial school, or a 3- or 4-year higher industrial school, or a 2-, 3- or 4-year agricultural school). Before the Liberation, the level of the industrial schools was very low. The 1884 Law on Industry had made it obligatory for the towns to organize schools for industrial apprentices; in addition, the more important factories ran a certain number of specialized workers' school, where three half-days per week were devoted to general and technical education. The 1924 decree had slightly modernized the curriculum of these schools, and this curriculum—particularly with regard to vocational subjects—was to remain in force until 1949.

The structure and curriculum of the *gimnázium* were fixed by Decree No. 14 of 1951, which assigned to this institution the task of developing the knowledge acquired by pupils at the general school and of preparing them for higher education. The *gimnázium* comprised two sections, the science section and the humanities section (languages and history).

Technical secondary schools were instituted in 1947 by a decree of the Ministry for Industry. In 1949, technical secondary schools, designated as technical or industrial *lycées*, were created in which there was no differentiation of studies until the third or fourth year. In order to meet the needs of socialist industry, the present industrial technical schools were organized in 1950; they are placed under the control of the various ministries for industrial questions, and their structure was fixed by Decree No. 37 of 1955. The agricultural technical schools developed on the same lines as the industrial technical schools and come under the same legislation.

The commercial secondary schools which existed before the Liberation have become economic technical schools, comprising various sections.

The law relating to industrial apprentices (1949) fixed the present system for the training of specialized workers.

All secondary educational establishments are maintained by the State. In accordance with the agreements concluded with the various churches, there are still 11 denominational secondary schools (*gimnázium*)—8 Catholic, 1 Protestant and 2 Jewish—with 84 classes and a total of 2,073 pupils.

Administration

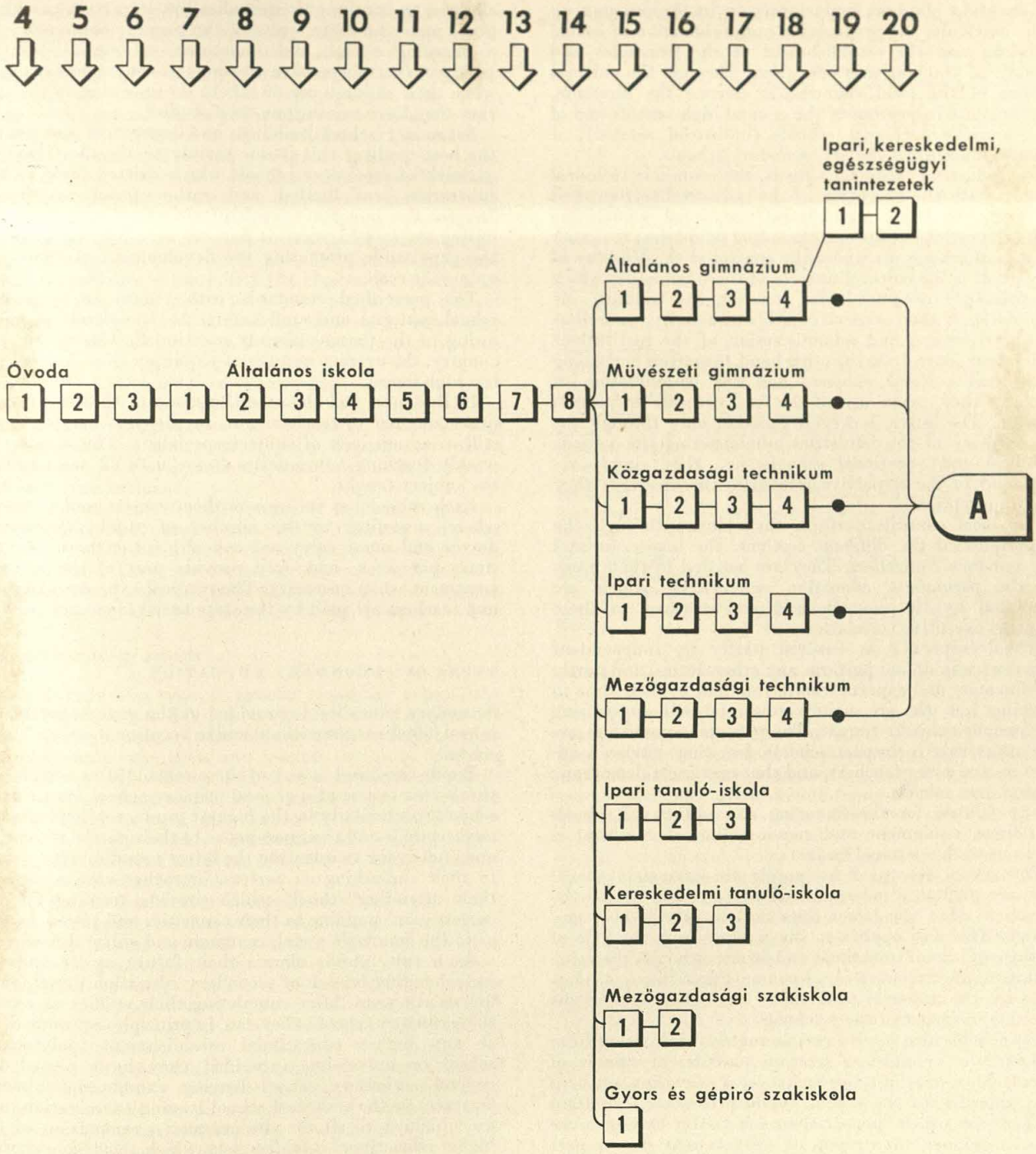
The direction, control, supervision and financing of secondary education are the responsibility of the public authorities, principally the Ministry of Education. In addition to issuing educational directives to other ministries controlling schools at secondary level, the Ministry

GLOSSARY

általános gimnázium: general secondary school.
általános iskola: primary school.
gyors-és gépiró szakiskola: vocational training school for steno-typists.
ipari, kereskedelmi, egészségügyi tanintézet: vocational training institutes for industry, commerce, public health workers.
ipari tanulóiskola: vocational training school for trades and industry.
ipari technikum: vocational secondary school of technical training for industry.
kereskedelmi tanulóiskola: vocational training school of commerce.
közgazdasági technikum: vocational secondary school of economics.
mezőgazdasági szakiskola: vocational training school of agriculture.
mezőgazdasági technikum: vocational secondary school of agriculture.
müvészeti gimnázium: secondary school of art.
óvoda: pre-primary school.

HIGHER EDUCATION

A. *Egyetemek, főiskolák, akadémiák:* universities and colleges.


4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Ipari, kereskedelmi, egészségügyi tanintezetek
1 2
Általános gimnázium
1 2 3 4
Óvoda
1 2 3
Általános iskola
1 2 3 4 5 6 7 8
Müvészeti gimnázium
1 2 3 4
Közgazdasági technikum
1 2 3 4
A
Ipari technikum
1 2 3 4
Mezőgazdasági technikum
1 2 3 4
Ipari tanuló-iskola
1 2 3
Kereskedelmi tanuló-iskola
1 2 3
Mezögazdasági szakiskola
1 2
Gyors és gépiró szakiskola
1

of Education plays an important part in the drawing up of the curricula, the preparation and publication of school textbooks and the establishment of the principles and methods of teaching and education. Through the cultural sections of the local councils, it ensures the direction, financing and inspection of the general high schools and of the economic technical schools (industrial section); it directly administers the art secondary schools.

The industrial technical schools, the economic technical schools (with the exception of the industrial section) and the commercial and agricultural vocational schools are under the control of the corresponding ministries; the other vocational schools are under the control of the Ministry of Labour. It is the cultural sections of these ministries which are primarily responsible for ensuring the training corresponding to their respective fields of activity, as well as for the financing and administration of the institutions under their control. On the other hand, in matters pertaining to general cultural subjects and the co-ordination of teaching they make use of the local councils' inspection services. The latter, however, function only through the intermediary of the ministries administering the various technical and vocational schools, i.e., they simply recommend to the respective ministries the measures they deem appropriate.

The local councils perform their duties through the rapporteurs of the different sections, the inspectors and the economic controllers. They are assisted in their work by the permanent education committees, which are appointed by the councils and are attached to these councils' executive committees.

School inspection is ensured partly by independent educators who do not perform any other duties, and partly by educators and experts who devote half of their time to teaching, but who are mainly concerned with supervising the various subjects taught. The parents' committees are not authorized to inspect schools, but they advise headmasters and assist teachers, and thus exercise a democratic control over schools.

Expenditure for the financing and upkeep of schools (buildings, equipment and remuneration of teachers) is paid out of the national budget.

The school fees paid by pupils are extremely small; they are paid to a governmental account and not to the school, so that the latter does not directly receive any money. This also applies to the receipts from the sale of produce of school workshops and farms, although the value of this productive work is, of course, taken into consideration by the financial authorities when they open credit accounts in favour of these schools.

The schools also receive certain material aid, either from the parents' committees (certain parents, or groups of parents may purchase, for instance, a television set or a film projector for the school, found prizes, etc.), or from the factories which sponsor them (the latter may give the school machines, or a group of workers may devote part of its time to constructing school buildings, fitting them up or preparing equipment for the pupils' practical work, etc.).

Only a few years ago, it was still necessary to award scholarships and grants in order to facilitate studies at secondary schools, but this necessity hardly ever arises now. Most parents have sufficient means to enable their children to continue their studies but in certain cases the State pays the entire costs of the pupil's maintenance in a boarding school, and sometimes—through the intermediary of certain social institutions—even supports parents when their children are unable to do so, owing to the fact that they have to continue their studies.

Secondary school buildings and equipment are not of the best quality; this is due mainly to the fact that the network of secondary schools which existed prior to the Liberation was limited and rather poorly equipped. Despite the important work of construction undertaken during the last 15 years, it has not been possible to fill in the gaps while promoting the development of education on a vast scale.

The prescribed standards with regard to secondary school material and staff cannot be completely applied, owing to the reasons already mentioned. Throughout the country, the average number of pupils per class is 40, which is a high figure.

In Budapest and the other large towns there is an adequate number of teachers but, in the provinces, there is still a certain lack of subject specialists. The number of weekly teaching hours varies from 20 to 22 according to the subject taught.

Each school has its own medical service and premises where, according to the number of pupils, the school doctor and nurse carry out a health inspection 2, 4 or 6 times per week, and even provide part of the medical treatment when necessary. The medical expenses of pupils and teachers are paid by the state social insurance service.

TYPES OF SECONDARY EDUCATION

Secondary education is provided at the general secondary school (*általános gimnázium*) and in vocational and technical schools.

Pupils can enrol at any of these schools after completing the 8-year course at a general primary school. At primary schools, particularly in the highest grade, teachers already advise pupils and their parents as to their pupils' prospects, and endeavour to orientate the latter's studies with a view to their embarking on careers, or rather with a view to their attending schools which provide training for the careers corresponding to their capacities and tastes, as well as to the country's social, economic and cultural needs.

As a rule, pupils choose their future career and the corresponding branch of secondary education during their fourteenth year. After completing their studies at any of the secondary schools, they can, in principle, continue them at any higher educational establishment (polytechnic school or university), provided they have passed the general secondary school leaving examination (baccalaureate) or the technical school leaving examination, and are qualified to sit for the entrance examination of the higher educational establishment which they have chosen.

The vocational schools do not prepare pupils for higher education, but pupils who complete their studies there can continue their secondary education by following the evening or correspondence courses organized by the *lycées* or technical schools, and sit for the baccalaureate examination or the technical school-leaving examination.

All young people who are at least 15 years of age and who are engaged in productive work are entitled to attend the evening courses or correspondence courses for workers. The 129 secondary evening schools, with their 509 classes, provide instruction for 12,251 young people who, after their work, attend courses four times a week and study all the subjects included in the curriculum of the ordinary schools (except the second foreign language, for these courses include only one compulsory language, Russian). The correspondence courses are limited as regards certain of the less important subjects (psychology, descriptive geometry, singing) and do not include a foreign language. For the school-year 1958/59, the 279 secondary correspondence schools comprised 1,122 classes with a total of 28,330 pupils. One day each week pupils can consult teachers; at the end of each term, there is a compulsory test in all the subjects studied and, at the end of each school year, a complete examination.

Pupils who have followed the evening or correspondence courses of a secondary school and who have passed the baccalaureate examination, or technical school-leaving examination, can attend the regular courses, as well as the evening or correspondence courses of a higher educational establishment.

The school year, for all secondary schools, begins on 1 September and usually ends on 20 June; it comprises 33 school weeks. Pupils enrol on the first working day after 20 June. There are 6 working days per week, usually from 8 a.m. to 1 p.m. or 2 p.m. Each lesson lasts 50 minutes in the morning, and 40 minutes in the afternoon.

General secondary schools

There is only one type of general secondary school, the *általános gimnázium*. It comprises two sections: humanities (emphasizing languages and history) and a modern section (science). As a rule, these two sections are to be found in all grades of all schools. The course provides all pupils with a comprehensive picture of modern general culture corresponding to their age (14 to 18 years). The table below shows the weekly distribution of teaching hours among the different subjects included in the curriculum for the school-year 1958/59.

The humanities section is sometimes designated as the Russian language section when there is a considerable number of lessons devoted to that subject as well as a corresponding reduction in the number of the other lessons.

In order to help pupils to develop their faculties, aptitudes and tastes, there exist in each *gimnázium* from 8 to 10 study circles which, under the direction of the best specialized teachers, devote themselves to the study of the various subjects taught. Thanks to lectures, practical work, the joint study of various problems, discussions, etc., these study circles prepare pupils for specialized higher studies, or for vocational training. During the school-year 1958/59, 76,396 pupils took part in the activities of 3,207 study circles. Pupils also have the possibility of learning a third language, music, or industrial or artistic drawing.

The pupils' work, oral and written, is marked as follows: 5 (very good), 4 (good), 3 (fair), 2 (pass or satisfactory), 1 (unsatisfactory, bad or very bad). A pupil who, at the end of the year, receives a mark equivalent to 'unsatisfactory' for one or two subjects, can sit for a further examination at the beginning of the following year and, if he passes, can continue his studies in a higher grade. A pupil who fails in three or more subjects must spend another year in the same grade before being able to continue his studies. At the end of each school year, there is no examination proper, but a general revision of the subjects taught. At the end of the fourth year, candidates sit for the baccalaureate examination at the school they have attended; the board of examiners consists of their teachers for that year and of a chairman appointed by the Ministry. This examination comprises a written test (Hungarian, Russian and mathematics) and an oral test (Hungarian, history, mathematics and physics). In addition to these compulsory subjects, the candidate may sit, if he wishes, for a written test bearing on a second language.

Gimnázium teachers are trained at the different university faculties. They are partly recruited on a competitive basis, and are appointed by the head of the local council's cultural section. Their promotion is automatic, every second, third or fifth year. The best of them—their number corresponds to a limited proportion of the total number of teachers—can be promoted by the establishment employing them. Teachers usually hold a diploma authorizing them to teach two subjects, but several of them hold a diploma qualifying them to teach a third subject related to the other two (in the latter case, they must have completed additional studies at the university).

TIME-TABLE OF GENERAL SECONDARY SCHOOLS
(in periods per week)

Subject	Humanities section				Humanities section—Russian language				Modern section				Modern section with practical work			
	Years				Years				Years				Years			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Hungarian language and literature	5	4	5	5	4	4	4	4	5	4	4	4	5	4	4	4
History	3	3	4	4	3	3	3	3	3	3	3	4	3	3	3	3
Russian language	3	3	3	3	6	6	6	6	3	3	3	3	3	3	3	3
Second modern language	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Mathematics	5	5	4	3	5	4	4	3	5	5	4	4	5	5	4	4
Descriptive geometry	—	—	—	—	—	—	—	—	—	—	2	2	—	—	2	2
Physics	—	2	3	4	—	2	3	4	—	2	3	5	—	2	3	5
Practical work in physics	—	—	—	—	—	—	—	—	—	½	½	1	—	½	—	—
Chemistry	3	2	2	—	2	2	2	—	3	2	2	—	3	2	2	—
Practical work in chemistry	—	—	—	—	—	—	—	—	1	½	½	—	1	½	—	—
Biology	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Practical work in biology	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—
Geography	2	3	2	—	2	2	2	—	2	3	2	—	2	3	2	—
History of art	—	—	—	2	—	—	—	2	—	—	—	—	—	—	—	—
Psychology	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—
Logic	—	—	—	1	—	—	—	1	—	—	—	1	—	—	—	1
Singing	1	1	—	—	1	1	—	—	1	—	—	—	—	—	—	—
Physical culture	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Practical industrial or agricultural work	—	—	—	—	—	—	—	—	—	—	—	—	2	2	2	2
Ethics	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total	31	31	31	31	31	32	32	32	32	32	32	32	32	33	33	32

The curriculum of the art *gimnázium* is similar to that of the general secondary school, but modified so as to include the theoretical and practical teaching of some branch of art. This type of *gimnázium* (at present there are eight of them) constitutes a transition between the general secondary school and the vocational secondary school.

Vocational and technical schools

The other main category of secondary schools in Hungary comprises the vocational and technical schools. Until recently, this category also included the teacher training schools and the pre-primary teacher training schools, which trained, respectively, teachers of grades 1 to 4 in the primary and general schools, and nursery school teachers. At the end of the school-year 1958/59, however, these schools were replaced by new institutions—one providing a 2-year course for nursery school teachers, and the other a 3-year course for teachers of grades 1 to 4 in the general schools—open to holders of the baccalaureate. These two institutions, thus transformed into higher educational establishments, do not come within the scope of the present survey.

Technical schools. While providing pupils with a general education, these schools also give them some practical experience in industry or agriculture and teach them the basic principles of economic administration in both these fields. The vocational training is partly theoretical and partly practical. The practical training is given, during the school year, in the school workshops, laboratories or offices and, during the summer holidays, in the factories; this practical training totals 4 weeks per year.

The task of the technical schools is to train technicians in production or economic administration. The curriculum of these schools is extremely varied. The weekly time-table comprises 36 lessons—including practical work—of which 40 per cent are devoted to general culture. The number of lessons devoted to practical work varies, according to the class and speciality concerned, from 6 to 12 hours per week.

Owing to the large number of candidates, and in order to make as fair a selection as possible, pupils are admitted to the industrial technical schools only after they have passed an entrance examination. For the other sections of the technical schools, the conditions of admission are virtually the same as for the *gimnázium*.

At the end of the school year, there is no examination; the system of marking and the method of promotion from one class to another are the same as in the *gimnázium*. At the end of the fourth year, pupils must pass an examination in order to receive a technician's diploma. This examination comprises oral and written tests in the following subjects: the Hungarian language, history, mathematics and, according to the speciality chosen, physics, chemistry or biology, and two or three other (vocational) subjects, as well as practical work. Pupils who obtain the technician's diploma work in a factory for another year or two in order to acquire more advanced practical experience as specialized workers; they are then appointed to technicians' posts.

Specialists who have completed their studies at an economics technical school are appointed to a body responsible for economic administration in the field of production, or to a financial or economic post in the field of national administration. The best pupils from the technical schools generally continue their studies at a higher educational establishment providing training in the same speciality as the school they have just attended; but they can enrol at any university, provided they pass the entrance examination.

Technical school teachers must have a university degree or a specialist's diploma (in engineering, economics, etc.). Practical instruction is entrusted to technicians or to excellent specialized workers. The remuneration and promotion of technical school teachers are governed by the same rules as those of *gimnázium* teachers.

Vocational schools. The training of specialized workers is, to a large extent, carried on simultaneously in schools established for that purpose and in factories or distributing centres.

The network of establishments where specialized workers are trained in the various branches of production and distribution is extremely complex (22 branches with a total of 300 specialities). The actual teaching is provided mainly at the establishments and workshops under the control of the Ministry of Labour. During the school-year 1958/59, 39,218 of the 101,561 pupils of the vocational schools were working in the institutions controlled by the Ministry of Labour; 44,352 were being trained at workshops belonging to local industrial co-operatives or small industries and subject to the control of the local councils and to the supervision of the Ministry of Labour; and 17,991 were trained at establishments belonging to various factories and educational organizations under the control of the different ministries responsible for production and distribution. Pupils are employed by factories as apprentices on the conditions fixed by law. In certain branches, they are admitted only after they have passed an entrance examination requiring general knowledge and special aptitudes. Prior to their admission, they must have passed the leaving examination of the 8-year general school, and have obtained a medical certificate issued by an approved doctor. The length of the training period depends on the speciality chosen, but it is usually 1, 2 or 3 years—in most cases, 3 years.

In addition to theoretical and practical vocational training, the curricula always include general educational subjects, whose importance varies according to the speciality chosen; with regard to vocational training proper, the curricula allow four times more teaching hours to practical than to theoretical instruction, for in their third year pupils are trained at the factory itself.

During their studies, pupils also do productive work and therefore receive a fixed salary. Those whose work is not satisfactory are excluded from the courses, and their appointment is terminated. On the completion of their vocational training, pupils must sit for an examination comprising theoretical and practical tests, the board of examiners being appointed by the State. Those who are successful receive a specialized worker's diploma.

As already indicated, the vocational schools do not prepare pupils for studies at a higher level, and the diplomas they confer do not give access to higher education. Once he has passed the examination, the pupil is usually em-

ployed at the factory where he has been trained, but he is free to look for employment elsewhere.

The teaching staff of vocational schools is composed of teachers, engineers, certificated technicians and the best specialized workers. The remuneration of this staff is essentially the same as that of technical school teachers.

Among the various establishments depending on the vocational schools, the pupils' centres and the school workshops are of special educational importance. They provide workers with excellent specialized training and inculcate in them valuable human qualities. The pupils participate in the community life of the factory workers and in the activities of their political and cultural organizations. Thus, the training of specialized workers is ensured by several institutions: pupils' centres, schools, school workshops and factories.

The schools that specialize in shorthand and typing are attended by girls who have completed their studies at the 8-year general school. The courses usually last 6 months or a year (2 years at the higher level); in addition to vocational teaching, they comprise general educational subjects including the Hungarian language. On the completion of their studies, pupils can sit for an optional examination, which is simply designed to test certain aptitudes and does not give access to higher education.

Out-of-class activities

The work of the study circles, already mentioned, complements the teaching of the subjects included in the curriculum of various educational establishments. The pupils' centres and school study circles also play an important part in secondary education. The former provide board and lodging for pupils whose parents live in places where there is no secondary school of the type which the pupil wishes to attend. These centres initiate pupils in community life; they are attached to certain schools, and are sometimes placed under joint direction, unless they are attended by pupils of several schools of the same kind.

The school study circles are placed under the supervision of a teacher; they are installed in the schools themselves, and the pupils who make use of them are those who are unable to study at home or who particularly need supervision and advice.

During out-of-class hours, it is the school sports clubs and literary, music and art clubs which organize the pupils' social and cultural activities. Pupils, under the supervision of a teacher, enjoy a considerable degree of independence. The organization in charge of the political and socialist education of youth is the Communist Youth Union; its members include the best pupils, those who have reached the highest level of development from the moral and political standpoints. This organization plays a leading role in the life of all the pupils.

The dancing lessons organized at the schools, the dance evenings and sports festivals, the group excursions, the holiday camps, and collective visits to theatres and concerts also contribute to the realization of the aims of education, by an appropriate use of leisure hours. All these activities are supervised by teachers, or take place in their presence so that they can always intervene if necessary. In this way, these activities extend the school's educational influence by contributing to the socialist education of young people between 14 and 18 years of age.

TRENDS AND PROBLEMS

The main secondary educational problems in Hungary concern: the content of present-day general secondary education; the relation between the sciences which are still developing and the curricula which can and must be applied in schools; the needs created by the development of production and the necessity of providing practical training; the overworking of pupils; the extension of compulsory attendance to secondary schools, rendered necessary by the evolution of modern life; educational problems relating to the building up of socialism.

It is with a view to resolving these problems that it is planned to undertake, in the near future, a further reform of education.

[*Text prepared by the Hungarian National Commission for Unesco in July 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 9,857,000.
Area: 35,919 square miles; 93,030 square kilometres.
Population density: 274 per square mile; 106 per square kilometre.

Summary of school statistics, 1953–57. During the school year 1957/58, there were over 1.5 million pupils enrolled at educational institutions, of whom about 43 per cent were girls. In addition, there were 36,479 persons attending adult education classes.

Total enrolment, which represented approximately 16 per cent of the total population, was distributed as follows: pre-primary education, 10 per cent; primary education, 78 per cent; secondary education, 10 per cent; higher education and special education, 2 per cent.

Total enrolment in 1957/58 was 4 per cent higher than in 1953/54. Between 1953 and 1957, the enrolment increase was 5 per cent in primary schools and 41 per cent in gymnasiums. Owing to certain decisions on educational policy, however, the number of pupils enrolled in other institutions, and in particular in teacher training colleges, declined over the period under review.

In nursery schools and in general schools of primary education, girls made up approximately half the total

enrolment. At the secondary level, the percentage of girls enrolled increased in gymnasiums (from 48 per cent in 1953/54 to 56 per cent in 1957/58) and decreased in vocational schools (37 per cent in 1953/54 against 30 per cent in 1957/58). The proportion of women on the teaching staff changed very little between 1953 and 1957; it was approximately 60 per cent in primary schools and 40 per cent in gymnasiums.

In spite of the reduction in enrolment in teacher training colleges, the teaching staff continued to increase, particularly in primary schools, where the pupil-teacher ratio fell from 28 in 1953/54 to 23 in 1957/58. (See Table 2.)

Enrolment trends in secondary education, 1930–37 and 1946–57. During the above two periods, enrolment in general secondary education increased at a high rate until 1953/54. This is true also for vocational education. Enrolment in teacher training colleges fluctuated. Average total secondary enrolment was 44,000 in 1930–34 and 162,000 in 1955–57. The ratio obtained by relating these averages to the estimated population 15–19 years old rose from 5 (1930–34) to 22 (1955–57). (See Table 4.)

Examination results in secondary education, 1953–57. Between 1953 and 1957, the increase in the number of certificates awarded was 63 per cent in general education and 18 per cent in vocational education. In 1957/58, there were only 1,135 teaching certificates granted against 3,104 in 1953. This corresponds to the decrease in enrolment in teacher training colleges. (See Table 3.)

Educational finance, 1957. For the year 1957, total recurring expenditure on education amounted to 2,475 million forints, which represents an average of 252 forints per inhabitant. (See Table 1.)

Source. Hungary: Ministry of Public Education and Culture, reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1957 (in thousand forints)[1]

Recurring expenditure by level and type of education	Amount[2]		Per cent	
Total recurring expenditure		**2 474 520**		**100.0**
Central administration		29 550		1.2
Instruction		2 444 970		98.8
Pre-primary education		279 348		11.3
Primary education		1 281 333		51.8
Secondary education		189 220		7.6
General	121 481		4.90	
Vocational	31 287		1.26	
Teacher training[3]	36 452		1.47	
Higher education[4]		303 750		12.3
Special education		59 367		2.4
Adult education		12 665		0.5
Other education, not specified		319 287		12.9

1. Official exchange rate: 100 forints = 4.29 U.S. dollars.
2. Data concerning capital expenditure are not known.
3. Includes teacher training for kindergartens.
4. Includes adult education, correspondence courses and evening classes.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools						
	Total	**1957/58**	**2 599**	**7 170**	**7 170**	**162 174**	**79 046**
	,,	1956/57	2 509	6 151	6 151	167 849	...
	,,	1955/56	2 503	6 120	6 120	149 948	72 662
	,,	1954/55	2 435	5 486	5 486	118 372	...
	,,	1953/54	2 245	4 431	4 431	131 873	...
Primary	General schools						
	Total	**1957/58**	**6 291**	**53 667**	**32 722**	**1 259 114**	**609 815**
	,,	1956/57	6 273	52 214	31 799	1 255 001	608 674
	,,	1955/56	6 220	50 259	31 640	1 226 200	596 032
	,,	1954/55	6 168	45 955	28 937	1 207 455	590 444
	,,	1953/54	6 108	43 108	26 946	1 203 346	589 903
Secondary							
General	Gymnasiums						
	Total	**1957/58**	**239**	**4 849**	**1 866**	**86 554**	**48 501**
	,,	1956/57	226	4 490	1 756	81 392	44 063
	,,	1955/56	209	4 094	1 598	71 739	37 162
	,,	1954/55	187	3 489	1 315	64 458	32 657
	,,	1953/54	186	3 045	1 179	61 536	29 708
Vocational	Schools of political economy	1957/58	58	869	415	19 409	...
	Industrial schools	1957/58	67	1 320	235	31 911	...
	Schools of agriculture	1957/58	45	467	84	6 684	...
	Total	**1957/58**	**170**	**2 656**	**734**	**[1]58 004**	**...**
	,,	1956/57	177	2 660	727	[1]68 497	[1]21 609
	,,	1955/56	181	2 831	817	[1]62 729	[1]25 189
	,,	1954/55	184	3 072	...	[1]71 879	[1]25 639
	,,	1953/54	183	2 943	837	[1]75 961	[1]27 892

1. Including part-time pupils: 20,579 in 1957/58, 29,376 (F. 5,315) in 1956/57, 22,413 (F. 3,957) in 1955/56, 23,708 (F. 4,407) in 1954/55, 21,729 (F. 4,454) in 1953/54.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Second. [cont.]							
Teacher training[2]	Schools for pre-primary teachers	1957/58	12	79	48	[3]534	[3]534
	Schools for primary teachers	1957/58	28	469	212	[3]2 000	[3]1 241
	Total	**1957/58**	**40**	**548**	**260**	[3]**2 534**	[3]**1 775**
	„	1956/57	53	785	394	[3]4 988	[3]3 459
	„	1955/56	65	885	412	[3]7 051	[3]5 174
	„	1954/55	71	974	479	[3]9 998	[3]7 620
	„	1953/54	71	982	477	[3]14 001	[3]10 796
Higher							
Teacher training	Teacher training colleges						
	Total	**1957/58**	**4**	**218**	**37**	**1 464**	**845**
	„	1956/57	4	219	37	1 444	740
	„	1955/56	4	232	36	1 821	962
	„	1954/55	5	429	91	2 655	1 479
	„	1953/54	5	571	136	4 446	2 210
General and technical	Polytechnical schools	1957/58	5	1 249	101	10 309	1 142
	Universities	1957/58	9	3 070	510	15 067	5 616
	Colleges of art	1957/58	4	221	34	768	293
	Agricultural institutions	1957/58	7	666	78	5 087	600
	Other institutions	1957/58	1	54	9	372	108
	Total	**1957/58**	**26**	**5 260**	**732**	**31 603**	**7 759**
	„	1956/57	27	5 012	692	39 479	8 659
	„	1955/56	28	5 132	671	43 186	9 961
	„	1954/55	31	5 400	945	44 799	10 800
	„	1953/54	28	5 969	991	48 887	11 205
Special	General schools with special classes	1957/58	73	108	76	1 887	744
	Special schools	1957/58	42	439	308	5 407	2 266
	Institutions						
	for re-education	1957/58	20	224	159	2 685	1 108
	for physically and mentally defective children	1957/58	3	19	8	272	66
	for the deaf and dumb	1957/58	8	140	82	1 214	569
	for the hard-of-hearing	1957/58	1	12	9	103	42
	for the blind	1957/58	1	30	13	218	96
	for the partially blind	1957/58	1	2	2	40	16
	School for physically handicapped children	1957/58	1	14	10	133	44
	Sanatorium schools	1957/58	3	38	26	511	253
	Institution for speech-handicapped children	1957/58	1	12	6	209	45
	Total	**1957/58**	**154**	**1 038**	**699**	**12 679**	**5 249**
	„	1956/57	146	985	630	11 615	4 823
	„	1955/56	145	939	606	10 981	4 541
	„	1954/55	126	885	552	10 109	4 295
	„	1953/54	156	759	...	10 041	4 176
Adult[4]	General primary schools	1957/58	...	...	...	16 114	...
	Gymnasiums	1957/58	...	...	...	12 296	4 018
	Popular Universities	1957/58	9	...	...	8 069	...
	Total	**1957/58**	**...**	**...**	**...**	**36 479**	**...**
	„	1956/57	...	...	...	[5]38 991	...
	„	1955/56	...	...	...	[5]36 451	...
	„	1954/55	...	...	...	63 270	...
	„	1953/54	...	...	...	[5]66 546	...

2. Starting in 1959/60, teachers will be trained in institutions of higher education.
3. Including part-time pupils.
4. Adult education is provided in the regular schools, with the full teaching staff of these schools.
5. Not including enrolment in popular universities.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Diploma of general secondary schools	9 929	...	11 685	...	11 861	...	15 204	...	16 151	...
Diploma of vocational secondary schools	10 051	...	11 969	...	11 101	...	11 815	...	11 811	...
Teaching Certificate	3 104	...	3 435	...	2 982	...	2 392	...	1 135	...

4. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	26 705	20	10 469	27	9 862	65			
1931	25 073	21	9 507	28	10 086	67			
1932	23 533	22	8 178	28	9 998	68	44	843	5
1933	27 490	23	8 078	29	9 982	69			
1934	25 511	23	8 952	30	9 913	70			
1935	27 651	24	10 413	31	9 725	70			
1936	29 355	24	11 701	31	9 273	70	50	868	6
1937	30 593	25	12 971	31	8 786	70			
1946	55 198	29	25 357	41	13 264	70			
1947	...	...	...	...	...	...			
1948	40 466	...	30 436	...	11 095	...	77	797	10
1949	44 041	...	...	...	10 591	...			
1950	52 549	...	43 488	...	11 918	...			
1951	54 532	...	55 250	...	12 377	...			
1952	60 654	44	63 858	37	14 219	81	139	713	19
1953	72 902	45	75 961	37	14 001	77			
1954	79 794	46	71 879	36	9 998	76			
1955	85 182	48	62 729	40	7 051	73			
1956	99 276	49	68 497	32	4 988	69	162	727	22
1957	98 850	53	58 004	...	2 534	70			

1. Data refer to the 4-grade *gimnázium* and to secondary courses for adults.

ICELAND

THE EDUCATIONAL SYSTEM

All schools operated or subsidized by public funds are integrated into one school system, and studies in all public schools are organized in such a way that pupils moving from one district to another are not handicapped when changing schools. Standards of examination are unified, and individual schools may without further entrance examination receive pupils from any part of the country.

Primary and lower secondary schools for children between the ages of 7 and 16 are almost solely financed by public funds, i.e., by local authorities and the State jointly. Grammar schools, i.e., upper general secondary schools (*menntaskólar*) and the university are entirely maintained by the State. These schools may be attended by all, irrespective of religious denomination. Pupils within the compulsory age range (7–15) must however be taught Scripture.

Private schools for pupils within the compulsory age range are allowed, their curricula and examinations being on the same footing as those of public schools. The very few private schools of this type are Roman Catholic or Adventist. There are some vocational schools, e.g., schools of commerce, pictorial art, drama, music, etc., which are run by organizations or individuals with the aid of grants from public funds. All private schools have to be licensed or approved by the Minister.

The Ministry of Education is in charge of the greater part of the educational system, but some vocational schools are run by other departments, e.g., agricultural schools come under the Ministry of Agriculture and the Nurses' Training School under the Ministry of Health.

The Ministry of Education appoints a Director of Education, who supervises the enforcement of laws and regulations, and collects information and statistics on education. The University of Iceland is, however, re-

sponsible directly to the Ministry of Education. The Director consults school boards on courses of study, examination standards, etc., in primary as well as in secondary schools.

Each of the 14 towns and 23 rural districts forms an educational district (*skólahérad*) and has an educational council elected by town councils and rural district councils respectively. Each educational district is composed of one or more school districts (*skólahverfi*), of which there are 220 in all, each with a school board consisting of either three or five persons. In most towns, however, the work of school boards is done by the educational council. The chairman of a school board is appointed by the Minister of Education, whilst the other members are elected by the local authorities. All public schools which are jointly financed by the State and the local authorities, come under the administration of school boards and educational councils. Headmasters and teachers are appointed by the Minister on the advice of the school board concerned and the Director of Education. Upper secondary schools and such vocational schools as are entirely financed by the State are administered directly by the respective ministries, assisted in specialized matters by advisory committees.

The diagram on page 643 shows the structure of the Icelandic school system.

THE DEVELOPMENT OF SECONDARY EDUCATION

Church schools (*latínuskólar*) dating back to medieval times long played a role similar to that of present-day secondary schools. The *latínuskólar* were closed down in 1800 when a secondary school with a 6-year course was founded in Reykjavik. In 1904 this school was divided into lower and upper stages, each lasting 3 years, and its name was changed to *menntaskóli*. The first Act regulating *menntaskólar* was passed in 1930. In 1946 a new Act establishing 4-year *menntaskólar* was passed and this is still in force with only minor changes.

There were no schools in Iceland corresponding to the lower secondary school of today until about 1880, when the first of such schools, offering a 2-year course, was founded. The curricula were patterned on those of parallel schools in Denmark.

At the turn of the century general interest in the junior stage of secondary education increased, especially after compulsory school attendance between the ages of 10 and 14 was introduced by law in 1907. By that year various secondary schools had been set up with courses of a few weeks' duration in Icelandic, mathematics, Danish; also in English and other subjects. In 1930 a new Lower Secondary Schools Act was passed, under which the length of the lower secondary school course was fixed at 3 years. Many of the subjects were the same as in the lower secondary school sections of the *menntaskólar*.

During the first decade of this century there was some interest in the establishment of folk high schools on the pattern of those which had for some time been in operation in Denmark, and three were in operation when the District School Act was passed in 1929 establishing a 2-year 'district school' course and prescribing a curriculum similar to that of the earlier folk high schools. In 1946 a new Act on lower secondary education was passed. The district schools were transformed from folk high schools into lower secondary schools, giving their pupils opportunities for entry to further education similar to those offered by the lower secondary schools of the towns. In this connexion it may be mentioned that there is now considerable interest in the foundation of a school patterned on the folk high schools, which would be independent of the rest of the school system.

Towards the end of the nineteenth century a 1-year continuation course for the training of teachers was introduced at the lower secondary school in the south of Iceland. This arrangement continued until 1908, when the Teachers' Training College of Iceland was founded under the 1907 Act. In 1944 the course was extended to 4 years and entrance standards raised, and under the 1947 Act (which is still in force) entrance was made subject to the same qualifications as were required for entering upper secondary schools. Training colleges for teachers of specialized subjects were established: for teachers of handicrafts in 1939, for teachers of physical education and teachers of domestic science in 1942, and for teachers of music in 1958.

In the last three decades of the nineteenth century a number of domestic science and agricultural schools were founded. The Agricultural School Act was revised in 1937 and a new Domestic Science School Act was passed in 1946, superseding previous legislation.

The first technical school in Iceland was opened in Reykjavik in 1904 and others were later set up in various towns. They were founded by artisans, or by artisans' organizations, and usually the schools were operated as evening schools, the pupils receiving their practical training through their daytime employment. The courses of study varied in accordance with the requirements of local industry. In 1955 a Technical Education Act was passed. Technical schools are now usually day schools, financed jointly by the State and the local authorities. Attempts are being made to bring practical training in important trades within the schools themselves as much as possible.

The Commercial College of Iceland (*Verzlunarskóli Íslands*) was founded in Reykjavik in 1904 by business organizations, and the Co-operative School (*Samvinnuskólinn*) in 1918 by the co-operative movement. No statutory laws exist on these schools, except that in the Upper Secondary School (*Menntaskóli*) Act there is a provision that gives the Commercial College of Iceland the right to confer matriculation (granting university entrance).

A navigation school (*stýrimannaskóli*) was founded in 1890, and a training school for engineers (*vélstjóraskóli*) in 1915. The latter was for a long time operated in conjunction with the navigation school, its chief function being to train engineers for the merchant navy and the fishing fleet. Under the 1936 Act this school offers more varied engineering courses, including a course in electrical engineering. Its name was also changed to the Engineering School (*Vélskólinn*).

Administration

The Education Acts governing the various types of secondary schools have been referred to above. They stipulate which subjects should be included in each course, but do

not expressly state what each subject should cover, leaving further details of the curricula for special regulations; the same applies to examinations. The drafting of new curricula regulations can begin from proposals made by teachers or be initiated by the Ministry and the Director of Education. In the latter event teachers and other educationists are consulted, and all final drafts are tried out in the schools and suitably amended before being submitted to the Minister of Education for signature.

The more general aspects of school administration have already been described. The Director of Education directly supervises schools as far as it is in his power, but for advising on teaching methods, supervising the day-to-day work, etc., he is assisted by school inspectors, both for general and specialized subjects. There are 10 of these inspectors, mainly for primary schools, the lower general secondary schools, and domestic science schools. There are no inspectors for upper secondary schools and vocational schools.

As stated above, most Icelandic schools are built and financed by the State and local authorities, or by the State alone. Lower secondary schools, technical schools and domestic science schools receive state grants covering one half of their foundation costs, all salaries of permanent staff and one half of 'miscellaneous' operational costs. Upper secondary schools, teacher training colleges, nautical schools and other special schools are provided and maintained entirely by the State. The commercial schools are run by business organizations and co-operatives, receiving small subsidies from public funds. Schools of music, handicrafts and arts, and study groups, are set up by associations and individuals; they usually receive grants from public funds, and some of them also receive small subsidies from local authorities.

Owing to the fact that many rural areas of Iceland are very sparsely populated, a number of boarding schools have been established. If the parents or guardians of a child subject to compulsory education cannot afford to pay the cost of its stay in a boarding school, this is met by public funds like other expenses in connexion with the childs education. All pupils within the compulsory age range (7–15) receive textbooks free of charge, issued by the State Educational Publishing Department.

All designs for schools are subject to the approval of the State Architect and the Director of Education, after which they have to be accepted by the Ministry of Education. Most schools are designed in the offices of the State Architect. The size of a school will of course depend on the number of pupils in its area, but the size of schoolrooms provides a good seating capacity for 30 children on the average, being 45–50 square metres. The present official policy is to limit the schools to 400 pupils. Every school of average size must have a gymnasium, rooms for handicrafts, health service, library, etc. Swimming pools are provided wherever possible. If possible, special rooms are provided for science teaching. Heating, lighting and sanitation are similar to those of Middle and North European schools.

A special Medical Inspector of Health for Schools supervises all matters relating to the health of the school population, and the State Inspector of Physical Education supervises and gives advice on physical training. The latter official, for instance, sees to it that the law on swimming as a compulsory subject is enforced.

TYPES OF SECONDARY EDUCATION

At the end of the primary school (*barnaskóli*) the pupil passes into the lower secondary schools (*gagnfraedoskólar*) which are divided into two streams: academic (*bóknámsdeild*) and practical (*verknámsdeild*). The junior secondary stage (*unglingaskóli*) takes over compulsory education for 2 years, going up to the age of 15. (Some country school areas have been granted special permission to end compulsory education at the age of 14.) Compulsory education is wound up by the junior secondary school-leaving examination (*unglingapróf*); successful candidates may attempt the entrance examinations for technical schools. A third year of lower secondary education in the academic stream leads to the middle school examination (*midskólapróf*), a good pass in which secures admission to the 4-year upper secondary school (*menntaskóli*). This examination is

GLOSSARY

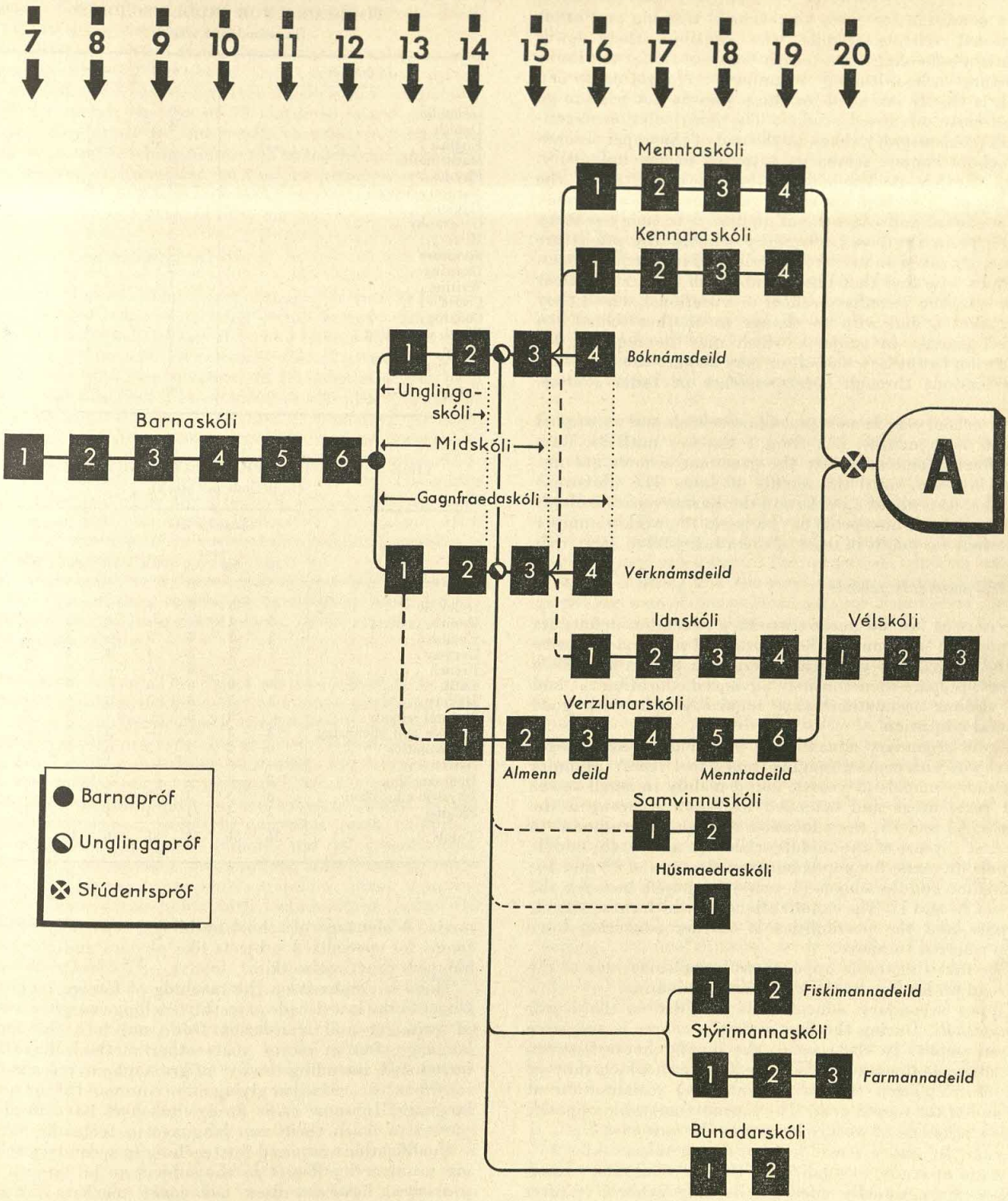
almenn deild: see *verzlunarskóli.*
barnaskóli: primary school.
bóknámsdeild: academic stream in lower general secondary schools.
búnadarskóli: vocational training school of agriculture.
fiskimannadeild: see *stýrimannaskóli.*
farmannadeild: see *stýrimannaskóli.*
gagnfraedaskóli: 4-year lower general secondary school.
húsmaedraskóli: vocational training school of home economics.
idnskóli: part-time vocational training school for apprentices.
kennaraskóli: teacher training school.
menntadeild: see *verzlunarskóli.*
menntaskóli: upper general secondary school of academic or grammar type.
midskóli: 3-year lower general secondary school.
samvinnuskóli: vocational training school in co-operatives.
stýrimannaskóli: vocational training school of navigation with courses for fishermen (*fiskimannadeild*) and seamen (*farmannadeild*).
unglingaskóli: 2-year lower general secondary school falling within the compulsory education period.
vélskóli: advanced vocational training school for engineering technicians.
verknámsdeild: practical stream in lower general secondary school.
verzlunarskóli: vocational secondary school of commerce with two cycles, general (*almenn deild*) and specialized or academic (*menntadeild*).

HIGHER EDUCATION

A. *Háskóli:* university.

EXAMINATIONS

barnapróf: primary school certificate.
stúdentspróf: university entrance.
unglingapróf: lower secondary school leaving certificate.


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15
16
17
18
19
20
Menntaskóli
1 2 3 4
Kennaraskóli
1 2 3 4
1 2 3 4 Bóknámsdeild
Unglinga-
skóli
Barnaskóli
1 2 3 4 5 6
Midskóli
Gagnfraedaskóli
A
1 2 3 4 Verknámsdeild
Idnskóli
1 2 3 4
Vélskóli
1 2 3
Verzlunarskóli
1 2 3 4 5 6
Almenn deild
Menntadeild
Barnapróf
Unglingapróf
Stúdentspróf
Samvinnuskóli
1 2
Húsmaedraskóli
1
1 2 Fiskimannadeild
Stýrimannaskóli
1 2 3 Farmannadeild
Bunadarskóli
1 2

also a condition for entry to teachers' training and other vocational schools. Pupils who continue their lower secondary schooling for a fourth year can sit for the lower secondary school-leaving examination (*gagnfraedaprof*), which is chiefly intended for those who do not wish to go in for more advanced studies. The Matriculation examination (*studentsprof*), taken at the end of the upper secondary school course, serves as entrance to the university.

The Reykjavik Municipality (where two-fifths of the population of Iceland are congregated) employs a specialist in vocational and educational guidance. In many schools, especially in the lower secondary schools, the pupils are frequently taken on tours to factories and industrial centres.

Pupils who find that they do not wish to carry on their studies in the secondary school or vocational school they have chosen and wish to change to another school can attend courses in subjects which may be required for admission to the new school, or may acquire the necessary qualifications through correspondence or radio courses, etc.

The school year in most secondary schools and vocational schools is 8 months, i.e., from 1 October until 31 May. The final examinations at the grammar schools are not over, however, until the middle of June. The Christmas vacation lasts about 2 weeks and the Easter vacation about a week. Schools are open 6 days a week, the weekly number of periods for pupils in most of them being 33 to 36.

General secondary schools

The present law on lower secondary education defines its purpose as: 'to promote the mental and physical maturity of the pupils, give them the instruction that is laid down by law, prepare them for more advanced education . . . and for various occupations that require people with good general education'.

Lower secondary education is provided in three stages or schools with courses ranging from 2 to 4 years: (a) junior secondary schools (2 years), found mainly in small towns and rural areas and attended by children between the ages of 13 and 15; the education they give corresponds to the first 2 years of the middle schools (b and c); (b) middle schools (3 years) for pupils between the ages of 13 and 16; (c) higher middle schools (4 years) for pupils between the ages of 13 and 17. The examinations for which these schools prepare and the possibilities of further education have been referred to above.

The first time-table opposite will give some idea of the curriculum leading to the *midskóli* examination.

Upper secondary education is provided in the 4-year *menntaskóli*. During the first year the course is the same for all pupils. In the second, the pupils choose between the language line and the science line, from which they sit the Matriculation (university entrance) examination at the end of the fourth year. The second time-table opposite gives a schedule of weekly lessons in the *menntaskóli*.

From the above it will be seen that it takes 6+3+4 = 13 years of study to qualify for the Matriculation examination. Exceptionally good pupils may achieve it after 11 or 12 years.

Teaching methods in secondary and vocational schools in Iceland are broadly speaking similar to those in Scandinavia. A shortage of school buildings, especially of classrooms for specialized subjects like physics and chemistry, hampers practical work.

There is emphasis on the teaching of foreign languages. Down to the last decade or so the teaching consisted mainly of grammar and translation from and into the foreign language, but in recent years other methods have been introduced, including the use of gramophone records, tape recorders, etc., aimed at giving more command of the spoken language. In some cases foreign teachers have been employed to teach their own language in Icelandic schools.

Qualifications required for teaching in secondary schools are a university degree in the subject to be taught. This provision, however, does not cover teachers for some special subjects, such as cooking, handicrafts, and physical training.

In the lower general secondary schools and other parallel

TIME-TABLE FOR MIDDLE SCHOOLS
(in periods per week)

Subject	1st year	2nd year	3rd year
Icelandic	6	6	5
Danish	4	4	4
English		5	5
Mathematics	5	5	6
Physics			3
Natural science	2	2	2
Hygiene			2
Geography	2	2	2
History	3	2	2
Scripture	2		
Drawing	2	2	1
Writing	1		
Crafts	2	2	
Cooking	2	2	
Physical training	3	3	3
Music	1	1	1
Free period	1		
Totals	36	36	36

TIME-TABLE FOR UPPER SECONDARY SCHOOLS
(in periods per week)

Subject	Language line				Science line			
	year				year			
	1st	2nd	3rd	4th	1st	2nd	3rd	4th
Icelandic	5	3	5	4	5	4	4	4
Danish	4	4	—	—	4	3	—	—
English	5	5	4	5	5	3	2	—
German	4	3	3	4	4	4	4	—
French	—	—	5	6	—	—	3	5
Latin	—	6	6	6	—	4	—	—
History	3	3	3	3	3	—	4	4
Natural science	—	3	3	—	—	3	3	3
Physics and chemistry	3	3	—	—	3	5	6	7
Mathematics	6	2	3	3	6	6	6	6
Astronomy	—	—	—	—	—	—	—	2
Book-keeping	2	—	—	—	2	—	—	—
Physical education	3	3	3	3	3	3	3	3
Singing	1	1	1	1	1	1	1	1
Totals	36	36	36	35	36	36	36	35

schools teachers have to teach a basic number of 30 periods a week, decreasing to 25 when they reach the age of 55 and to 20 when they turn 60.

Teachers may retire at the age of 65, when they receive a pension (about 60 per cent of their average salary during the preceding 10 years), but retirement is not compulsory until they reach the age of 70. After 10 years' service a teacher may apply for one year's vacation to further his knowledge and teaching abilities. The teacher must consult the Director of Education on how he plans to spend his vacation; most teachers undertake studies overseas. Such a vacation can be obtained only once.

Vocational and technical schools

Agricultural schools. The object of these schools is to provide practical knowledge of farming. Applicants for admission must have reached the age of 18 and have completed their compulsory education. The course lasts 2 years, or rather two winters and one summer. It includes study of both theory and practice. The curriculum comprises Icelandic, mathematics, sociology, physics, chemistry, geology, physiology, physical training, and the various branches of agricultural science proper such as agricultural economics, veterinary science, methods of cultivation, etc. The pupils are also instructed in the practical side of farming, agriculture, horticulture, animal husbandry, and so on. After the final examinations, successful candidates receive a diploma in agriculture.

An advanced 2-year course leading to a higher diploma is held in one of the two schools. In addition, short courses are offered annually in many places, under the auspices of the Farmers' Union.

Horticultural school. The object of this school is to give its pupils specialized knowledge of market gardening. The 2-year course comprises both theory and practice. To be admitted applicants must be at least 17 years old, have completed their compulsory education, and have worked for at least 2 years in a recognized market garden. The curriculum includes most of the subjects taught in the agricultural schools, and the practical work comprises market gardening (both outside and in greenhouses), layout of gardens and greenhouses, afforestation, cultivation of flowers, fruits and vegetables, plant diseases, etc. The course concludes with examinations, successful candidates becoming fully qualified horticulturalists.

Nautical school. The school trains ships' officers. The following courses can be taken: (a) 4 months' training for the First Fisherman's Certificate; (b) 2 years' training for the Second Fisherman's Certificate; (c) 3 years' training for the Mate's Certificate; (d) special training for the Master's Certificate for State Patrol Vessels; this course lasts at least 4 months after the completion of the Mate's Certificate. To be admitted to the Nautical School applicants must be at least 18 years of age, have completed their compulsory schooling, and have been members of a ship's crew for at least 24 months. The course for the Mate's Certificate includes mathematics, navigation, Icelandic, Danish, English, maritime law, hygiene, bookkeeping, economics, physics, mechanical engineering, geography and meteorology, seamanship and physical training.

Mechanical Engineering School. The school trains engineers for ships and mechanics for factories, electric power stations, etc., preparing its pupils for the Mechanic's Certificate, the Electrician's Certificate for mechanics, and the Electrician's Certificate for electricians. Applicants for admission must have completed a 4-year apprenticeship and passed final examinations at a technical college.

Hotel and Catering School. The length of the course is 3 years. To be admitted to the school applicants must have reached the age of 16 and passed the middle school examination. The curriculum includes Icelandic, English, book-keeping, physics and chemistry, handwriting, Danish, mathematics, drawing and French, as well as vocational subjects. In addition, 4-month courses for cooks on fishing vessels and merchant ships are held at the school. Other courses are offered as the occasion arises.

Domestic science schools. The length of the course is approximately 9 months. Entrance requirements are a minimum age of 17 years and completion of compulsory education. The teaching is both theoretical and practical. On the theoretical side the following subjects are taught: Icelandic, Scripture, child psychology and education, dietetics, materials and utensils, household accounting, hygiene, and sociology. The practical teaching covers cookery, cleaning and washing, sewing, knitting, mending, gardening, care of domestic animals, etc. Short extra courses are also arranged at these schools.

Technical schools. These are attended by pupils who are contracted to masters or industrial concerns as apprentices in accordance with law. Special preparatory and continuation courses may also be held. As far as possible the teaching programme is arranged in 2 to 3-month daytime courses. Otherwise there are evening courses which cover longer periods of time, in which case the apprentice's working week is reduced by 12 hours. To be admitted to a technical school applicants must have reached the age of 15 and passed the middle school examination.

Subjects taken in the apprenticeship course, which may be of 3, 4 or 5 years' duration, include: Icelandic, a foreign language, mathematics, physics, chemistry, handwriting, book-keeping, geometric drawing, cubic drawing, artistic drawing, technical drawing, trade training. The curriculum may vary for different trades; in each case it has to be approved by the council for Technical Education and the National Union of Artisans.

Commercial schools. There is no apprenticeship in conjunction with these schools. The Commercial College of Iceland offers a 4-year course for boys and girls of 14 to 18 years of age, leading to a commercial diploma. There is also an advanced 2-year post-diploma course, leading to Matriculation. Hence, the aim of the college is on the one hand to give the theoretical and practical training that is required for commercial occupations of any kind, and on the other to provide an opening for university education. Short study courses may also be arranged, either in general

subjects like languages or in specialized subjects like salesmanship, etc.

The table below shows the curriculum and the weekly number of periods for each subject.

TIME-TABLE OF COMMERCIAL SECONDARY SCHOOL

Subject	Year of study					
	1	2	3	4	5	6
Icelandic	5	4	3	4	2	2
English	6	5	5	4	4	5
German	—	5	5	4	2	2
French	—	—	—	—	4	6
Latin	—	—	—	—	4	—
Spanish (optional)	—	—	—	—	—	4
Danish	4	3	3	3	—	—
Accountancy	3	3	3	5	—	3
Mathematics	4	4	4	4	5	5
Commercial law	—	—	2	2	—	—
Economics	—	—	2	2	2	2
History	3	2	2	2	2	2
Geography	2	2	1	1	—	—
Commodities	—	—	—	1	—	—
Science (physics, chemistry biology, physiology)	—	—	—	—	5	4
Typewriting	2	2	2	2	—	—
Shorthand (optional)	—	—	—	1	—	—
Handwriting	1	1	—	—	—	—
Physical training	3	3	3	3	3	3
Total	33	34	35	38	33	38

The Co-operative School, a 2-year boarding school in the country, provides a commercial course with particular attention to the history and special function of co-operative societies. To be admitted to the school applicants should preferably be not under 18 years of age and have completed the middle school or received education of a similar standard.

The subjects taught are: Icelandic, Danish, English, German, economics, book-keeping, typewriting, commercial arithmetic, commercial law, commodities, salesmanship, secretarial work, advertising copywriting and window display, cultural history, history of the co-operative movement, conference procedures.

Teacher training schools

The training of teachers for the primary and the junior secondary stage takes place in the Teachers' Training College of Iceland. Entrants who have passed the middle school examination take a 4-year course, while those who have passed the Matriculation examination take a 1-year course.

The curriculum of the 4-year course includes Icelandic, Danish, English, German, mathematics, natural history, physics, Icelandic history, world history, history of education, geography, handicrafts, singing, Scripture education, teaching methods, teaching practice, hygiene, drawing, handwriting, and physical training. The 1-year course includes only the eight last-named subjects.

The Training College for Teachers of Physical Education is located in the country. The length of the course is 9 to 10 months. Short courses for the general public may also be held. The aim of the school is twofold: (a) training of teachers of physical education for all schools financed by public funds; (b) training of coaches for the requirements of clubs, organizations or individuals.

The Training College for Teachers of Domestic Science also has two aims: (a) training of teachers of domestic science for domestic science colleges and secondary schools (2-year course); (b) training of matrons for boarding schools and other institutions (1-year course). The following subjects are taught: theoretical—dietetics, materials and utensils, and household accounting; practical—cookery, cleaning and washing, gardening, care of domestic animals and farm produce, mothercraft, and teaching practice. Special regulations lay down in detail what each subject should cover, as well as the scope and nature of examinations and grading.

The Training College for Teachers of Handicrafts is operated in conjunction with the Teachers' Training College of Iceland. The length of the course for those who wish to become teachers of handicrafts in primary schools is 1 year (the school year is 8 to 9 months), and in secondary schools 2 years. The curriculum includes the following subjects: Icelandic, education, hygiene, history of art, materials, teaching practice. In addition women students take model drawing, costume designing, sewing, knitting and crocheting, weaving, hobbies, book-keeping; and men take artistic drawing, technical drawing, carpentry, metalwork, book-binding.

Candidates for final examinations in training colleges for teachers of specialized subjects, such as physical education, handicrafts, cookery, etc., are required by law to have completed the Teachers' Training College of Iceland. Owing to the great shortage of teachers of some special subjects, exemptions have been granted from this provision so that in some cases the specialized training colleges have enrolled students who have completed technical education, a course in a domestic science college, passed the middle school examination, etc.

Teachers of drawing and of music and singing receive their training in the School of Arts and Crafts and the Reykjavik College of Music respectively. If students have not already completed the Teachers' Training College of Iceland they have to attend it for courses in education, psychology, teaching methods, hygiene, etc.

Miscellaneous schools

The Nurses' Training School is a boarding school run by the State in conjunction with the National Hospital. Entrants must be between 20 and 30 years of age, in good health, and mentally and physically suited for their vocation. They must hold the middle school certificate or have equivalent qualifications.

Schools of music are now fairly numerous, mainly in towns and some large villages. Founded by patrons of music and by music associations, they receive some grants from the State towards operational costs. The Reykjavik College of Music is by far the largest, having courses for most of the instruments that are required for a symphony orchestra.

The School for Arts and Crafts is located in Reykjavik. It offers courses in drawing, painting, lithography, etc.

Elementary sculpturing and modelling may also be included. This school is attended by those who wish to make art their career and by those who intend to become industrial designers or art teachers. There are also courses in handicrafts, such as book-binding, weaving, etc.

The National Theatre in Reykjavik runs a school of dramatic art. The courses of study are similar to those of parallel schools in Scandinavia and Great Britain.

Adult education

Adult education classes are held in several places throughout the country. There are both elementary and advanced courses in a great variety of subjects for both young and old. Most of them are evening classes, attended partly by people who simply want to improve their general education and partly by students who wish to qualify themselves for admission to higher schools.

Correspondence courses of various kinds are run by the Iceland Co-operative Societies. The State Broadcasting Service offers various courses, mainly in Icelandic and foreign languages; these broadcasts cover the same sort of ground as the adult education classes and the correspondence courses. In addition, miscellaneous courses are offered by individuals and private organizations in many parts of the country.

Out-of-class activities

In all secondary schools there are various clubs and societies, such as sports clubs, chess clubs, dramatic societies, debating societies, etc. The officials of such societies are assisted by headmasters and teachers when required, and the headmasters often seek the co-operation of such societies for the promotion of cultural activities in the schools.

TRENDS AND PROBLEMS

A fairly large number of Icelandic teachers in secondary schools go overseas either to further their knowledge in their own particular field, or to acquaint themselves with education abroad. In this way many new trends in education abroad reach Iceland fairly soon, and attempts are made to adapt them to local requirements. Regulations and curricula undergo periodical revision in the light of the experience of teachers and the needs of the school population at large.

The present official policy aims at increasing the scope of optional subjects in general schools, especially in view of the increasing number of subjects the schools have to teach and the constantly expanding content, particularly as a result of growing industrialization. A shortage of school buildings stands in the way of rapid progress in this field, however, and there is also a shortage of specialized teachers. It may be mentioned that proposals have been advanced for the raising of the minimum age of entrants to the school that trains teachers for the primary and the junior secondary school stage, so that they would be at least 21 to 22 years old when they qualified as teachers. An extension (from 1 to 2 years) of the course in the Teachers' Training College for grammar school graduates is also under consideration.

[*Text prepared by the Ministry of Education, Reykjavik, in October 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 169,000.
Area: 39,800 square miles; 103,000 square kilometres.
Population density: 4 per square mile; 1.6 per square kilometre.

Summary of school statistics, 1951–55. According to the data available, some 28,600 pupils were enrolled in educational institutions at all levels in 1955, representing approximately 18 per cent of the population. Of the total enrolment, 66 per cent were pupils in primary and special schools, 22 per cent in general secondary schools and teacher training schools, 9 per cent in vocational education and the remainder, 3 per cent, were students at the university. Including auxiliary staff, the number of teachers at all educational levels in 1955 was 1,620. The pupil-teacher ratio, including auxiliary staff, was 24 at primary schools and 14 in general secondary schools. Compared with 1951, enrolment at all educational institutions had increased by about 19 per cent. (See Table.)

Educational finance, 1956. Data available for 1956 show that total expenditure on education was 114,266,062 kroner (official exchange rate: 100 kroner = 6.1 U.S. dollars [approx.]), representing over 700 kroner per inhabitant. Of the total spent, 82.9 million kroner or 73 per cent was derived from the central government budget for public education and 31.3 million kroner, 27 per cent, from subsidies allocated by the local authorities.

Sources. Iceland: Ministry of Education and Central Statistical Bureau, reply to Unesco questionnaire for years 1951–54; International Bureau of Education, *International Yearbook of Education*, 1956.

SUMMARY OF SCHOOL STATISTICS, 1951–55

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public						
	Total	**1955**	...	...	...	...	...
	„	1954	1	5	4	400	160
	„	1953	1	5	4	250	102
	„	1952	1	5	4	238	105
	„	1951	1	8	5	246	120
Primary	Primary schools						
	Total	**1955**	...	[1]**807**	...	***19 000**	...
	„	1954	[2]135	[3]630	[3]174	17 200	...
	„	1953	[2]129	[3]611	[3]168	16 850	...
	„	1952	[2]128	[3]577	[3]166	15 560	...
	„	1951	[2]125	[3]577	[3]162	15 116	...
Secondary							
General	Grammar schools (*menntaskólar*)	1955	...	[1]67	...	847	...
	Lower secondary schools	1955	...	[1]369	...	5 243	...
	Total	**1955**	...	[1]**436**	...	**6 090**	...
	„	1954	64	[4]260	[4]48	5 585	...
	„	1953	63	[4]262	[4]46	5 397	...
	„	1952	59	[4]247	...	5 467	...
	„	1951	57	[4]229	...	5 338	...
Vocational	Vocational schools	1955	...	[1]118	...	1 532	...
	Commercial schools	1955	...	[1]24	...	359	...
	Agricultural schools	1955	...	[1]15	...	81	...
	Domestic science schools	1955	...	[1]52	...	337	337
	Nursing and midwifery schools	1955	...	[1]24	...	96	96
	Naval schools	1955	...	[1]32	...	237	...
	Total	**1955**	...	[1]**265**	...	**2 642**	...
	„	1954	49	[5]92	[5]44	[6]2 883	...
	„	1953	46	[5]92	[5]45	[6]2 637	...
	„	1952	46	[5]90	[5]43	[6]2 640	[6]846
	„	1951	50	[5]102	[5]55	[6]2 665	[6]842
Teacher training	Teacher training schools						
	Total	**1955**	...	[1]**39**	...	**119**	...
	„	1954	3	41	10	142	64
	„	1953	3	40	9	153	60
	„	1952	3	40	9	159	56
	„	1951	3	39	11	168	69
Higher							
General and technical	University						
	Total	**1955**	**1**	**69**	...	**750**	...
	„	1954	1	68	1	750	...
	„	1953	1	62	1	700	...
	„	1952	1	61	1	692	131
	„	1951	1	60	1	680	130
Special	School for deaf-mutes						
	Total	**1955**	**1**	**4**	...	**24**	...
	„	1954	1	5	1	25	11
	„	1953	1	4	1	11	7
	„	1952	1	4	1	15	11
	„	1951	1	4	1	8	—

1. Including auxiliary teachers.
2. Not including itinerant schools.
3. Teachers in junior secondary schools and part of the teachers in middle schools are included with those of the primary schools to which they are attached.
4. Not including part-time teachers who numbered 151 (F. 56) in 1954, nor teachers in junior secondary schools, who are included with those of primary schools.
5. Not including part-time teachers who numbered 212 (F. 30) in 1954.
6. Including pupils in art and music schools and physical culture schools, who numbered 380 (F. 221) in 1954. Not including part-time pupils (250 in 1954).

THE EDUCATIONAL SYSTEM

The Constitution of India (a) directs the provision of universal, free and compulsory education for children up to the age of 14 years (Article 45); (b) precludes denial of education on grounds of religion, race, caste or language (Article 29); (c) promotes with special care the educational and economic interests of the weaker sections of the people, particularly scheduled castes and tribes (Article 46); (d) prohibits religious instruction in institutions maintained out of state funds and compulsion in any recognized institution to take part in any religious education (Article 28); and (e) gives all minorities the right to establish and administer educational institutions, and assures to them grant-in-aid without discrimination (Article 30).

The Government of India Act of 1919 introduced dyarchy in the Provinces. Till then education had been directly administered by the Government. But in the dyarchic system, education was one of the matters transferred to popular control, and since that time it has remained a provincial or state responsibility except for post-school technical and university education, which are the concern of the Central Government. The Central Ministry of Education, however, is responsible for all education in centrally administered areas.

In the States, the schools directly managed by the Government form a comparatively small proportion of the total number. The large majority are under the following kinds of management:

Local bodies (district boards, municipalities). Although the main concern of local bodies is primary education, some secondary schools in different States are also managed by them. Such schools are subsidized on scales and conditions varying from State to State.

Religious and other denominational bodies. These agencies are responsible for running a large number of educational institutions in the country. They have contributed greatly to the expansion of secondary education and the maintenance of efficient standards.

Registered trusts or societies. Many private schools are run by registered trusts or societies; these often constitute the most satisfactory form of private management.

Private bodies and individuals. Some schools in each State are run by private bodies or individuals who are the proprietors of the institutions. This kind of management is being gradually discouraged.

The diagram on page 651 shows the structure of the school system.

THE DEVELOPMENT OF SECONDARY EDUCATION

In the decade preceding 1900, according to the Recommendations of the Indian Education Commission of 1882 the Government of India withdrew from direct management of secondary schools. This led to private agencies playing a larger role in the field of secondary education. There was a rapid increase in the number of secondary schools, which, with English as the medium of teaching, imparted instruction through a unitary course of studies in which great emphasis was placed on literary subjects. From the establishment of the universities in 1857, secondary schools functioned merely as institutions preparing students for higher education. Although the Hunter Commission (1882) recommended that secondary schools should offer two 'avenues', literary and vocational, the recommendations did not produce any effect. The Indian Universities Act of 1904, by which secondary schools were to be recognized by universities, only strengthened the domination of the university.

1905–21: Post-Curzon period. Although Lord Curzon's policies were largely reversed by his successors, most of his educational programmes were held to be sound and progressive. Secondary schools were controlled by conditions prescribed for recognition by the Education Departments and by the university. Government policy also aimed at the improvement of secondary education by providing trained teachers, hostels, manual training, better science teaching, increased grants-in-aid and more training colleges (Resolution on Educational Policy, 1913).

At the same time, in response to the new movement to free secondary education from the sway of the university, some Provinces (States) set up Boards of Secondary Education, which framed syllabuses, instituted examinations and issued a School Leaving Certificate, on the basis of which pupils were to be admitted to colleges or the services. The School Leaving Certificate examination thus came into being as an alternative to the Matriculation.

The attempts made in this period to introduce and develop vocational and pre-vocational courses failed, largely owing to lack of planning and co-ordination. But one reform was carried out successfully, namely, the substitution of Indian languages for English as media of instruction in the middle schools.

The latter part of this period saw the beginning of a large expansion in the number of secondary schools.

1921–37: The period of dyarchy. By the Government of India Act of 1919, education, as a 'transferred subject', passed under the control of Indian ministers in the different State Governments. This, however, was accompanied by an almost complete withdrawal of the Government of India from the field of education. This 'divorce of the Government of India from education' as the Hartog Committee called it, cut off all co-ordination between the Provinces, and is largely responsible for the present wide variations between the States in educational policies, objectives, and types of institution. Although the Central

Advisory Board of Education, which had been abolished in 1923, was revived in 1935, it did not make any significant contribution in this direction. However, owing to an upsurge in political and social consciousness, educational institutions of all types expanded with remarkable rapidity. From 1922 to 1937, the number of secondary schools increased from 7,530 to 13,056, and the pupils from 1,106,803 to 2,287,872. The Indian languages were gradually supplanting English as media of instruction for most of the subjects of the high school classes.

1937–47: Period of provincial autonomy. Provincial autonomy, which came into being under the Government of India Act of 1935, put an end to the dyarchic categories of 'reserved' and 'transferred' subjects, and introduced instead the new categories called 'Central' and 'State' subjects. Since by this reform the State acquired a considerable amount of freedom, one would have expected to find a striking advance in education during this decade. In actual fact, however, this was a period of slow development. The causes were (a) the preoccupation of the Government with the second world war; (b) political unrest in the country; and (c) the economic dislocations of the post-war period.

The economic factor had great repercussions on the development of education during this period. The rise in the cost of living, together with the increasing cost of education, particularly hit the middle classes from whom the secondary schools drew their main supply of pupils. The poorer classes could not afford secondary education, although they were becoming more and more education-conscious. Pupils in the secondary schools were, therefore, increasingly drawn from the well-to-do sections of society.

However, a few forward steps that were taken in this period may be recorded here. The mother tongue was accepted as the medium of instruction in secondary schools, and more and better textbooks in the Indian languages appeared. Technical, commercial and agricultural high schools were started by State Governments and grants-in-aid were increased in respect of non-literary courses.

1947–55; Secondary education programmes on an All-India scale. Educational reconstruction, which had received very little impetus under provincial autonomy, gathered momentum with the formation of the first Federal Ministry of Education in 1946. The States began actively to initiate reforms. Many of them appointed committees to suggest new measures of reform and reconstruction. In 1948, the Central Advisory Board of Education examined the whole field of secondary education, and resolved that a commission be appointed by the Government of India to (a) review the present position of secondary education in India, and (b) to make recommendations in regard to the various problems related thereto. This resulted in the appointment of the Tara Chand Committee, whose report was considered by the Central Advisory Board in 1949, which again urged the appointment of a commission to examine the whole subject of the aims, objectives and purposes of secondary education and its relation to basic and university education. Meanwhile, the University Education Commission appointed in 1948 under Dr. S. Radhakrishnan made a review of secondary education in its report, and recommended that the standard of admission to the university should correspond to that of the present Intermediate Examination, i.e. after 12 years' schooling.

In 1952, the Government appointed a Secondary Education Commission (chairman, Dr. A. Lakshmanaswami Mudaliar) which, after a comprehensive survey and study, submitted its report in 1953. The far-reaching proposals made in this report have been generally accepted by the State Governments and by the Central Advisory Board.

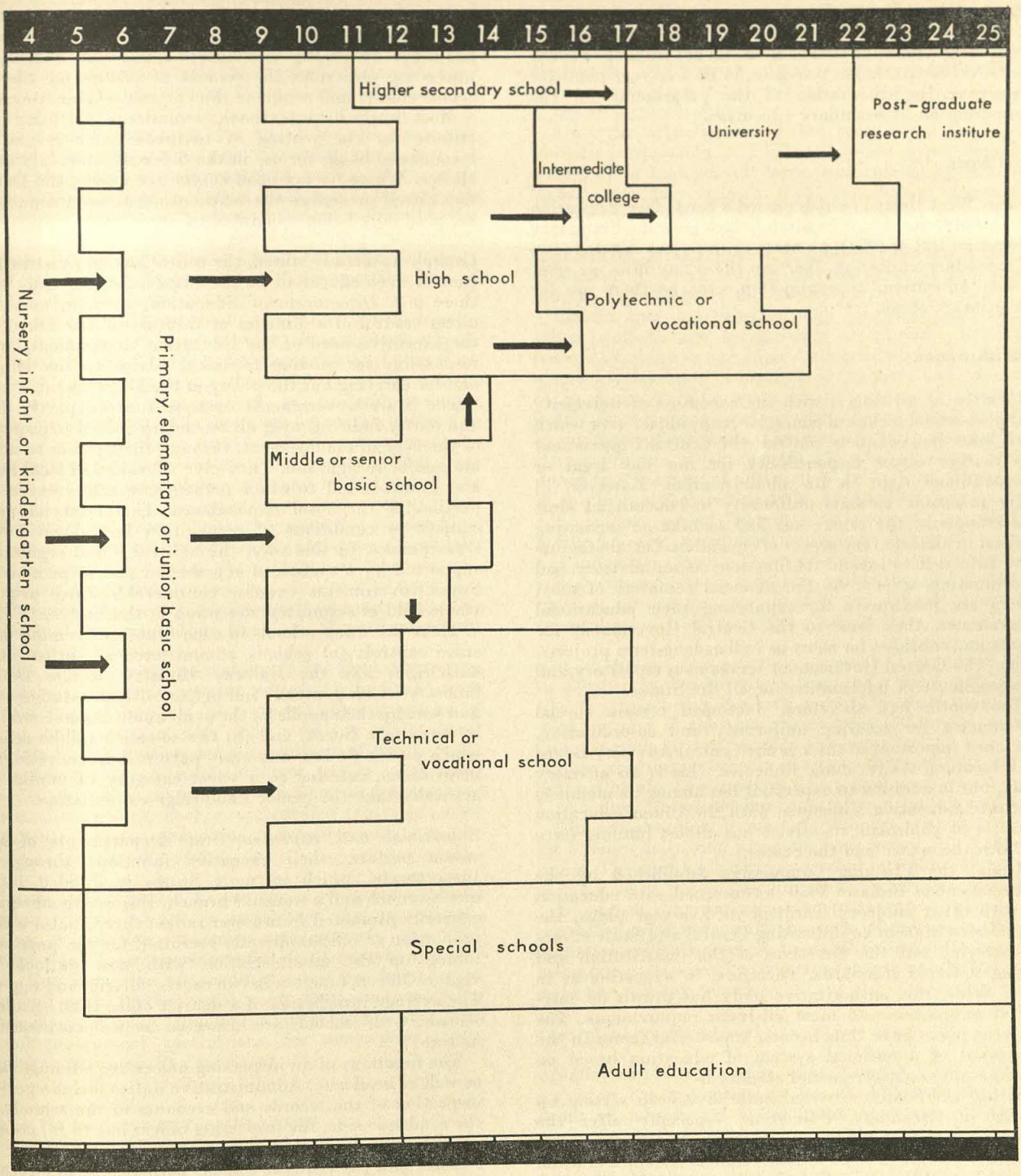
The general pattern of secondary education as envisaged in the Mudaliar Commission Report, and as approved by the Central Advisory Board, is as follows: (a) 8 years of integrated elementary (basic) education; (b) 3 (or 4) years of secondary education, through diversified courses of study, in which the first year will explore and determine the pupil's aptitude and the next 2 (or 3) years constitute his full study; and (c) 3 years of university education for the first degree after the higher secondary school.

In view of the national scale and character of secondary education, and in accordance with the Secondary Education Commission Report and its acceptance by the Central Advisory Board, the Government of India assumed a certain measure of direct responsibility, and set up an All-India Council for Secondary Education consisting of representatives of Central and State Governments and educational authorities. The main function of this body is to make available to the Central and State Governments concrete proposals for secondary education reform and

GLOSSARY

NOTE. Educational systems in India vary from State to State. The diagram shows the main types of school found throughout the country, the variations in ages of attendance and the general lines of progression (indicated by arrows).

elementary school: see *primary school* below.
high school: general secondary school.
higher secondary school: general secondary school including 1-year post-secondary course leading direct to university.
intermediate college: non-degree-granting college, providing transitional course from secondary school to university. Some degree-granting institutions include intermediate classes.
junior basic school: craft-centred lower primary school.
middle school: lower general secondary school.
nursery, infant or kindergarten school: pre-primary school.
polytechnic or vocational school: technical college.
primary or elementary school: primary school varying in organization from State to State.
senior basic school: craft-centred experimental upper primary school.
special schools: schools for the handicapped or for juvenile delinquents.
technical or vocational school: vocational secondary or vocational training school.
university: degree-granting universities and colleges including faculties of arts, science, engineering and medicine.


4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25
Higher secondary school
University
Post-graduate research institute
Intermediate college
High school
Polytechnic or vocational school
Nursery, infant or kindergarten school
Primary, elementary or junior basic school
Middle or senior basic school
Technical or vocational school
Special schools
Adult education

reconstruction. Engaged in a country-wide programme, the All-India Council for Secondary Education is assisted by expert guidance as well as financial aid from the centre. The Government makes provision in its five-year plans for progressive implementation of the programme for the reconstruction of secondary education.

Legal basis

Except West Bengal (which passed a Secondary Education Act in 1948) and Uttar Pradesh (which passed a Secondary Education Bill in 1921), no State in India has enacted laws on secondary education. Nor are there any laws on compulsory education, apprenticeship, etc., as there are for the primary stage.

Administration

Education at all stages, with the exception of university and post-school technical education, is a subject over which each State has complete control; the Central Government has neither direct responsibility for, nor any legal or constitutional right in its administration. However, in order to ensure national uniformity in educational aims and standards, the centre has had to take an increasing interest in almost every aspect of education. Certain factors have helped it to extend its functions as an advisory and co-ordinating agency. As the financial resources of most States are inadequate for supporting their educational programmes, they look to the Central Government for grants and subsidies for short as well as long-term projects. Again, the Central Government serves as a repository and clearing house of information for all the States.

The centre has, therefore, developed certain special instruments for securing uniformity and co-ordination. The most important of these is the Central Advisory Board of Education. As its name indicates, this is an advisory body, but in addition to experts, it has among its members all State Education Ministers. With the Union Education Minister as chairman, its advice has almost binding force on both the centre and the States.

Again, the Planning Commission established by the Government of India in 1950 is concerned with education as with other subjects. Through its five-year plans, the commission aims at co-ordinating Central and State efforts for carrying out the directives of the Constitution and raising national standards. Therefore, in education as in other fields, this authoritative body has drawn up integrated programmes to meet all-India requirements. The five-year plans have thus become a powerful factor in the promotion of a national system of education based on common aims, objectives and standards.

Within the States, Governments have been setting up Boards of Secondary Education, especially after the recommendation of the Secondary Education Commission, and now—except in the Punjab, Tripura, Assam Himachal Pradesh and Manipur—all States have such boards. The boards are mainly advisory in character; they include secondary school teachers and headmasters, and representatives of the universities. Through their syllabus committees, they frame and recommend curricula for approval by the Government and they also conduct the final school leaving examination. In the States which have yet to set up Secondary Education Boards, the university prescribes the courses of studies for the high school classes and conducts the external examination.

Most States have textbook committees which lay down criteria for the writing of textbooks and review and recommend books for use in the different secondary school classes. Where no textbook committee exists, the Department itself prescribes the textbooks, but such committees are gradually being appointed in every State.

Control. As already stated, the centre has no constitutional control over education in the States. At the state level, there is a Directorate of Education, working under the direct control of a Minister of Education. The Director is the executive head of the Education Department, and is responsible for offering technical advice to the Minister and for carrying out the policy of the Department.

The State Governments exercise control, partly direct and partly indirect, over all secondary schools irrespective of the type of management, through their power to accord aid and/or recognition. They give subsidies to local bodies and grants-in-aid to other managements to meet a proportion of the total expenditure. This financial aid is subject to conditions of recognition laid down by the Government. In this way, through rules and regulations, supported by a system of supervision and inspection, the State Governments exercise considerable sway over the whole field of secondary education in the States.

There are a few schools in each State not coming under state control: (a) schools administered by other public authorities like the Railway Ministry or the Defence Ministry which generally fall in line with the state system, and send up their pupils for the final examinations conducted by the State Board, and (b) the so-called public schools, which do not fit into any state pattern but are residential institutions, catering to a select category of pupils, who generally take the Senior Cambridge examination.

Supervision and inspection. State Departments of Education perform their executive functions through an Inspectorate, which in most States is divided into a men's branch and a women's branch. Inspecting officers are generally promoted from lower ranks; there is also a small proportion of officers directly recruited for the purpose of toning up the administration with new outlook and vigour. Officers function in two cadres, district and regional. The average jurisdiction of a district office is 60 secondary schools. Girls' schools are inspected by women inspecting officers.

The functions of an inspecting officer are administrative as well as academic. Administrative duties include periodic inspection of the records and accounts of the schools. On the academic side, the inspecting officer has to (a) conduct annual inspections and assess the achievements of the schools, and (b) visit the schools periodically to advise on improved methods. The inspecting officer occupies a key-position in the Education Department. He is in direct and constant contact with the schools, and it is through him that all necessary information passes to the schools from the Department and to the Department from the schools.

Finance. Sources of revenue at the State level are: (a) government funds (grants); (b) district board and municipal board funds; (c) private endowments; and (d) fees. Government grants and fees account for more than four-fifths of the total income.

Grants-in-aid are made by the State to privately-managed institutions for the following purposes: (a) towards the salaries and allowances of teachers; (b) towards the rent and repair of the school building; (c) towards the expenditure on furniture, equipment and teaching materials; (d) for purchase, acquisition and extension of the school building; (e) for acquisition of land for school building, hostel building or playgrounds; (f) for meeting loss of income due to fee-concessions.

For payment of these grants, the States lay down conditions from time to time. Almost all secondary schools levy fees, the rate varying from one kind of school to another. Generally speaking, the rate is lowest in government institutions, and highest in privately-managed schools. In most States the fee-range for private schools in receipt of grants-in-aid is fixed by the Government. Some institutions prefer to do without such grants so that their freedom in the matter of fees may not be fettered. These are mostly schools for the upper classes, and in large cities.

All State Governments make provision for scholarships, stipends and fee-remissions for needy and deserving pupils. There are also scholarships for children of teachers, displaced persons, military personnel, etc., as also for pupils of scheduled castes and backward communities. A few scholarships are granted on the basis of performance at the public examination.

Scales of pay vary from State to State. The salary scales for teachers in privately-managed schools are laid down by the State Education Department, and payment of salaries in accordance with these scales is an essential condition for recognition and for payment of grants-in-aid to the schools. These scales, however, are in many cases lower than those enjoyed by teachers in government schools. Government teachers are entitled to pension after retirement, but non-government teachers only get the benefit of the provident fund.

Buildings and equipment. Conditions of recognition include minimum requirements in respect of accommodation, lighting, ventilation, sanitary arrangements, etc. The average floor space recommended is 10 square feet per pupil. But expansion of secondary education has been so great and rapid in the recent years that accommodation has become an acute problem. Capital grants are given to non-government institutions for constructing new buildings and renewing equipment.

TYPES OF SECONDARY EDUCATION

The secondary school comprises two stages, junior and senior. The former is also called the middle school or lower secondary school or, if it adopts the basic system, the senior basic school. The junior stage extends in most States over 3 years, and in a few States, 4 years. The senior stage, known as the high school, is spread over 3 to 4 years but, in some cases, where the middle school goes up to class 8, the high school consists of the last two classes—9 and 10. The middle school is generally attached to the high school so that the 6 or 7 years of the secondary stage form one course. Quite often the middle school classes form the apex of the elementary school.

After the introduction of the reorganized pattern of secondary education in 1955, two other types of senior secondary or high schools have been coming up, viz., the higher secondary school, and the (higher secondary) multi-purpose school. The higher secondary school adds one more year of study, which is expected to upgrade the standard of attainment of the school leavers. This additional year is taken from the first year of the former intermediate classes of the university.

Besides this upgrading of high into higher secondary schools, efforts are being made to provide diversified courses of study in the higher secondary schools, such as science, technology, commerce, agriculture, and fine arts, to meet the varying aptitudes, interests and talents of pupils. Such higher secondary schools are called multilateral or multi-purpose schools. The diversification into different streams begins at the age of 14 plus. In some States, diversified courses of instruction have been introduced in the high schools without the accompanying upgrading.

Secondary school leavers can proceed to colleges, polytechnics or vocational institutions like trade schools and industrial schools. Those who wish to join professional colleges in engineering, medicine, agriculture and commerce have at present to pass through the pre-university, the pre-professional or the intermediate courses.

The school year. This generally covers the period from June to April. It is divided into a long and a short term, June to December being the long term. The total number of working days in the year varies from 180 to 200, with a long vacation for summer and two short ones in mid-year. Within the terms, schools observe other public holidays notified by the Government. The school week varies from 5 to 6 days, the sixth day being often a half-day session.

The school ordinarily meets for 6 hours, with instruction for 5 hours daily, and provision for a longer and a shorter recess. The working hours are divided into 35 to 40 periods in the week, a period being of 40 or 45 minutes' duration.

In certain urban areas, owing to the great demand for secondary education and the lack of adequate accommodation, schools work in two shifts. The total hours of instruction per week in these schools are nearly the same as in the full-day schools.

General secondary schools

Middle schools and senior basic schools. These cater to pupils of the age group 10 to 13. Although both these types of schools are a continuation of the primary or junior basic stage and cover a similar educational programme, they adopt different methods of approach and teaching. The curriculum at this stage includes language and literature, social studies, general science, mathematics, citizenship training, art and music, craft and physical education. Languages taught include the mother tongue or the regional language, English in most States, and the national language Hindi (or any other Indian language

in areas where Hindi is also the regional language). The aim of instruction at this stage is to introduce the pupil in a general way to significant departments of human knowledge and activity.

The high school, higher secondary and multi-purpose schools. This stage covers the age group 14 to 17. Although the trend is to convert all high schools into higher secondary schools (see above), for the present there are both high schools and higher secondary schools functioning side by side. The high school curriculum, framed on the basis of abilities and interests which have taken shape in the middle school, enlarges and enriches the general courses already covered. In most States the course subjects are the same as in the previous stage, i.e., languages, science, mathematics, social studies (or history and geography), arts and crafts, physical education and citizenship training. Some States have not yet made science a compulsory subject of study. However, provision is made in several States for special courses in mathematics and science as optionals.

The higher secondary school provides (a) a core curriculum common to all pupils, consisting of languages, general science including mathematics, social studies and a craft, and (b) diversified courses of study in one of seven groups, namely humanities, sciences, technology, commerce, agriculture, fine arts and home science. The last year of the middle school is generally an exploratory stage when teachers are expected to discover the particular programme most suited to the pupil's abilities and interests. Crafts include hand spinning and weaving, woodwork, metal work, gardening, tailoring, sewing, needlework and embroidery, leather work, clay modelling and papermâché, workshop practice and printing technology. Each diversified course includes several interrelated subjects out of which the pupil elects his group according to his tastes and interests.

At present, at the end of the high or higher secondary course, pupils offer all their subjects for the public examinations conducted by the state boards. Cumulative records are being kept in more and more schools, and some States are trying to give more weight to internal examination.

Teaching staff. Teachers of high school classes are graduates, with an additional degree in education. The middle school is generally staffed with secondary grade trained teachers. The regional and national languages and art and craft subjects are taught by undergraduate teachers who hold diplomas or certificates as prescribed by the respective States. Higher secondary schools require teachers who hold a master's degree in addition to a diploma in teaching, and teachers with special technical qualifications to handle the practical streams. But the problem of teacher shortage, which was already acute, has now become further aggravated by the rapid expansion in secondary education, by the upgrading of high schools and by the introduction of diversified courses.

Teachers' pay varies from State to State, and from management to management. It may be said generally that scales of pay are not attractive enough to draw the best material to the profession, especially in respect of the technical courses. The problem of raising the pay and the status of teachers is being actively considered.

Teachers are recruited either through the Public Services Commission, the employment exchanges or departmental agencies.

Two classes of teacher training institution prepare teachers for secondary schools: (a) secondary teacher training institutions and (b) graduate teacher training institutions. The first is for those holding the High School or Higher Secondary School Certificate, and provides training, generally speaking, for 2 years. The second is for university graduates, a 1-year course which prepares them for the Bachelor of Education, Bachelor of Teaching or Licentiate in Teaching degrees. Eighteen universities also provide courses for the degrees of Master of Education, a 1- or 2-year course after the B.T. or B.Ed. degree, and Ph.D., which requires 2 to 3 years of study after the M.Ed. degree, and for research work.

Training institutions are of two types, basic and non-basic. There are training colleges exclusively for men and for women, while others are co-educational. Training colleges are generally recognized by the universities, which also award the diploma, except in one State where the training colleges are recognized, and the teaching diploma is awarded, by the State Department of Education.

In the basic training institutions the curriculum includes the philosophy and sociology of basic education, basic methods, theory and practice in crafts, psychology and administration. In the secondary training school, the curriculum covers, in addition to a similar pattern of subjects, a study of texts in the regional language. The practical part includes practice teaching, criticism lessons, observation and analysis of class periods, study of timetables, maintenance of records, case studies of selected children, preparation of aids, etc.

Teachers in secondary training schools are trained graduates. In addition, there are specialist teachers for language, crafts, physical training and art. Teachers in graduate training colleges should hold a master's degree, and a bachelor's diploma in education, and should preferably have had teaching experience in a secondary school. In addition to the principal, vice-principal and subject teachers, training colleges have posts of specialists for arts and crafts, physical education and psychology practicals.

The facilities available for training teachers for secondary schools are inadequate compared to the need, although progress is being made both towards more training institutions and more trained teachers. The percentage of trained teachers was 60 at the end of the first five-year plan as against 54 at the beginning. It is expected to rise to 68 at the end of the second plan in 1960–61.

In the field of teacher training, extension services have come to assume an increasing importance in the last 4 years. Initiated by the Government of India, these services are now being offered by 54 departments attached to selected training colleges. The departments give in-service training to teachers through seminars, workshops, conferences and study circles, and through audio-visual, library and guidance services. The training colleges also are benefited by this dynamic in-service training programme as they are made to come into living contact with schools and teachers and their actual problems.

Agricultural education

Manjri type school. This type of school is designed to combine practical training with theory. A farm of at least 150 acres is attached to each school. The students do all the work, including cooking, laundry and cleaning. The object is to make each school self-supporting on the products of the farm. The programme of studies, which covers two years, includes agriculture, animal husbandry, dairying, animal disease, horticulture, marketing and village industry. These schools are primarily organized to prepare students for village leadership. Those who have gone through a basic school and have had some secondary education but have not necessarily passed the Matriculation examination are admitted to the Manjri school. There are 50 Manjri type schools in Bombay State, and 150 such schools are expected to be established throughout India by the end of the second five-year plan.

Rural institutes. Ten rural institutes have been functioning since 1956–57 under the direction and supervision of the National Council of Rural Higher Education. The following courses are offered: (a) 3-year diploma course in rural education; (b) 3-year certificate in rural and civil engineering; (c) 2-year certificate course in agricultural sciences; (d) preparatory course for matriculates to prepare them for entry into the 3-year diploma course. The diploma course follows on after the Higher Secondary Examination, and the diploma is regarded as equivalent in standard to an ordinary degree at a university. Core subjects such as rural problems, the history of civilization, and regional languages are also taught in these institutes.

Technical education

This term includes vocational, technical and professional training. The Ministry of Labour and Employment is in charge of industrial training institutes, while the Ministry of Education is seeking to expand the provision of technical courses in multi-purpose schools. Private industry is also being urged to start technical training programmes.

On a recommendation made by the Central Advisory Board of Education in 1945, the Government of India constituted the All-India Council for Technical Education, the Council's principal duty being to advise the Central Government on the effective organization and planning of higher technical education in India, and to bring about proper co-ordination between the different institutions. The council appointed six All-India Boards of Technical Studies, one for each of the following: applied art, architecture and regional planning, engineering and metallurgy, chemical engineering and chemical technology, commerce and business administration, and textile technology. The boards have prepared diploma courses of a high standard, laying emphasis on the practical side. To attain co-ordinated development of technical education in each State and ensure proper standards of instruction, examinations, etc., in technical institutions, the council has drawn up a model scheme for the establishment of State Boards of Technical Education. Such boards have been established in several States.

There are two distinct levels of employment in both industry and government so far as the matriculates and non-matriculates are concerned: (a) the supervisor, foreman or overseer level; (b) the skilled level. The two are sharply demarcated, and each has its own educational requirements and training institutions. They cater to the needs of pupils who have completed the secondary school or, in some cases, the middle school.

Industrial training institutes or centres. There are now over 60 such centres in India, offering training courses in 28 technical trades and 18 vocational trades. These centres were under the direct control of the Ministry of Labour and Employment up to 1956. They have now been transferred to the State Governments where they are operated by the Labour Division, except in Bombay where they have been placed under the Director of Technical Education.

The period of training in the vocational trades is 12 months, and in the technical trades 2 years, of which the first 18 months are spent in the institute and the remaining 6 months in the factory or industrial plant. Technical trade schools admit only over high school age students (16 to 25), but vocational trade schools admit trainees of 14 years upwards, serving the same age group as the secondary school. Study up to the matriculation stage is required for certain technical trades only. A certificate of proficiency is awarded to each trainee upon the completion of the programme. The National Council for Training in Vocational Trades is attempting to establish uniform standards throughout all the States and a uniform certificate of proficiency.

Trainees are not charged fees, and about one-third of them receive a scholarship payment of Rs.25 per month to cover living costs. Selection is made by committees on the basis of the secondary school record and personal interview. In general, only matriculates are considered, preference being given to those with high school chemistry, physics and mathematics.

Some centres are located in conjunction with other institutions such as technical high schools and technical institutes. This permits the sharing of equipment and facilities.

In the technical trades, each trainee receives training in one major trade and one allied trade. Related instruction in a subject like arithmetic is given either along with the major trade training or in separate classes by a special instructor.

The shortage of competent instructional staff is a problem. As the scales of pay are far below those of industry, highly skilled tradesmen cannot be obtained for teaching.

Employment opportunities vary widely among the trades. Craftsmen and turners are more in demand than radio or motor mechanics. There is need for greater co-operation from industry.

Technical high schools. Separate technical high schools have been established in Bombay State for teaching the elements of mechanical and electrical engineering, and providing a certain amount of workshop practice to students of the high school classes. Along with these technical subjects, the students also study certain core subjects such as

regional languages, Hindi, social studies and science. In fact these schools correspond to the technical streams of the multi-purpose schools; they give a vocational bias but do not train the student for any specific vocation. Many of the students from these schools go on to a polytechnic or an engineering college.

Schools of industry. These provide specific craft training in weaving, carpentry, auto mechanics, turning and printing. In some cases they are combined with a technical high school and thus share shop facilities. The programme is of 2 years' duration. Students who have passed the middle school or its equivalent are admitted. The minimum age of admission is 15 years. Students who complete the training are considered semi-skilled. They can complete their training by apprenticing under a skilled worker.

Junior technical schools. This is a scheme proposed by the Ministry of Scientific Research and Cultural Affairs. These schools are to be established in industrial centres and wherever possible attached to a polytechnic so as to share common instructional facilities. The course is to be of 3 years' duration and is intended to provide vocational training opportunities in the technical trades to the secondary school-age boys of 14 to 17 years. The curriculum is to include a study of the humanities and languages, general science and mathematics, elementary mechanical engineering, engineering drawing and workshop training. Specific trade training is to be provided in turning, machining, fitting, smithing, tool-making, welding, sheet metal work, pattern making, moulding, electrical work, motor mechanics, and other technical trades. Completion of the 3-year programme is expected to lead either to further vocational training at an industrial training centre or to further technical education in a polytechnic.

Commercial education

Commercial high schools. These schools correspond to the commerce stream in the multi-purpose school. The course includes commerce and book-keeping, typewriting and shorthand, and prepares students for the SSC. (Secondary School Certificate) examination so that they will be eligible for entrance into a commerce or arts college.

Government Commercial Diploma and Commercial Certificate examinations. Bombay State has established a Government Commercial Diploma and Government Commercial Certificate. These qualify for positions in government service. To be eligible for the diploma examination a candidate should attend a recognized institution for 1 year if he is a matriculate and for 2 years if he is a non-matriculate. The examination covers English, commercial arithmetic, elements of book-keeping, commercial geography, methods of business, and one subject elected from shorthand, accountancy, typewriting, Indian administration, Indian banking, insurance, secretarial practice or salesmanship.

Commercial certificate examinations are taken by government servants and employees in commercial concerns. The certificates are of two kinds, one of regular and another of higher proficiency.

Out-of-class activities

Most secondary schools provide facilities for out-of-class activities; in some institutions these activities have become co-curricular and form an integral part of the regular educational programme.

Wherever playgrounds are available, sports and games are greatly encouraged. Attention is also being paid to the development of indigenous group games which are popular locally.

The scout and guide movements have taken deep root in India, and an association called the Bharat Scouts and Guides has many branches in all the States; a large number of schools have scout troops and scout camps are frequently organized. There is an Auxiliary Cadet Corps, open to pupils of the last two standards in all schools; the officers are drawn largely from the teaching profession so that teachers and students are brought into closer contact in the training camps.

There are many other extra-curricular or co-curricular activities which schools in all parts of India are developing to a greater or lesser degree: debates, dramatic performances, school magazines, excursions, gardening, social service projects, art projects and students' camps. In progressive institutions students are entrusted with the planning and organization of these activities. Quite a few schools have students' government in which the students not only have a share in the organization of extra-curricular programmes but are also sometimes consulted in internal management and administration.

TRENDS AND PROBLEMS

Since Independence, the expansion in secondary education in India has been remarkable, as is evident from the enormously increased number of schools and enrolment of pupils. It is expected that this tempo will be maintained during the third five-year plan.

Secondary education has a particularly vital role to play in the far-reaching social, cultural and economic revolution which is taking place in India. Not only does trade and industry need legions of properly qualified young men to staff the contemplated programmes of expansion, but an army of teachers is also needed for the primary schools under the scheme for providing free and compulsory education to all children in the age-group 6 to 11. This means not merely the opening of more secondary schools but also higher standards for the pupils, so that at the end of their course they may acquire a degree of academic proficiency comparable to that attained by school leavers in advanced countries. To this end the country has already accepted a programme of upgrading the high into higher secondary schools by the addition of one more year, and of improving the quality and content of instruction by introducing a reorganized and enriched curriculum, which means the provision of science in all the schools as well as a better qualified staff and fuller equipment for laboratory, library, and co-curricular activities.

One main defect of the existing system is that it is unilinear and that all the pupils, regardless of differing aptitudes and abilities, are pressed into one pattern. The

multi-purpose school as a corrective to this 'single-track' system, provides a diversity of educational programmes in the form of electives. At the same time pupils study a certain common core of subjects of general value so that they may grow up as intelligent citizens of a democracy. The technology, agriculture, commerce, fine arts and home science courses in these schools have been included in the curriculum both on account of their educational value and because they are to serve as terminal education for large numbers. The successful functioning of these schools is, at the moment, somewhat hampered by the shortage of trained and suitably qualified teachers in the practical streams, and the Government is engaged in finding a solution to this problem. Nevertheless, there is considerable enthusiasm for these schools, and about 10 per cent of the existing high schools have already been converted to this pattern.

Teacher shortages are also a feature of the upgraded higher secondary schools, where a large number of those who have a Master's degree are needed for teaching the core subjects as well as the electives, especially the sciences. Various programmes of in-service training for improving the qualifications of the existing teachers have been devised to meet the situation.

Under the reconstruction programme, special attention has been given to the teaching of science. In pursuance of a major project, 40 selected teachers were sent abroad for special training in methods of science teaching. A science club movement has also been started, and is expected to lead to an organized search for science talent.

Examination reform. The new objectives of the reorganized secondary education call for new evaluation and testing procedures, making examinations not a test of memory but a measure of the pupil's educational growth. An all-India programme of examination reform has been launched, with the help of specially trained personnel, so that in a period of 10 years the new techniques of internal and external assessment will have been adopted by the State Examining Boards.

Textbooks. The textbooks now in use in Indian schools do not come up to standard. This is partly due to the lack of co-ordination between educationists, authors and publishers. The Central Bureau of Textbook Research set up in 1954 helps the States in examining textbook content, and in other matters relating to printing and format. The bureau has developed objective criteria for the evaluation of textbooks.

Guidance and counselling. A Central Bureau of Educational and Vocational Guidance was set up in 1954, and Educational Guidance Bureaux have been established in many of the States. A full programme of educational counselling and guidance, at least in the multi-purpose schools, will be taken up for implementation soon.

The foregoing is a brief account of the existing trends and difficulties. In the underdeveloped countries which are anxious to join the vanguard of progressive nations, secondary education is apt to suffer because it is sandwiched between the large and urgent claims of compulsory primary education on the one hand and the pressing need to produce the leaders of government and industry through an expansion of university education on the other. And yet this middle storey is absolutely vital to the well-being and durability of the entire fabric of education. The secondary schools have to supply properly qualified teachers to run the multitudes of fast-springing elementary schools as well as to prepare well-grounded students for the universities. In India as in other countries the many problems posed by this difficult situation are challenging the resourcefulness and ingenuity of educationists.

[*Text prepared by the Ministry of Education, New Delhi, in October 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): [1]397,540,000.
Area: 1,267,094 square miles; 3,281,769 square kilometres.
Population density: 314 per square mile; 121 per square kilometre.

Summary of school statistics, 1953–56. In 1956/57, a total of 34.5 million persons were enrolled in some 330,000 educational institutions of all levels. This does not include 1,200,000 persons attending adult education schools or literacy centres. Between 1953 and 1956, total school enrolment increased by 23 per cent and the school-going population, representing 7.5 per cent of the total population in 1953, rose to 9 per cent in 1956.

Between 1953 and 1956, enrolment in general secondary schools increased by 25 per cent (female enrolment increased by 39 per cent), enrolment in vocational secondary schools increased by 40 per cent and in secondary teacher training colleges by 24 per cent (female enrolment increased by 11 per cent).

Enrolment in schools of primary education represented 75 per cent of the school-going population; enrolment in schools of general secondary education 21 per cent. Enrolment in pre-primary schools and in teacher training schools represented 0.3 per cent in each case. Enrolment in vocational schools was 0.5 per cent of the total and in general and technical institutions of higher education 2 per cent.

The proportion of girls among the pupils enrolled was as follows: pre-primary education, 42 per cent in 1956/57; 47 per cent in 1953/54; primary education, 31 per cent in 1956/57; 29 per cent in 1953/54; general secondary education, 21 per cent in 1956/57; 18 per cent in 1953/54; secondary teacher training, 27 per cent in 1956/57; 30 per cent in 1953/54.

Total teaching staff, at all levels of education, numbered some 1.1 million, of whom 18 per cent were women. (See Table 2.)

Enrolment trends in secondary education, 1930–56. Average total enrolment in 1955–56 was over five times that of 1930–34, although the ratio obtained by relating the average total enrolment to the estimated population 15–19 years old had not increased in the same proportion. The ratio was 5 for 1930–34 and 16 for 1955–56.

An important fact to note is the high increase in the proportion of girls among secondary school pupils—21 per cent in 1956 as against only 5 per cent in 1930. (See Table 4.)

Examination results in secondary education, 1953–56. Between 1953 and 1956, the number of certificates granted increased by 21 per cent (all students), the number granted to girls increasing by 36 per cent. Among those receiving certificates in 1956/57, 18 per cent were girls as against 16 per cent in 1953/54. (See Table 1.)

Educational finance, 1956/57. In the fiscal year beginning April 1956, 2,063 million rupees were spent on education. The larger part thereof was allocated by State Governments, amounting to 56 per cent of the total receipts. Capital expenditure represented 11 per cent of the total expenditure. (See Table 3.)

Sources. India: Ministry of Education, replies to Unesco questionnaires.

1. Includes data for Kashmir-Jammu, the final status of which has not yet been determined.

1. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–56

Type of diploma or certificate granted	School year							
	1953/54		1954/55		1955/56		1956/57	
	Total	Female	Total	Female	Total	Female	Total	Female
Matriculation and School Leaving Certificate Examination	394 657	59 529	397 540	65 106	426 952	71 901	458 192	81 640
Higher Secondary Certificate	2 348	359	2 474	375	2 542	427	3 357	671
Technical and Industrial School Diploma	15 718	2 450	18 588	2 579	26 393	3 646	35 137	4 946
Commercial School Diploma	13 049	1 551	19 970	2 013	22 508	2 725	11 980	2 012
Agricultural and Forestry School Diploma	999	14	1 510	14	4 162	660	4 138	31
Marine School Diploma	—	—	583	—	677	—	1 211	—
Medicine and Veterinary Science School Diploma	977	591	1 456	873	1 594	873	2 342	1 347
Physical Education School Diploma	1 536	279	1 414	248	1 701	350	2 537	246
Teacher Training Certificate	46 218	12 628	49 427	13 771	54 828	15 230	55 362	14 027

2. SUMMARY OF SCHOOL STATISTICS, 1953–56

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Pre-primary schools, public	1956/57	119			7 116	...
	Pre-primary schools, aided private	1956/57	448	2 131	1 785	31 594	...
	Pre-primary schools, unaided private	1956/57	202			15 307	...
	Total	**1956/57**	**769**	**2 131**	**1 785**	**54 017**	**...**
	,,	1955/56	630	1 880	1 591	35 828	...
	,,	1954/55	513	1 536	1 310	37 050	...
	,,	1953/54	426	1 347	1 065	30 635	...
Primary	Junior basic schools, public	1956/57	41 864			3 745 673	...
	Junior basic schools, aided private	1956/57	4 716	38 970	5 741	361 487	...
	Junior basic schools, unaided private	1956/57	301			20 359	...
	Single teacher schools, public	1956/57	73 986			2 733 293	...
	Other schools, public	1956/57	100 312			11 598 954	...
	Single teacher schools, aided private	1956/57	30 532			1 058 206	...
	Other primary schools, aided private	1956/57	31 878	671 169	115 520	4 133 020	...
	Single teacher schools, unaided private	1956/57	2 195			71 524	...
	Other primary schools, unaided private	1956/57	1 514			200 051	...
	Total	**1956/57**	**287 298**	**710 139**	**121 261**	**23 922 567**	**...**
	,,	1955/56	278 135	691 249	117 067	22 919 734	...
	,,	1954/55	264 626	675 801	113 212	22 196 160	...
	,,	1953/54	239 382	623 255	104 907	20 812 789	6 060 438
Secondary							
General	Secondary schools, public	1956/57	3 342			1 568 558	...
	Secondary schools, aided private	1956/57	6 768	205 617	39 146	3 058 644	...
	Secondary schools, unaided private	1956/57	1 695			559 739	...
	Senior basic schools, public	1956/57	6 377			1 611 948	...
	Senior basic schools, aided private	1956/57	509	52 552	10 188	115 471	...
	Senior basic schools, unaided private	1956/57	11			3 367	...
	Middle schools, public	1956/57	9 617			1 664 762	...
	Middle schools, aided private	1956/57	5 599	114 011	20 908	783 472	...
	Middle schools, unaided private	1956/57	2 373			213 203	...
	Total	**1956/57**	**36 291**	**372 180**	**70 242**	**9 579 164**	**...**
	,,	1955/56	32 568	338 188	58 929	8 526 509	...
	,,	1954/55	27 518	287 735	48 478	6 892 886	...
	,,	1953/54	25 767	269 417	44 733	6 410 048	1 239 806
Vocational	Engineering and technological schools	1956/57	178	2 969	6	41 938	...
	Agricultural schools	1956/57	98	465	4	6 250	...
	Arts and crafts schools	1956/57	304	1 057	617	14 712	11 991
	Commercial schools	1956/57	829	2 296	109	79 889	...
	Industrial schools	1956/57	534	2 860	618	32 563	...
	Schools of medicine	1956/57	116	849	229	7 278	...
	Schools of physical education	1956/57	36	170	14	3 101	...
	Other vocational schools	1956/57	11	110	—	2 695	...
	Total	**1956/57**	**2 106**	**10 776**	**1 597**	**188 426**	**...**
	,,	1955/56	2 144	10 324	1 635	178 754	...
	,,	1954/55	1 892	8 871	1 429	155 546	...
	,,	1953/54	1 791	7 686	1 261	134 161	32 553
Teacher training	Teacher training schools, public	1956/57	552			54 665	...
	Teacher training schools, aided private	1956/57	273	6 721	1 458	24 585	...
	Teacher training schools, unaided private	1956/57	91			3 968	...
	Total	**1956/57**	**916**	**6 721**	**1 458**	**83 218**	**...**
	,,	1955/56	930	6 373	1 431	83 467	...
	,,	1954/55	860	5 694	1 277	76 706	...
	,,	1953/54	808	5 314	1 279	73 435	21 916

Note. Data relate to schools at the level of education indicated but include pupils enrolled in classes at other levels (e.g. pre-primary and secondary pupils enrolled in primary schools). By level of education enrolment data are as follows.

Pre-primary	1956/57	99 313 (41 541 F.)
	1955/56	75 495 (30 361 F.)
	1954/55	60 294 (24 834 F.)
	1953/54	42 051 (19 832 F.)
Primary	1956/57	25 964 808 (8 080 691 F.)
	1955/56	24 511 331 (7 486 686 F.)
	1954/55	22 622 017 (6 740 376 F.)
	1953/54	21 206 218 (6 199 920 F.)
Secondary, General	1956/57	7 413 597 (1 520 219 F.)
	1955/56	6 826 605 (1 340 071 F.)
	1954/55	6 368 010 (1 197 700 F.)
	1953/54	5 945 769 (1 092 621 F.)
Secondary, Teacher training	1956/57	94 845 (25 606 F.)
	1955/56	90 914 (25 881 F.)
	1954/55	81 046 (24 758 F.)
	1953/54	76 633 (23 030 F.)

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Higher							
Teacher training	Teacher training colleges, public	1956/57	73	[1] ...	[1] ...	8 130	...
	Teacher training colleges, aided private	1956/57	46	[1] ...	[1] ...	4 109	...
	Teacher training colleges, unaided private	1956/57	14	[1] ...	[1] ...	1 740	...
	Total	**1956/57**	**133**	[1] ...	[1] ...	**13 979**	...
	,,	1955/56	107	[1] ...	[1] ...	11 262	...
	,,	1954/55	77	[1] ...	[1] ...	8 551	...
	,,	1953/54	61	[1] ...	[1] ...	6 504	2 189
General and technical	Universities	1956/57	33	3 786	216	54 817	...
	Research institutions	1956/57	41	705	28	2 252	...
	Colleges (general education)	1956/57	773	26 339	3 356	570 665	...
	Colleges (professional education)	1956/57	267	[1] 9 675	[1] 812	93 193	...
	Other colleges	1956/57	128	1 630	204	15 289	...
	Total	**1956/57**	**1 242**	[1] **42 135**	[1] **4 616**	**736 216**	...
	,,	1955/56	1 129	[1] 37 865	[1] 3 958	669 917	...
	,,	1954/55	1 041	[1] 34 373	[1] 3 413	609 641	...
	,,	1953/54	957	[1] 30 510	[1] 3 028	547 601	67 672
Special	Schools for the mentally handicapped	1956/57	3	35	22	253	73
	Schools for the blind	1956/57	53	372	65	2 578	470
	Schools for the deaf-mute	1956/57	34	290	92	2 236	752
	Schools for crippled	1956/57	8	29	7	536	100
	Reformatory schools	1956/57	37	370	97	7 273	1 139
	Total	**1956/57**	**135**	**1 096**	**283**	**12 876**	**2 534**
	,,	1955/56	132	1 033	268	12 503	2 333
	,,	1954/55	131	951	243	11 995	2 314
	,,	1953/54	107	801	191	8 729	1 581
Adult	Schools for adults	1956/57	822	44 663	4 375	62 940	4 805
	Literacy centres/classes	1956/57	43 236			1 142 050	140 388
	Total	**1956/57**	**44 058**	**44 663**	**4 375**	**1 204 990**	**145 193**
	,,	1955/56	46 091	44 186	3 912	1 278 827	135 901
	,,	1954/55	43 223	55 236	6 573	1 111 405	115 642
	,,	1953/54	39 965	47 042	6 010	948 847	92 628

1. Teachers of higher teacher training are included with those of colleges for professional education (higher).

3. EDUCATIONAL EXPENDITURE, 1956/57 (in million rupees)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**2 063.1**
Central Government	141.8
State Governments	1 154.0
Local authorities	176.1
Tuition fees and other receipts from parents	401.0
Endowments, etc.	64.4
Other sources (not specified)	125.8

B. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**2 063.1**
Recurring expenditure		1 833.3
For administration or general control	41.2	
For instruction		
Salaries to teachers, etc.	1 126.0	
Other instructional expenditure	470.5	
Other recurring expenditure	195.6	
Capital expenditure		229.8

1. Official exchange rate: 1 rupee = 0.210 U.S. dollar.

2. Closed account.

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**1 833.3**		**100.0**
Administration		[3]41.2		[3]2.2
Direction	9.7		0.5	
Inspection	31.5		1.7	
Instruction		1 596.5		87.1
Pre-primary education	2.9		0.2	
Primary education	584.8		31.9	
Secondary education	645.3		35.2	
General	587.3		32.0	
Vocational	37.8		2.1	
Teacher training	20.2		1.1	
Higher education	330.8		18.0	
Special education	25.9		1.4	
Adult education	6.8		0.4	
Other recurring expenditure		195.6		10.7
Scholarships	90.7		5.0	
Hostel charges	28.9		1.6	
Miscellaneous	76.0		4.1	

3. Includes 5,935,000 rupees (0.32 per cent) spent for central administration.

4. TRENDS IN SECONDARY EDUCATION, 1930–56

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	1 122 142	5	44 786	12	32 163	22			
1931	1 220 894	7	...	...	28 768	25			
1932	1 249 804	8	42 351	15	27 276	26	*1 330	25 909	*5*
1933	1 286 158	8	43 701	16	27 244	27			
1934	1 388 141	9	48 008	15	26 662	26			
1935	1 456 420	9	52 078	14	27 133	27			
1936	1 488 053	9	...	...	26 206	27			
1937	1 576 572	10	55 919	15	26 019	28	1 660	28 303	*6*
1938	1 664 757	10	59 884	15	26 701	29			
1939	1 702 945	11	64 440	16	29 806	28			
1940	1 820 355	12	64 467	17	31 331	29			
1941	1 871 708	13	57 404	16	32 121	29			
1942	1 700 602	13	53 335	17	31 389	30	2 026	30 750	*7*
1943	1 839 918	14	52 930	18	29 220	30			
1944	2 465 255	13	53 247	20	28 891	31			
1945	2 719 985	13	59 065	20	31 411	30			
1946	2 195 095	14	49 690	20	34 095	31			
1947	2 551 032	14	53 912	22	38 895	28	3 069	33 228	*9*
1948	2 971 062	14	59 990	21	51 505	25			
1949	4 366 865	16	95 485	20	67 046	25			
1950	4 817 011	17	120 505	19	70 063	26			
1951	5 343 836	17	126 102	19	66 518	30			
1952	5 675 138	17	142 632	22	72 781	30	5 843	36 984	*16*
1953	5 945 769	18	140 803	23	76 633	30			
1954	6 368 010	19	166 295	22	81 046	31			
1955	6 826 605	20	159 101	...	90 914	28	7 379	38 819	*19*
1956	7 413 597	21	173 714	...	94 845	27			

INDONESIA

THE EDUCATIONAL SYSTEM

Education in Indonesia is based on the Pantja-Sila, the philosophy of the Republican Constitution, and, whether provided by the Government or by private bodies, has as its purpose the achievement of the ideal expressed in the Indonesian motto: *Bhinneka Tunggal Ika*—Unity in Diversity.

Ethnic, linguistic, social, cultural and religious factors do not greatly affect the provision of schooling, although the Constitution lays down that every Indonesian is free to choose the type of education he wishes. Local languages may be used as the medium of instruction only up to the third grade of the primary schools in areas where they are spoken by a large part of the population, and only on request. Otherwise the national language, Bahasa Indonesia, is the compulsory medium of instruction from the very beginning except in private schools run by foreigners for their own children, and even these schools have to teach Bahasa Indonesia as a subject. Social discrimination has been done away with, so that all Indonesians have the same educational opportunities. Religious instruction is given only at the request of parents and if there is a teacher available for that subject.

Although the final goal is to educate Indonesian children within their own national culture, Western culture still affects education as a whole. English is taught as the first foreign language. The Indonesian child must become not only a good citizen of Indonesia but also a good citizen of the world, with a reasonable portion of tolerance.

The Central Government provides public secondary and university education; provincial governments are responsible for public primary education, under the supervision of the Central Government.

Private agencies, mainly religious, have primary as well as secondary schools, and universities.

The structure of the school system is shown in the diagram on p. 663.

At the end of the sixth primary grade the pupils take their final examination, which is considered as an entrance examination for all types of secondary schools. As Indonesia has not yet enough high schools the Government is compelled to limit admission by giving priority to pupils obtaining the highest marks in this examination.

Not all secondary school diplomas entitle their holders to enrol at universities. In particular it is difficult for trade school graduates to continue their study at most of the government universities.

THE DEVELOPMENT OF SECONDARY EDUCATION

General education. The history of Western education in Indonesia begins with the arrival of the Portuguese and Spanish in the early part of the sixteenth century. Although the main purpose of the newcomers was trade, they brought with them the gospel and established religious schools.

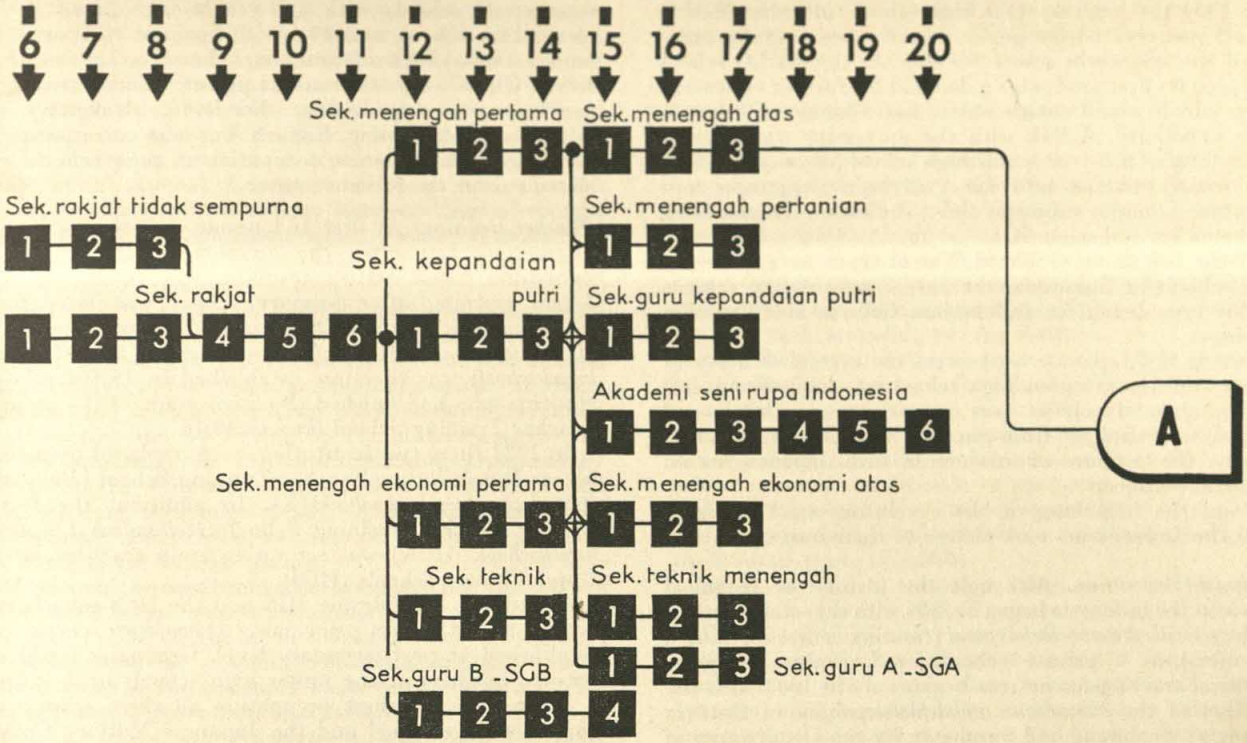
The Dutch in their turn also set up church schools but these were only for the children of Christian natives, and for centuries were very few in number. Economic and social privileges given by the Dutch to Western educated Christians began to cause uneasiness among the Indonesian Muslim nobility, especially in Java. This group began efforts to obtain the right to send their children to the Dutch elementary schools, and a few Muslim boys of noble birth were admitted.

After the revolution of 1848 a new Constitution was adopted, which provided that the Governor-General of the Netherlands East Indies should sponsor schools for non-Christian children. One of the purposes of the schools established under this new act was to educate the personnel needed for 'indirect rule', which proved an excellent system for ensuring peaceful government of the subject people.

Secondary education began only in the last decades of the nineteenth century. An *ambachtschool*—a technical school of 2 or 3 classes, and a *kweekschool tot opleiding van inlandse onderwijzers*—a 4-year training school for native teachers, were established. Also a few Indonesian boys who had attended Dutch elementary schools were admitted to Dutch secondary schools. The good results achieved by these boys gave more impetus to the continued demand for admission to the Dutch 7-year elementary schools. The difference of curriculum between the 7-year Dutch school and the school which had been established for the Indonesians, the 5-year 'native school second class' (*inlandse school 2de klas*) was more and more felt as a discrimination. A 'native school first class' was established, with a 6-year course. The Dutch language was added to the curriculum and a Dutch teacher provided to teach this subject. But it became obvious that this type of school did not satisfy the demand.

The Russo-Japanese War brought about a revolution in the minds of Asian peoples, encouraging them to take every opportunity to fight for equality. In Indonesia, the Japanese had the same rights as Europeans and hence could send their children to Dutch schools. This led the Chinese in Indonesia to seek similar benefits. If their request were not met, they threatened to build schools for their children on the same pattern as schools in China; and to have allowed this would have meant giving permission to build a state within a state, as the Chinese already had their own leaders and their own regulations, although still within the framework of the Netherlands Indies Civil Administration Regulations.

In 1908 a solution to this problem was found in the establishment of the Dutch-Chinese school (*Hollandsch Chinesche school* or HCS), a 7-year course with Dutch as the medium of instruction. This was felt to be a discrimination by the Indonesians, so that in 1914 a Western



GLOSSARY

NOTE. In the accompanying diagram the word *sekolah* (school) is abbreviated to *sek.*

akademi seni rupa Indonesia: vocational training school of arts.
sekolah guru A (SGA): teacher training school at upper secondary level.
sekolah guru B (SGB): teacher training school at lower secondary level.
sekolah guru kepandaian putri: specialized teacher training school for teachers of home economics.
sekolah kepandaian putri: lower vocational secondary school of home economics.
sekolah menengah atas: upper general secondary school.
sekolah menengah ekonomi atas: vocational secondary school of commerce.
sekolah menengah ekonomi pertama: lower vocational secondary school of commerce.
sekolah menengah pertama: lower general secondary school.
sekolah menengah pertanian: vocational training school of agriculture.
sekolah rakjat: primary school.
sekolah rakjat tadak sempurna: rural primary school, at present incomplete but being progressively converted into full primary course.
sekolah teknik: lower vocational secondary school of technical studies.
sekolah teknik menengah: upper vocational secondary school of technical studies.

HIGHER EDUCATION

A. Universities and other institutions of higher education.

7-year Dutch-native school (*Hollandsch inlandsche school* or HIS) was founded exclusively for native children, with Dutch as the medium of instruction.

With the birth of these two types of school a keen demand arose for more advanced education. A 3-year junior high school, called an advanced primary school (*meer uitgebreid lager onderwijs* or MULO school) was established. Although this was also open to Dutch pupils who failed in their entrance examination to the secondary school proper (*hogere burgerschool*) it was in fact intended mainly for natives, Chinese and Eurasians.

The relatively high standard of living of former pupils of HIS and HCS schools, who obtained employment in government service and private undertakings, opened the eyes of the middle classes, the labourers, and the farmers. They also wished to have Western education for their children, who were usually sent to the 3-year village school (*sekolah desa*) and the 5-year second-class native school. For these children the Dutch, in 1922, instituted a 5-year 'link-school' (*schakesschool*) which admitted children who had passed through the *sekolah desa* and the third class of the *inlandsche school 2de klas.*

In 1937 the native junior high school (*inheemse* MULO school) was created for pupils who had successfully completed the *inlandsche school 2de klas*. As the MULO school produced its first graduates a demand for further education arose, which would enable native and Chinese children to enter university. A link with the university was realized in the form of a 3-year senior high school (*algemene middelbare school*) divided into an A division (languages and literature as major subjects) and a B division (emphasizing mathematics and science).

At the beginning of World War II there were 17 senior high schools in Indonesia, the only 2 government schools of this type being for Indonesian, Chinese and Eurasian children.

During the Japanese occupation the system of a 3-year junior and 3-year senior high school was maintained, but the number of schools was not increased. Dutch and English were dropped from the curriculum, and Indonesian became the medium of instruction with Japanese as an important subject.

From the beginning of the revolution on 17 August 1945 the Indonesians took charge of their own education.

Technical education. Although the history of technical education in Indonesia began in 1835 with the establishment of the so-called *ambachtsleergang* (training course for skilled labourers), as a private school for European students, technical training for natives began only in 1903 with the creation of the *inlandsche ambachtsleergangen* in Batavia (Jakarta), Semarang and Surabaya, by the Department of Instruction and Public Worship of the Netherland Indies Government. The courses for Europeans were taken over by the Government in 1912, and between 1914 and 1920 all these technical courses passed under the supervision of the Department of Agriculture, Industry and Commerce.

Since skilled labourers need better trained and educated supervisors, there was a need for schools with a broader curriculum. During the period 1902 to 1931, 5 technical schools were built in Batavia (Jakarta), Surabaya, Jogjakarta, Bandung and Semarang. These schools offered 3- or 4-year courses after primary school.

The Japanese Occupation Administration closed all these schools and courses in 1942 but reopened the 4-year technical schools in Jakarta, Jogjakarta and Surabaya in 1943. In 1944, 3-year senior technical schools, admitting pupils from the 4-year technical schools or the junior high schools, were set up in Bandung, Jogjakarta and Surabaya.

Home-making education. Under the influence of the philosophy of the famous Indonesian Princess Kartini and liberal thinking among the Dutch people in Indonesia, a trade school for girls (*huishoud school*) was set up in 1920; it was renamed the elementary industrial school (*lagere nijverheidschool*) in 1935, and is now called *sekolah kepandaian putri*.

In 1928, the Dutch established 4-year senior home-making schools for pupils having completed junior high school.

Business education. During the Dutch regime, the following institutions were founded: the 5-year Prins Hendrik School, 3 secondary commercial schools with a 2-year course based on the junior high school, 2 intermediate commercial schools with a 2-year course based on the elementary school, and 10 'small business' schools (*klein handel scholen*) with a 2-year course based on the *inlandsche school*. There were also various private courses leading to certificates in typewriting, shorthand, elementary and advanced book-keeping, English, business correspondence, etc. During the Japanese occupation all these schools were closed except the private courses.

Teacher training. At first Indonesian was the medium of instruction, but after the creation of the *Hollandsch inlandsche school* (HIS), teaching was in Dutch. This 4-year training after primary school was later found inadequate for teaching Dutch in the higher classes of the HIS, and a 3-year Higher Teacher Training School (*hoogere kweekschool*) was therefore established in 1919 for bright students who had finished the third grade of the ordinary Teacher Training School (*kweekschool*).

In 1927 these two institutions were replaced by a single 6-year Dutch-Native Teacher Training School (*Hollandsch inlandsche kweekschool*—HIK). In addition, the Dutch-Chinese Teacher Training School (*Hollandsch Chineesche kweekschool*—HCK) was set up to train teachers for the Dutch-Chinese schools (HCS).

In order to provide the HIS and the HCS schools with native and Chinese principals, a *hoofdacte cursus* was established at post-secondary level. Graduates could also become teachers at the junior high schools or inspectors.

During the Japanese occupation all these schools and courses were stopped and the Japanese Military Government created a 4-year teacher school with Indonesian as the medium of instruction and Japanese as an important subject.

Following the Proclamation of Independence, the Indonesian Government established several types of teacher training schools at secondary level for general and vocational education; these institutions are described below.

Legal basis

Education was basically governed from 1945 to 1950 by relevant articles in the 1945 Constitution. A provisional constitution was in force from 1950 till July 1959, when the earlier Constitution was re-established. The paragraphs concerning education in both Constitutions are almost the same, at least in spirit.

Education Act No. 4 of 1950, which gave legal expression to these general principles, defines the aims of secondary education (vocational as well as general) and makes it clear that the chief concern of secondary education is not to prepare the child for higher learning but to make him a useful member of the community. In a conference held in 1955 the senior secondary school principals expressed the view that the high school curriculum should no longer be dominated by preparation for college entrance but should be planned to meet the varied needs of all the young people of the community which it served.

Administration

Although the Government of the Republic of Indonesia is largely decentralized, secondary education still comes under the central authorities.

By Decree of 13 March 1957 the Department of Instruction of the Ministry (now Department) of Education was replaced by the two departments (now offices) for general and vocational education respectively. The Office of General Education has divisions for kindergartens, primary education, secondary education junior level, secondary education senior level, and teacher training; and the Office of Vocational Education divisions for technical education, business education, home-making education, other vocational education and teacher training for vocational education. The two offices have branches in the provincial capitals.

Each office is responsible for the planning and organization of the type of education with which it is concerned, and has its own research division for developing curricula, methodology and textbooks, and planning teacher training. The research division performs these tasks by creating pilot schools, and by setting up committees such as the Special Committee on Technical Education organized by decree of the Minister of Education, Instruction and Culture of 21 November 1958, No. 122045/5. Curricula, methodology and textbooks must be in conformity with the ideals of the Pantja-Sila.

All documents pass through the provincial representative's office to the central education authorities.

Other public authorities administrating schools at secondary level or providing vocational training courses include most of the principal Departments of State. (See under Types of secondary education.)

Subsidized and aided private schools follow the same procedure of administration as the government-run schools.

Supervision and inspection. Both general and vocational education are supervised and guided by the Central Government, each type of secondary education having its own central inspectorate. Junior secondary schools are inspected through head-inspectors and inspectors stationed in the provinces but belonging to the central education authority. Senior secondary school inspectors are posted to the central inspectorate headquarters in Jakarta. Special attention is given to two subjects, namely Bahasa Indonesia and English, each falling under a separate division in the offices of general and vocational education.

Inspectors are recruited from principals with a teachers' college or bachelor's degree.

Finance. Secondary education is on the whole financed by the Central Government. In some cases where a building is badly needed and the Central Government's budget is already exhausted, an appeal is made to the local community, particularly to parents, and this usually has good results. The Department of Education has drawn up standards for buildings and equipment, with special attention to lighting and sanitation. The Department provides the schools with equipment and furniture.

All secondary school teachers are paid by the Central Government from the budget of the Department of Education. Fees are charged according to the annual income of the parents, but the total fees collected by any one school are not enough to pay the salary of the most junior teacher.

School welfare services are still rare in Indonesia. Where they exist they are provided by parents' associations in close co-operation with the teaching personnel.

TYPES OF SECONDARY EDUCATION

All types of secondary education are open to pupils who have completed primary school and have passed the entrance examinations, the available places being filled by pupils with the highest marks.

General and vocational education are given full-time, even in places where there are not enough school buildings. If necessary, schools have morning, afternoon and evening sessions, each providing the full course.

Little help or direction is given to the pupil or parents in choosing the type of secondary education. However, as almost all parents want their children to have a university education, primary teachers, in appropriate cases, advise parents to send their children to vocational secondary schools in order to be able to meet the urgent need for skilled workers. Marks obtained in entrance examinations are an important consideration in admitting children to the various types of school.

Types of further education open to secondary school leavers include public and private universities and colleges.

The school year runs from the beginning of August to early July and is divided into 4 terms. At the end of the second term (December) there is a vacation of 7 days; however, if this overlaps or is too close to the 'Puasa vacation' of 30 days (taken in the Muslim lunar month of Puasa), the 7 days are transferred to another inter-term break. At the end of the school year there is a vacation which varies from 14 to 7 days, depending on the proximity of the Puasa holidays to one of the other term vacations.

Other holidays are the universal Muslim and Christian holy days. The only national holiday is on Proclamation of Independence Day (17 August).

The school week is from Monday to Saturday. The school day runs normally from 7.30 a.m. to 1 p.m., except on Fridays when school ends at 11 a.m.

General secondary schools. The word 'general' is used for schools not having as principal aim to prepare directly for a particular career.

There are two types of general secondary school: the *sekolah menengah umum tingkat pertama* (junior high school), which leads to *sekolah menengah umum tingkat atas* (senior high school), each school having a 3-year course.

In the third class of the SMP (junior high school) the course is split into an A stream and a B stream. As can be seen from the following time-table the former devotes more periods to language while the latter emphasizes mathematics and general sciences. But the differences are not so great that one may refer to a 'language' stream and a 'mathematics' stream.

The SMA (senior high school) has A, B and C streams, emphasizing respectively languages and literature, mathematics and science, and commercial subjects. Differences between these streams are shown in the following table.

At the end of the third year junior high school students take their final examination. Those who pass get a diploma and may request admission to the corresponding stream

TIME-TABLE FOR JUNIOR HIGH SCHOOLS (SMP)
(in periods of 45 minutes per week)

Subject	Year			
			3	
	1	2	Stream A	Stream B
Indonesian	5	5	6	4
Local language[1]	(2)	(2)	(2)	(1)
English	5	4	5	4
Algebra	4	3	2	4
Geometry	3	4	—	4
Commercial arithmetic	—	—	4	—
Physics (plus chemistry in stream B)	2	3	1	4
Biology	2	2	2	2
Geography	2	2	3	2
History	2	2	3	2
Physical education	3	3	3	3
Moral education	1	1	1	1
Drawing	2	2	2	2
Music	1	1	1	1
Craft[1]	(2)	(2)	(1)	(1)
Total	34	34	34 or 35	34

1. Alternative subjects.

of the senior school, i.e., the A or C stream for holders of the junior A stream diploma, and the B or C stream for pupils with the junior B diploma.

Students of the SMA who have successfully passed their examination in the 'less important subjects' (see table) at the end of the second year, may sit for their final examination at the end of the third year for the senior diploma.

Marks obtained in the various examination subjects are taken into consideration if the student applies for enrolment in the corresponding faculties of the universities and colleges. Successful A stream candidates are eligible to apply for admission to the faculty of letters, the academy of arts and the faculty of law; the B stream leads to the faculties of medicine, technology, veterinary science, agriculture, physics and pure sciences; the C stream to the faculties of law and economics.

Vocational and technical schools

As a developing country Indonesia needs increasingly large numbers of well-trained personnel for field and office work, and the funds allotted from the State Budget to the Ministry of Education are still inadequate to meet this

TIME-TABLE FOR SENIOR HIGH SCHOOLS (SMA)
(in periods of 45 minutes per week)

A stream				B stream				C stream			
Subject	Year			Subject	Year			Subject	Year		
	1	2	3		1	2	3		1	2	3
Basic subjects											
Indonesian	5	5	5	Algebra	2	2	3	Economics	3	3	3
English	4	4	6	Trigonometry	2	1	2	Administration and civics	2	2	2
German or French	3	3	3	Solid geometry	2	2	2	Law	2	2	3
History	3	3	3	Descriptive geometry	1	1	1	Social and economic geography	3	3	3
Geography	2	2	2	Physics	4	5	5	Ethnology	1	1	1
				Mechanics	—	2	3	History	2	2	2
				Chemistry	4	4	4				
				Biology and hygiene	2	2	2				
Important subjects											
History of Indonesian art	1	1	1	Indonesian	3	3	3	Commercial arithmetic and method	2	2	2
History of Indonesian culture	2	2	2	English	3	3	4	Book-keeping	2	2	2
Ethnology	1	1	1					Algebra	2	2	2
Economics	2	2	2					English	4	4	4
Administration and civics	2	2	2					Indonesian	3	3	3
Less important subjects (examined at end of 2nd year)											
Local language	2	2	—	German	2	2	2	German or French	2	2	2
Old Javanese	2	2	—	Geography	1	2	—	Chemistry of commodities	2	2	—
Algebra	1	1	—	History	2	2	—	Economic history	2	2	—
Hygiene	1	1	—	Administrations and civics	2	1	—	Hygiene	1	1	—
Drawing	2	2	2	Economics	1	1	—	Drawing	2	2	—
				Book-keeping and drawing	2	2	—				
Not examined											
Physical education	3	3	3	Physical education	3	2	2	Physical education	2	2	3
Religion	2	2	2	Religion	2	2	2	Religion	2	2	2
Totals	38	38	34		38	39	35		39	39	34

need. Accordingly a wide range of courses and schools at the secondary level have been established by various other government departments to train staff. Some examples are given below. The usual minimum requirement for entry is a junior high school (SMP) diploma.

Department of Agriculture: specialized senior high schools for forestry, agriculture and veterinary science (3-year courses), and fresh water fishery (4 years).

Department of Defence: schools and courses for physical education instructors, radio operators, radio technicians, air traffic control personnel, army nurses and medical auxiliaries, etc.

Department of Shipping: navigation and radio operators' schools.

Department of Industry: courses in building materials, ceramics, starching (for the batik industry), and textiles. The Department also runs a senior school for technology (3-year course) and a school for chemical analysts (2 years).

Department of Health: schools for assistant radiologists, midwives, school dentists, nursery school teachers, physiotherapists, assistant pharmacists, etc.

Other departments providing vocational training include the Departments of Commerce, Justice, Social Affairs, Lands, Home Affairs, Communication, Police, Veterans Affairs, and Finance.

In all these schools and courses sponsored by the departments mentioned above, only vocational subjects are taught and training is restricted to the needs of the departments concerned. They are therefore quite different from the vocational and technical schools of the Department of Education, which train students within special fields according to the needs of the whole Indonesian community and with regard to the aptitudes and interests of the students themselves. To achieve this broader aim, the system of vocational education of the Department of Education is integrated with the whole educational system and comprises three main types of vocational secondary school—technical schools, domestic science schools, and commercial schools.

Technical schools. Sekolah keradjinan (SK). Schools for training in cottage industries offering 1- or 2-year courses, depending upon the type of handicraft or trade, for pupils who have completed primary school. The present scheme provides for training in the following subjects: woodcraft, masonry, blacksmithing, motor-repairing, carpentry, leatherwork, shoemaking, plumbing, sheet-metal work, dye-works, tailoring, weaving, ceramics, boat-building, etc. The establishment of these schools depends upon local conditions and needs. The curriculum consists of 80 per cent practical training and 20 per cent theoretical instruction.

Sekolah teknik (ST). Three-grade junior technical schools admitting pupils who have successfully passed an entrance examination and a test in drawing. There are courses in structural engineering, civil engineering, motor mechanics, electricity, mining, cabinet making, woodcraft, land surveying, weaving, ceramics, wireless, shipbuilding, printing, diesel motors. The accompanying time-table in a generalized one and may vary slightly from course to course. In the first semester of the first year, pupils are given various kinds of practical work so as to discover their talents; in the second semester they are placed in appropriate sections. The curriculum is 50 per cent practical work and 50 per cent theory.

Sekolah teknik menengah (STM). Three-grade senior technical schools admitting pupils who have successfully completed the junior high school (SMP) B stream with good marks in mathematics at the final examination. The aim is to produce technicians for management of certain state or private factories and workshops. The courses given are structural engineering, mechanical engineering, civil engineering, electricity, motor mechanics, mining, aviation, wireless, shipbuilding, marine engineering, chemistry, etc.

TIME-TABLE OF SEKOLAH TEKNIK (ALL SECTIONS)
(in 45 minute periods per week)

Subject	Year		
	1	2	3
Practice	14	14	10
Descriptive geometry	2	—	—
Projection drawing	—	2	—
Drawing	5	5	7
Vocational theory	1	3	5
Algebra/arithmetic	4	3	2
Geometry	3	2	2
Physics/mechanics	2	2	3
Materials	1	1	1
Indonesian language	3	3	3
English	2	2	2
Industrial organization	—	—	2
History	1	1	—
First aid	—	—	1
Moral/religious education	2	2	2
Physical education	2	2	2
Total	42	42	42

Kursus ahli teknik A (technicians' course A). A 1-year theoretical training course after the STM, principally concerned with research work.

Kursus ahli teknik B (technicians' course B). A 2-year course for graduates of *kursus ahli teknik A;* trains technicians as research assistants to university graduate engineers.

Kursus ahli teknik C (technicians' course C). A 2-year course after the B course, and at the same level as university engineering but with the main emphasis on practical training and research work.

Domestic science schools (*Sekolah kepandaian putri* or SKP). There are 2-year schools of this type, admitting girls who have failed the secondary school entrance examination. By training girls to become useful citizens, able to earn their own living, the 2-year school tries to prevent unemployment and child marriages. The curriculum consists of practical subjects: home-making, cookery, needlecraft, dressmaking, batik, drawing, weaving and general knowledge.

There are also 4-year schools, entrance to which requires success in the secondary school entrance examination. The first 2 years of training are devoted to preparatory courses in home-making and related subjects and in general

knowledge. In the last 2 years cookery, sewing, home-making, batik, drawing, weaving and needlecraft are taught as professional subjects.

Commercial schools. Kursus dagang tingkat pertama (KDP). Elementary 3-year courses providing opportunities for adults to follow courses in economics and business affairs.

Sekolah menengah ekonomi tingkat pertama (SMEP). Three-year junior commercial high schools, training pupils to start simple business enterprises of their own on a modern basis. Candidates for admission must have passed the entrance examination for the junior high school (SMP).

Sekolah menengah ekonomi tingkat atas (SMEA). Three-year senior commercial high schools, open to graduates of the SMP (both streams) and the SMEP. The object is to give students more advanced training in business affairs and some knowledge of foreign trade, and to enable leavers to set up in business for themselves. Bright students have the opportunity of entering the Faculty of Economics.

Teacher training schools

Sekolah guru B (SGB). This type of 4-year, post-primary teacher training school was set up in large numbers to train teachers for the introduction of compulsory primary education. Admission requirements are the same as for the SMP. The first three years are mainly devoted to general secondary education, professional training being undertaken in the fourth year. A small proportion of SGB students are given the opportunity of continuing their study at the SGA (see below) at the end of the third year. This type of school is disappearing and no new classes were begun after 1958.

Sekolah guru A (SGA). Teacher training school with a 3-year course in general and professional subjects for pupils who have completed junior high school.

Science teaching centre. The purpose of this centre is to improve science teaching and to give teachers already in service the opportunity of doing laboratory work.

Sekolah guru pendidikan teknik (SGPT). Teacher training school for technical education and a 3-year course after the technical schools (ST). Courses available include mechanical engineering, electrical engineering, machine woodwork, shipping, motor mechanics, diesel engineering, printing. Shop work is emphasized.

Kursus guru pendidikan teknik. A 1- or 2-year course for non-qualified technical teachers.

Sekolah guru kepandaian putri (SGKP). Trains teachers for home-making courses in domestic schools and needlework teachers for the SMP and other secondary schools. There are two courses—cookery and home-making, and needlecraft. Enrolment requires an SMP diploma or the completion of training at a domestic science school (SKP). At the end of the third year the students take their examination in practical work and at the end of the fourth year their examination in practical teaching.

Other specialized schools

The *Akademi Seni Rupa Indonesia* has a 6-year course after the SMP in plastic arts.

The *Konservatori Karawitan* offers 1- to 7-year courses in music and singing, Indonesian as well as Western.

The *Sekolah Kedjuruan Perhotelan* conducts a 2-year course in hotel management consisting of history of commodities, nutrition, elementary book-keeping, hotel organization, price policy, restaurant management, etc.

Teachers in secondary schools

In 1949 Dutch teachers made up 80 per cent of the staff in junior secondary schools and 90 per cent in the senior schools. The difficulties that arose when the Dutch teachers suddenly left Indonesia in the following year can be imagined. But, thanks to the industry and patriotism of the Indonesian people, particularly the teachers and education authorities, most of these problems were solved in record time. Qualified primary school teachers having had 6 years' training were moved to junior high schools and *hoofdacte* (post-secondary level certificate) holders to senior high schools. Primary schools had to be satisfied with less qualified or even unqualified teachers. As there were not enough *hoofdacte* graduates to fill the gap at the senior high schools, third-year government scholarship holders at the universities were appointed as teachers for 2 years and thereafter were allowed to continue their studies. An appeal was made to engineers and mechanics to teach part-time at the technical schools.

At present no more SGA graduates are being appointed to secondary schools. Junior secondary schools, general as well as vocational, are getting teachers from the *Pendidikan guru sekolah landjutan pertama* (RGSLP) teacher training school for junior secondary stage. Teachers for senior high school are trained in 2-year courses at university level.

Out-of-class activities

Out-of-class activities are still mainly limited to Boy Scouts, student associations (secular and religious), pen-friends, youth movements and youth columns in weekly papers. School sports and games are organized by the Department's Bureau for Physical Education, and every four years there is a National Sports Week.

TRENDS AND PROBLEMS

Indonesia has made remarkable progress in the field of secondary education since the Proclamation of Independence in 1945; delicate problems have been solved satisfactorily, but there are still many remaining. The educational authorities are at present preoccupied with problems such as how to provide within the shortest possible time buildings and equipment in a stringent monetary and budgetary situation—the Ministry of Education gets only 5 per cent of the total State Budget—in order to meet the ever increasing demand for secondary education.

Psychologically, the 'two-track system' (general and vocational) has some weaknesses in its relation to primary and junior secondary education. It is difficult to believe that primary school leavers are able to determine their specific aptitudes very accurately. To tackle this problem, comprehensive schools at junior secondary level have been suggested, where both general and elementary vocational subjects will be taught, making it easier for the teachers to advise students and their parents in choosing the direction of the future studies.

In view of the rapid development of the country's industrial, economic and business life it is felt that the balance between secondary general and vocational education has to be restored. Budget figures for secondary education indicate a distribution of 60 per cent for general education and 40 per cent for vocational. The idea now adopted of a distribution of 70 per cent for vocational and 30 per cent for general cannot be realized while the financial situation of the State is such that the diversion of more funds for vocational education could only be at the expense of general education.

Revision of vocational education curricula is in progress. Although 60 per cent of the time is devoted to professional subjects, graduates of vocational schools are still considered inadequately equipped to cope with their future tasks. The solution will be found in more training in practical work.

[*Text prepared by A. N. Hadjarati, Department of Education, Jakarta, in January 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 86,900,000.
Area: 575,894 square miles; 1,491,562 square kilometres.
Population density: 151 per square mile; 58 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment as shown in Table 1 exceeded 8 million pupils, or roughly one-tenth of the total population. This total may be distributed as follows: pre-primary education, 1 per cent; primary schools, 92 per cent; secondary schools, 3 per cent; vocational education, less than 2 per cent; teacher training schools, 2 per cent; higher education, 0.5 per cent. In public and aided private secondary schools, the proportion of girls was 29 per cent in general secondary education, 23 per cent in vocational education, 31 per cent in teacher training. The average number of pupils per teacher was 42 in primary schools, 29 in all the public and aided private secondary schools, and 12 in vocational schools (counting both full-time and part-time teachers). Between 1953 and 1957, enrolment in primary schools increased by 9 per cent, and in secondary education by 75 per cent.

Enrolment trends in secondary education, 1930–57. Between 1930 and 1939, general secondary school enrolment increased by 37 per cent, and vocational school enrolment by 28 per cent. Data are not available for the period 1940–49. Between 1950 and 1957, enrolment in general secondary schools increased two and a half times, and in vocational education and teacher training more than four times. However, total enrolment in all government schools for the period 1955–57 represented less than 5 per cent of the estimated population 15–19 years old. (See Table 2.)

Examination results in secondary education, 1953–57. The number of junior and senior high school diplomas more than doubled between 1953 and 1957. Girls received 27 per cent of the junior high school diplomas in 1957. The number of teaching certificates, type B, multiplied five times between 1953 and 1957, and the number of type A teaching certificates nearly tripled. Girls received 27 per cent of the type B certificates in 1957 and 30 per cent of the type A certificates. A total of 2,868 other types of teaching diplomas were awarded in 1957, as against only 311 in 1953. (See Table 3.)

Educational finance, 1956. From the total budget of the Ministry of Education, Instruction and Culture in 1956, an amount of 756,748,400 rupiahs was allocated for the financing of public education and subsidies to private education. This sum represented an average expenditure of about 9 rupiahs per inhabitant. Official exchange rate: 100 rupiahs = 8.80 U.S. dollars.

Source. Indonesia: Ministry of Education, replies to Unesco questionnaires; *Development of education in Indonesia, 1957;* International Bureau of Education, *International yearbook of education*, 1956.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57[1]

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1957/58	9	33	...	728	...
	Kindergartens, private	1957/58	1 089	2 204	...	76 447	...
	Total	**1957/58**	**1 098**	**2 237**	**...**	**77 175**	**...**
	„	1956/57	807	1 580	...	54 743	...
	„	1955/56	638	[1]1 002	...	[1]34 433	...
	„	1954/55	466	967	...	33 323	...
	„	1953/54	369	614	...	19 236	...
Primary	Primary schools, public	1957/58	29 741	158 012	...	6 574 548	...
	Primary schools, private	1957/58	4 098	18 641	...	801 508	...
	Total	**1957/58**	**33 839**	**176 653**	**...**	**7 376 056**	**...**
	„	1956/57	34 803	163 971	...	7 336 536	...
	„	1955/56	33 356	146 344	...	7 511 226	...
	„	1954/55	32 566	124 520	...	7 374 924	...
	„	1953/54	32 653	122 927	...	6 762 029	...
Secondary[1]							
General	Junior high schools, public	1957/58	416	5 837	1 530	159 030	44 845
	Senior high schools, public	1957/58	109	1 232	194	35 546	7 095
	Junior high schools, aided private	1957/58	216	1 970	573	63 991	23 655
	Senior high schools, aided private	1957/58	62	341	63	16 720	4 017
	Total	**1957/58**	**803**	**[2]9 380**	**[2]2 360**	**275 287**	**79 612**
	„	1956/57	700	[2]7 530	[2]1 914	243 234	68 449
	„	1955/56	698	[2]7 000	[2]1 830	223 232	59 556
	„	1954/55	604	[3]7 901	...	185 362	...
	„	1953/54	558	[3]7 642	...	158 110	...
Vocational	Technical and trade schools, public	1957/58	461	6 962	76	71 753	—
	Commercial schools, public	1957/58	154	2 056	286	34 108	5 105
	Domestic science schools, public	1957/58	167	1 290	1 120	17 192	17 192
	Schools for social workers, public	1957/58	2	34	6	232	38
	Schools for legal officers, public	1957/58	3	81	8	590	81
	Technical and trade schools, aided private	1957/58	15	133	4	1 289	—
	Commercial schools, aided private	1957/58	13	198	20	2 492	469
	Domestic science schools, aided private	1957/58	79	532	470	8 087	8 087
	School for social workers, aided private	1957/58	1	30	7	222	100
	Total	**1957/58**	**895**	**[4]11 316**	**[4]1 997**	**135 965**	**31 072**
	„	1956/57	837	[4]10 152	[4]1 823	117 339	28 500
	„	1955/56	604	[4]7 954	[4]*1 540	96 848	*22 790
	„	1954/55	558	[4]6 677	...	81 783	*19 680
	„	1953/54	481	[4]5 065	[4]*680	64 232	*14 060
Teacher training	Teacher training schools type B, public	1957/58	483	8 141	2 255	122 265	35 298
	Teacher training schools type A, public	1957/58	56	838	120	10 846	2 982
	Teacher training schools for kindergarten teachers, public	1957/58	5	67	39	768	768
	Teacher training school for the handicapped, public	1957/58	1	17	3	35	12
	Teacher training schools for technical teachers, public	1957/58	8	231	6	1 014	—
	Teacher training schools for domestic science teachers, public	1957/58	9	126	87	1 677	1 677
	Teacher training schools for junior high schools, public	1957/58	29	597	63	2 148	624
	Teacher training schools for physical education, public	1957/58	12	231	31	1 453	216
	Teacher training schools, type B, aided private	1957/58	62	757	150	11 225	4 150
	Teacher training schools, type A, aided private	1957/58	34	538	82	5 986	2 441
	Teacher training schools for kindergarten teachers, aided private	1957/58	2	36	19	304	304
	Total	**1957/58**	**701**	**11 579**	**2 855**	**157 721**	**48 472**
	„	1956/57	675	10 752	2 650	175 026	51 136
	„	1955/56	657	10 000	*2 590	181 104	...
	„	1954/55	631	7 281	...	155 356	...
	„	1953/54	582	4 616	*1 100	102 785	...

1. Incomplete data. Pre-primary education in 1955/56 does not cover 127 kindergartens for foreign children. Data on secondary education (general, vocational and teacher training) refer to public and aided schools only.
2. Not including part-time teachers, who numbered 4,831 (F. 635) in 1957/58.
3. Including part-time teachers.
4. Including part-time teachers, who numbered 4,140 (F. 412) in 1957/58.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Higher							
Teacher training	Teacher training courses B I, public	1957/58	96	790	79	4 059	...
	Teacher training courses B II, public	1957/58	10	66	5	162	...
	Teacher training courses B I, private	1957/58	...	...	...	...	...
	Total[5]	**1957/58**	**106**	**856**	**84**	**4 221**	**...**
	"	1956/57	122	981	[5]75	4 116	...
	"	1955/56	109	726	...	4 399	...
	"	1954/55	104	582	...	3 566	...
	" [5]	1953/54	78	398	...	2 000	...
General and technical	Faculties, public	1957/58	41	2 602	186	29 206	4 796
	Colleges, public	1957/58	14	[6]229	[6]9	[6]836	[6]31
	Faculties, private	1957/58	27	...	...	...	...
	Colleges, private	1957/58	5	[7]45	[7]11	[7]456	[7]187
	Total	**1957/58**	**87**	**[8]2 876**	**[8]206**	**[8]30 498**	**[8]5 014**
	"	1956/57	82	[9]3 206	[10]375	[9]34 112	[10]4 857
	"	1955/56	78	[11]2 469	[10]203	[12]26 404	[10]3 680
	"	1954/55	58	[13]1 679	[10]104	[13]22 713	[10]2 897
	" [10]	1953/54	32	1 078	77	16 534	2 225

5. Public schools only.
6. Not including data on 5 colleges.
7. Not including data on 1 college.
8. Not including data on private faculties and on 6 colleges.
9. Not including data on 4 colleges.
10. Faculties only.
11. Not including data on 6 colleges.
12. Not including data on 8 colleges.
13. Not including data on 3 colleges.

2. TRENDS IN SECONDARY EDUCATION, 1930 and 1950–57[1]

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	16 774	32	25 942	18	...	...			
1931	18 337	32	24 147	18	...	...			
1932	17 331	32	22 965	20	...	...	[2]40	6 686	[2]*0.6*
1933	16 369	33	21 437	20	...	...			
1934	15 419	33	21 095	17	...	...			
1935	15 673	33	19 490	20	...	...			
1936	16 679	34	27 109	16	...	...			
1937	18 167	35	28 685	16	...	...	[2]47	7 213	[2]*0.7*
1938	20 558	...	33 085	17	...	...			
1939	22 964	35	33 271	20	...	...			
1950	79 363	...	27 263	...	32 727	...			
1951	83 872	...	37 406	...	51 343	...			
1952	91 476	...	50 813	...	78 156	...	230	8 376	*2.8*
1953	99 990	...	58 944	...	110 557	...			
1954	119 786	...	77 516	...	152 557	...			
1955	141 507	...	88 876	...	164 754	...			
1956	168 496	...	106 165	...	157 022	...	428	8 910	*4.8*
1957	194 576	27	123 875	18	140 206	30			

1. From 1950 to 1957, government schools only.
2. General and vocational education.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Junior high school diploma	12 148	[1]2 623	...	...	21 248	[2]5 517	24 267	6 465	26 765	7 329
Senior high school diploma	5 723	1 108	...	...	7 122	1 525	7 123	1 487	12 882	...
Diplomas of technical and trade schools	7 326	—	...	...	10 218	—	10 897	—	[3]2 949	—
Senior technical school diploma	305	—	...	...	560	—	686	—	770	—
Junior commercial high school diploma	554	48	...	...	1 641	239	2 401	292	3 021	343
Senior commercial high school diploma	404	39	...	...	783	105	1 052	128	1 176	170
Domestic science school 2-year certificate[4]	1 838	1 838	...	...	794	794	1 218	1 218	[5]813	[5]813
Domestic science school 4-year certificate[4]					1 599	1 599	1 790	1 790	1 706	1 706
Others[6]	64	12	...	...	155	47	74	25	238	44
Teacher's Certificate type B	4 570	1 355	...	...	18 708	4 531	21 934	5 406	22 697	6 038
Teacher's Certificate type A	1 730	711	...	...	3 259	1 155	3 878	1 212	4 918	1 484
Kindergarten teacher's diploma	139	139	...	...	279	279	304	304	752	752
Junior high school teacher's diploma	—	—	...	...	336	135	905	347	1 188	329
Technical teacher's diploma	—	—	...	...	—	—	65	—	194	—
Domestic science teacher's diploma	172	172	...	...	209	209	224	224	489	489
Diploma for teaching handicapped children	—	—	...	...	—	—	34	11	—	—
Physical education teacher's diploma	—	—	...	...	116	12	175	34	245	32

1. Not including 1,929 pupils, included in the total, whose sex is not known.
2. Not including 94 pupils, included in the total, whose sex is not known.
3. Decrease is due to change in school system since 1956/57.
4. Domestic science schools of 3 years were changed to domestic science schools of 2 years and domestic science schools of 4 years as of school year 1954/55.
5. Not including the number of graduates from 3 schools.
6. Schools for social workers and for legal officers.

IRAN

THE EDUCATIONAL SYSTEM

The Iranian educational system (excluding pre-primary schools which are not yet a universal feature) comprises the following levels:

1. Primary (age of entry 7; length of course, 6 years).
2. Secondary (age of entry between 12 and 13) subdivided into: (a) the first cycle, lasting 3 years and providing pupils with a general education; (b) the second cycle, comprising two types of education; academic, with the following branches: mathematics, Persian language and literature, natural science and domestic science (all of which prepare pupils for university), and vocational education.

The Iranian educational structure is centralized, the Minister of Education having been made responsible,

under Article 19 of the Supplementary Fundamental Laws, for the organization of existing schools and the foundation of new schools.

Educational administration in the towns comes under the directors of education appointed by the Minister. The budget of the Ministry of Education forms part of the national budget and the appropriations are apportioned among the various towns by the central government departments. However, the transfer of some of the powers of central government departments to local authorities is envisaged.

Private agencies may also establish schools, provided that they first obtain the permission of the Ministry of Education, and that the school curriculum is approved by the Higher Council for National Education.

The Organic National Education Act was promulgated in November 1911. Among its more important articles are the following:

Article 3. Primary education is compulsory for all Iranians.

Article 8. Schools may be either official or unofficial. Official schools are those founded by the State and unofficial schools those founded by private individuals or bodies.

Article 11. No person who has not passed the official examinations shall be admitted to official schools, no matter where he or she has studied previously.

Article 12. Ministry of Education inspectors may visit all public and private schools for the purpose of inspecting them and no school principal may hinder them in any way from so doing.

Article 14. The Ministry of Education shall forbid the teaching of anything that may be prejudicial to the moral and religious upbringing of pupils; books of which the use is forbidden by the Ministry may not be used in any school.

Article 18. The Ministry of Education shall arrange the various levels of education and decide on the examinations to be set at each level and on the certificates which candidates for the government service must possess.

Article 19. A rural primary school shall be established in every village and suburban district.

Article 20. One or more primary and secondary schools shall be established in every town, in accordance with the size of its population, the needs of its inhabitants and its financial resources.

Article 21. Universities and university colleges shall be set up in Teheran and the other large towns.

Article 26. School buildings and equipment shall be under the supervision of the Ministry of Education.

Article 27. Special regulations will be issued to govern the free education of needy pupils in secondary schools and universities.

Article 28. Corporal punishment is forbidden in all schools.

The Higher Council for National Education was set up under the law of 10 March 1922 for the purpose of promoting scientific and cultural activities. It consists of 10 full members, i.e., a Muslim jurist, the principals of a secondary school and a university, 1 secondary school and 1 university teacher, and 5 members appointed from among the country's leading scholars and scientists. In addition, the Council may have 10 honorary members serving in a purely advisory capacity.

Both full and honorary members are appointed by the Minister for 4 years, their appointments being subject to confirmation by the Shah. The Minister of Education and the Director-General of the Ministry are *ex officio* members of the Council. Council members receive no remuneration. The Council has a permanent secretariat.

The Teacher Training Act was passed on 9 March 1934. It states the aims and regulates the organization of secondary teacher training colleges and primary teacher training schools. Principals and teachers at the colleges must be at least 30 years of age and have a doctor's degree while for the primary training schools teachers must be at least 25 years of age and have a secondary teacher training school diploma and a bachelor's degree.

The Government is under an obligation to offer a teaching post to graduates of the training colleges and schools and to pay them a salary. New teachers serve a year's probation and the Ministry may dismiss them if it considers them unsuitable.

Both the primary and secondary teaching professions have a seniority and salary scale divided into 10 grades. In each of the grades 1 to 3, teachers must serve for at least two years and in each successive grade for at least three years before they are eligible for promotion to the next grade, which is awarded on the basis of ability and services rendered. Married teachers with children normally receive preferential treatment in this respect.

The salary for primary school teachers in the lowest grade is fixed by law annually. Secondary school teachers receive double the salary of primary school teachers. Secondary and primary school teachers appointed to a post at some distance from their normal place of residence may be granted an allowance equivalent to one-fifth of their salary as long as they continue working in the district in question.

The Minister may transfer secondary school teachers to administrative departments provided that the transfer is not contrary to the terms of their contract and that their grade is fixed in accordance with the salary they were drawing before the transfer.

All teachers may retire on reaching the age of 50, whatever their period of service.

In residential teacher training colleges and schools board and lodging, lighting, heating, laundry services, etc. are provided at state expense. Students are also awarded scholarships, the value of which is fixed annually. Those who leave the institution before completing their studies, or who commit any act incompatible with their terms of admission must refund not only the value of the scholarship awarded them but also the amount their education has cost the school each year. Those who do not remain in the teaching profession for at least 5 years after qualifying must refund a sum equivalent to one-fifth of the amount paid by the State for their studies plus one-fifth of the value of their scholarship, for each year of the 5-year period, not spent in Government service. Those dismissed by the State are exempted from this regulation.

Until such time as the teacher training colleges and schools have produced a sufficient number of qualified teachers for primary and secondary schools, the Minister is authorized by law to recruit on contract teachers that he is satisfied are competent, to pay competent persons

who are prepared to teach, or to assign civil servants already employed in other government departments to teaching posts.

The principals and teachers of teacher training colleges and schools are appointed by the Minister on the proposal of the Department of Education.

THE DEVELOPMENT OF SECONDARY EDUCATION

In the nineteenth century, the structure of Iranian education was as follows: the religious schools (*madrasseh*) provided both secondary and higher education; any child leaving a *maktab* (primary school) at the age of 11 or 12 could attend a *madrasseh* for further study in Persian and Arabic language and literature; this was the first and necessary preliminary to the study of Islamic theology and possibly of philosophy.

The establishment of the Teheran Polytechnic, in 1852, by the Grand Vizier, Amir-e-Kabir, marked the beginning of a change in the content of secondary and higher education under the pressure of national needs and increasingly closer contact with the West.

The revolution of 1906, which gave Iran a Constitution and a central government, also led to the reorganization of education. A few years later Parliament passed the first laws drafted by the Ministry of Education, establishing the new educational system with its three levels, primary, secondary and higher. Primary education was intended for children from 7 to 11 years of age in rural areas and from 7 to 13 in the towns. After passing through the 6 grades of primary school, town children could enter a secondary school, but secondary education was free only for the children of needy families. At that time, however, there were few secondary schools and it was not until after the first world war and the establishment of the Pahlevi dynasty that secondary education began to expand. In fact its development became one of the principal concerns of the Iranian Government, which needed qualified officials for its civil service.

With the establishment of the Teheran secondary teacher training college, the promulgation of the first law on study abroad (1928), the Teacher Training Act (1934) and the preparation of the first official curriculum for secondary schools (1934), this level of education took definite shape. The establishment of the university of Teheran in 1934 put the final touch to the reorientation of Iranian secondary education.

The scheme then adopted divided secondary education into two 3-year cycles. The first cycle was designed to provide a general academic education, specialization beginning in the second cycle. Reforms to this system were introduced as early as 1938. Since 1955, the second cycle has been divided into four branches, literature, mathematics, natural science and domestic science.

Technical education, which had been left in the background, if not completely neglected, until 1935/36, began to develop from then on with the establishment of a large number of trade schools, mostly in Teheran.

At the moment, because of the large number of persons with a secondary leaving certificate wishing to enter university, and because of the country's need for medium-grade technicians, technical secondary education is expanding rapidly and a great many students with a first-cycle secondary certificate find in the technical and vocational schools a means of continuing their studies.

Administration

Syllabuses and regulations governing the subjects taught in secondary education are drafted by the Ministry's Department of Secondary Education and the Research and Programme Department. For the technical and vocational side, these departments enlist the co-operation of the Technical Education Department.

The drafts are submitted for consideration to a standing commission, consisting of experienced secondary school teachers, teachers at the secondary teacher training college and the Ministry's technical advisers. They are then studied by the Minister, who transmits them to the Higher Council for Education for final approval.

Teaching methods and problems of secondary education are usually discussed at national conferences convened in the various towns of the country by the Research and Programme Department. Participants include the authorities responsible for secondary education in the provinces and the Ministry's technical advisers.

The compilation and publication of secondary school textbooks is left to private initiative. Every year, the authors or publishers submit the printed text of their books to the textbook committee of the Higher Council for Education. The committee reports to the Council, and if necessary, requests the authors to amend their texts. Every June, the Council's secretariat prepares a list of all textbooks approved by the Council and distributes it to the various regional departments of education. At the beginning of every school year, teachers choose books on their particular subjects from this approved list for recommending to their pupils.

Supervision and inspection. The Ministry transmits instructions to the Directors-General for Education in the towns and provinces on the application of the syllabuses and regulations approved by the Higher Council for Education. The Directors-General supervise the application of these measures by those responsible, namely, the principals of secondary schools, vocational schools and primary teacher training schools. The Ministry's instructions are also binding on any private secondary schools and vocational schools which receive a Ministry grant.

Inspectors of education are chosen from the principals and teachers of secondary schools who have a minimum of 10 years' teaching experience and have reached the age of 35. These official inspectors are the only persons or agencies entitled to intervene in secondary school affairs. Of recent years however, some parents who are members of the Parents' and Teachers' Association have been allowed to co-operate with the secondary school authorities.

Finance. Secondary schools may be classified as follows according to the manner in which they are financed: (a) public secondary schools, financed entirely by the Ministry of Education; (b) semi-public secondary schools,

also financed by the Ministry, but entitled to charge school fees to help pay for the completion of school buildings, or the equipment of laboratories or libraries; (c) private secondary schools, largely dependent on school fees for their funds. However, by decision of the Higher Council for Education, the Ministry may make grants to such schools and supply them with teachers wherever possible. In all towns except Teheran the grant is 60 rials per non-paying pupil in the first cycle and 70 rials per non-paying pupil in the second. In Teheran the corresponding amounts are 70 and 100 rials respectively.

School welfare services. A school health service to watch over the health of secondary school pupils exists in all towns.

TYPES OF SECONDARY EDUCATION

Secondary education begins at the age of 13. Those who obtain the first cycle certificate (after a 3-year course) may continue their education:

1. In one of the four branches of the second 3-year cycle, literature, natural science, mathematics and domestic science, after which they may sit a competitive entrance examination for a university or other institution of higher education (the military academy, the Abadan advanced technical college, the senior police college, etc.), *or*
2. In a vocational school (*honarestan*). Students who qualify after completing the 3-year course are awarded a diploma of technical or vocational efficiency. With this diploma they may continue their studies at an advanced technical school such as the Technological Institute.

Iran now has a scholastic guidance programme; the plan is to collect information on pupils and, by way of experiment, to keep a school career file on each of them. Some steps have also been taken to devise standard tests in the Persian language and mathematics, and to compile intelligence tests. These preliminary activities will make it possible to set up a systematic and scientific system of educational and vocational guidance.

The secondary school year begins on 15 September and ends on 15 June. Schools in hot districts however, are authorized to begin their examinations on 5 May, their year then ending on 20 May.

The school year is divided into three terms. The main holidays are the last 10 days of the first term (from 11 to 21 December), 13 days at the time of the Iranian new year (from 21 March to 24 April) and 3 months in summer. There are 6 school days a week and classes are held from 8.30 to 11.30 a.m. and 2.30 to 4.30 p.m.

General secondary schools

The curriculum for the first secondary school cycle (see table) was established with an eye to the needs of pupils who cannot, or do not wish to, continue their studies, as well as to those of pupils wishing to carry on to university. Possession of a primary school certificate is essential for entrance to a secondary school.

TIME-TABLE FOR FIRST CYCLE OF GENERAL SECONDARY SCHOOLS

Subject	Year		
	First	Second	Third
Religious instruction	2	2	2
Persian	4	4	3
Arabic	2	2	2
Mathematics	4	4	4
Physics and chemistry	2	2	4
Natural history and hygiene	2	2	2
History and geography	2	2	2
Civics	1	1	1
Foreign languages	4	4	4
Physical culture	2	2	2
Calligraphy	1	1	1
Drawing and manual training (for boys), dressmaking and domestic science (for girls)	3	3	2

The second cycle prepares pupils for study at a university or other institution of higher education. Pupils who pass the final (third year) examination of the first cycle may continue in any one of its four branches, the curricula for which are shown in the accompanying table.

TIME-TABLE FOR SECOND CYCLE OF GENERAL SECONDARY SCHOOLS

(in hours per week)

Subject	Branch and form											
	Arts			Mathematics			Natural science			Home economics		
	4	5	6	4	5	6	4	5	6	4	5	6
Mathematics	2	2	—	7	7	10	3	3	2	2	2	—
Physics and chemistry	2	2	—	7	7	9	8	8	8	4	4	4
Natural science and hygiene	2	—	—	2	2	—	5	5	9	2	2	2
Foreign languages	5	5	6	4	4	4	4	4	4	4	4	4
Persian	6	6	7	3	3	3	3	3	3	3	3	3
Social science, history and geography	4	4	6	2	2	—	2	2	—	3	3	—
Logic and philosophy	—	2	5	—	—	2	—	—	2	—	—	—
Religious and moral instruction	1	1	—	1	1	—	1	1	—	1	1	—
Drawing and manual training (for boys); domestic science, cooking and hand-work (for girls)	2	2	—	2	2	—	2	2	—			
Physical culture	2	2	2	2	2	2	2	2	2	1	1	1

The various types of study open to persons with a secondary leaving certificate are shown in the diagram on page 677.

Secondary school teachers are trained at the Teheran secondary teacher training college or at the one quite recently opened in Tabriz.

Evening secondary schools. Anyone prevented by his daily occupation or by age from attending a day school may

enrol at an evening secondary school, provided that he or she has a primary school certificate.

The curricula at these schools are identical with those of the other general secondary schools in Iran. Towards the end of every school year, the Ministry of Education decides on the centres at which candidates from these schools may take their end-of-year examinations under the supervision of the regional education departments. The evening secondary schools are usually private schools but are under Ministry supervision.

The evening secondary schools generally give 18 hours of teaching a week. Pupils with the leaving certificate issued by these schools—like those from the day schools—may sit the competitive entrance examinations for a university or other institution of higher education.

Vocational and technical schools

Trade schools. In principle, vocational education begins in the second cycle of secondary school. However, in addition to the vocational branches of this second cycle, there are vocational schools of an educational standard equivalent to that of the first cycle of general secondary education. These are intended to train skilled tradesmen and have from 1 to 3 grades. Persons who have completed their primary schooling may enrol at one of these schools.

A specimen time-table is given below.

The schools have various sections: masonry, building, metalwork, tinwork, smelting, automobile engineering, carpentry and cabinet making. The leaving certificate of such schools does not entitle the holder to continue his studies at a secondary school, a teacher training school or a vocational secondary school.

There are now 15 schools of this type in Iran, attended by 1,505 pupils.

TIME-TABLE FOR TRADE SCHOOLS
(in hours per week)

Subject	Year		
	First	Second	Third
Practical arithmetic	3	2	2
Technical drawing	4	4	4
Technical subjects	4	3	2
Mathematics (algebra and geometry)	—	1	5
Practical work	22	20	18
Persian	3	3	2
Religious instruction	1	1	1
Foreign languages	2	2	4
History, geography, civics, social legislation	—	2	1
Physics and chemistry	—	1	3
Physical culture	—	—	2

Agricultural secondary schools. These schools are of two types, those of the first and those of the second cycle. By a recent decision of the Ministry of Education, the first-cycle agricultural schools are being converted into general secondary schools.

The table below shows the time allotted to the various subjects taught in agricultural secondary schools of the first cycle as of January 1957.

Agricultural secondary schools of the second cycle have been in existence only since 1958/59. The following subjects are taught: horticulture, animal husbandry, rural administration, agricultural machinery and equipment, cottage industries and the training of agricultural advisers and of rural administrators.

Pupils must obtain the full secondary school-leaving certificate if they wish to go on to more advanced studies.

Industrial secondary schools. The industrial schools correspond to the second cycle of secondary education. They

TIME-TABLE FOR FIRST CYCLE
OF AGRICULTURAL SECONDARY SCHOOLS
(in hours per week)

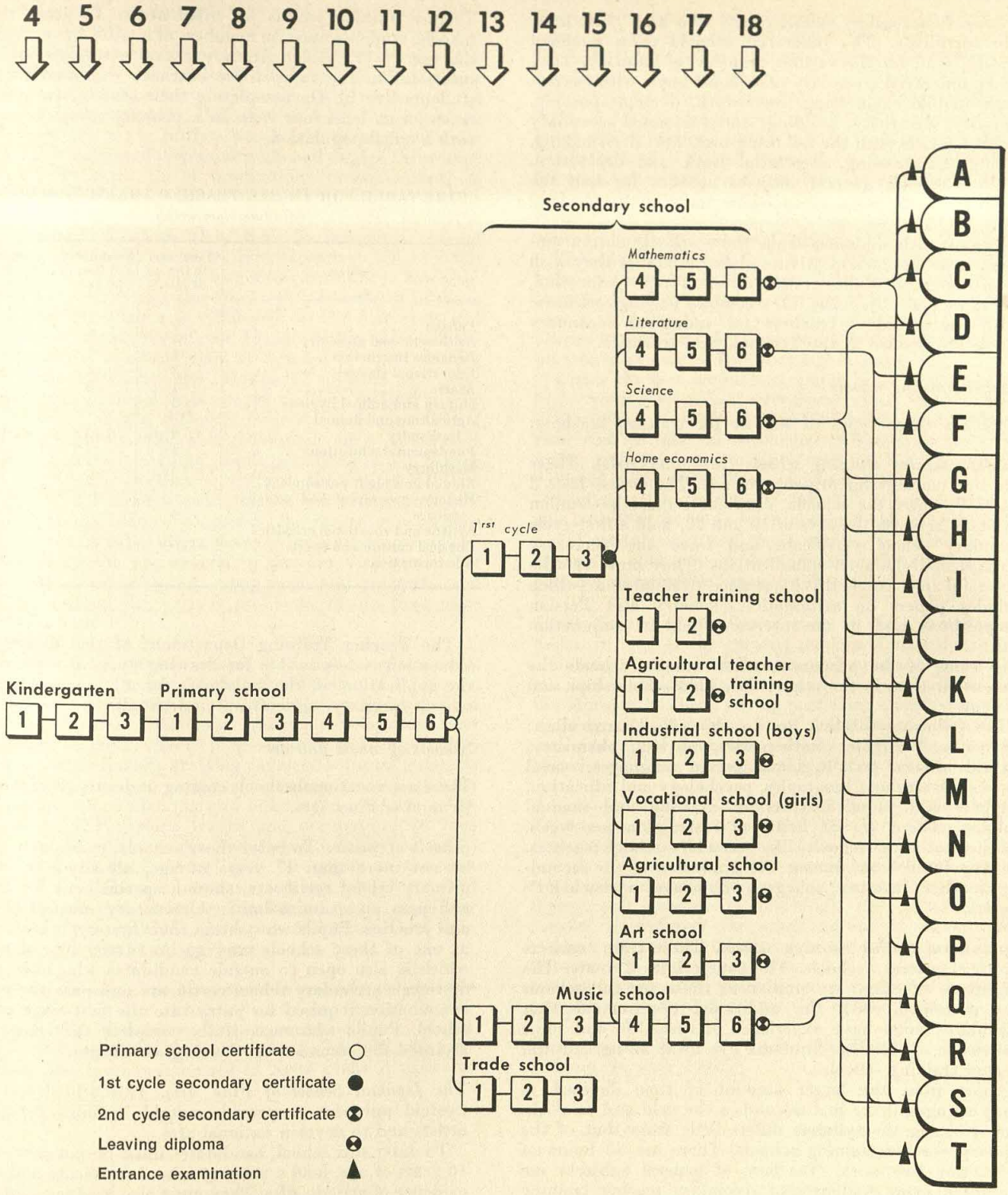
Subject	Year		
	First	Second	Third
Persian and Arabic	4	3	3
Religious instruction	1	1	1
Physics and chemistry	2	2	3
History and geography	2	2	2
Mathematics	2	2	2
Foreign languages	—	3	1
Natural science and hygiene	4	2	1
Agriculture	2	2	2
Horticulture	2	2	2
Animal husbandry, poultry keeping and agricultural industries	2	2	2
Agriculture machinery	2	2	—
Economics and civics	1	1	1
Physical culture	1	1	1
Workshop activities	6	6	6
Farm work	8	8	8

GLOSSARY

HIGHER EDUCATION

NOTE. Students from the various vocational secondary schools may continue their studies at appropriate institutions of higher education if they pass the examination for the second cycle secondary certificate and the entrance examination of the institution concerned.

A. Faculty of Technology
B. Faculty of Science
C. Faculty of Architecture
D. Faculty of Agriculture
E. Faculty of Law
F. Faculty of Arts
G. Faculty of Medicine
H. Faculty of Pharmacy
I. Faculty of Dentistry
J. Faculty of Veterinary Medicine
K. Teacher Training College
L. Faculty of Military Science
M. Technical College for the Oil Industry
N. Nursing and Midwifery Schools
O. Faculty of Islamic Theology
P. Technological Institute
Q. Conservatorium of Music
R. College of Forestry
S. Police College
T. College of Commerce


4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
Secondary school
Mathematics
Literature
Science
Home economics
1rst cycle
Teacher training school
Agricultural teacher training school
Industrial school (boys)
Vocational school (girls)
Agricultural school
Art school
Music school
Trade school
Kindergarten
Primary school
A B C D E F G H I J K L M N O P Q R S T
Primary school certificate
1st cycle secondary certificate
2nd cycle secondary certificate
Leaving diploma
Entrance examination

are open to secondary school pupils who have their first-cycle certificate. The industrial schools train qualified technical staff for the various branches of industry. They include industrial secondary schools for boys, with courses in automobile engineering, metalwork, dyeing, spinning, carpentry, electricity, building; and vocational secondary schools for girls with the following branches: dressmaking, cooking, hairdressing, secretarial work and decoration. In these schools general subjects account for half the syllabus. Pupils begin to specialize only in their second year.

Persons with diplomas from these schools obtain employment as foremen in private undertakings. If they wish to continue their studies at institutions of higher education, they must first obtain the full secondary leaving certificate (mathematics side). Teachers for industrial secondary schools are trained at the Technological Institute.

Teacher training schools

There are three types of schools for training teachers:

Primary teacher training schools (boys and girls). These turn out teachers for primary schools. The course lasts 2 years. To enter the schools, candidates must be Iranian nationals between the ages of 16 and 22, hold a first-cycle secondary school certificate and have the necessary physical and character qualifications. They must also be successful in a competitive entrance examination (which includes papers on arithmetic, geometry and Persian composition) and in an interview held in conjunction with it.

In some of the primary teacher training schools the students live in, in the others they hold scholarships and live out.

The following subjects are in the school curriculum: Persian and Arabic, mathematics, physics, chemistry, natural science and hygiene, foreign languages, social science, history and geography, psychology and education, religious and moral instruction, drawing and manual training. There are 32 hours of instruction per week. Teachers at these schools, like secondary school teachers, are appointed from among the graduates of the secondary teacher training colleges who have a bachelor's degree.

Agricultural teacher training schools. These train teachers for rural primary schools. The course lasts 2 years. The conditions of entry are similar to those for the schools just described, with the additional requirement that candidates must have experience of rural life and some knowledge of farming. Students live in at all agricultural teacher training schools.

Apart from the larger amount of time devoted to studying agriculture in class and in the field and to workshop training the syllabus differs little from that of the primary teacher training schools. There are 43 hours of instruction per week. Teachers of general subjects are appointed from graduates of secondary teacher training colleges who have a bachelor's degree. Teachers of specialized subjects (agriculture) are recruited among qualified agricultural engineers.

Teacher training schools for tribal areas. To enter these schools, students must be members of a tribe, have reached the age of 17, hold a primary school certificate and be successful in the competitive entrance examination. All students live in. On completing their studies, they must teach for at least four years in a primary school in areas with a tribal population.

TIME-TABLE FOR TRIBAL TEACHER TRAINING SCHOOLS
(in hours per week)

Subject	First term (10 Oct. to 21 Mar.)	Second term (23 Mar. to 20 June)	Third term (21 June to 5 Sept.)
Persian	6	4	—
Arithmetic and geometry	4	4	—
Religious instruction	1	1	—
Educational theory	3	1	—
Arabic	1	3	—
Human and animal hygiene	3	4	7
Agriculture and animal husbandry	9	13	19
Fundamental education	1	1	—
Machinery	1	1	5
Animal and plant parasitology	3	2	8
History, geography and social science	4	4	—
Artistic and vocational activities	—	—	4
Physical culture and sport	—	1	—
Administration	—	—	4

The Teacher Training Department of the Ministry of Education is responsible for drawing up, and supervising the application of, the syllabuses for all teacher-training schools (primary, agricultural and tribal).

Schools of music and art

These are vocational schools coming under the Directorate-General of Fine Arts.

Schools of music. To enter these schools, candidates must be not more than 17 years of age, already have their primary school certificate, show a special bent for music and pass an examination in elementary musical theory and practice. Pupils who obtain their first-cycle certificate at one of these schools may go on to the second cycle, which is also open to outside candidates who have their first-cycle secondary school certificate and pass the music examination required for entry into the first-cycle of the school. Pupils who successfully complete the course are awarded the second-cycle (leaving) certificate.

The Ispahan School of Fine Arts. This school serves a twofold purpose: to provide suitable training for gifted artists and to develop national arts.

To enter this school, candidates must be not more than 16 years of age, hold a primary school certificate and show evidence of artistic gifts. They must also produce a medical certificate showing that they are in good health. The leaving certificate of this school is equivalent to the secondary leaving certificate.

TRENDS AND PROBLEMS

Revision of secondary school curricula. The revision of the first and second-cycle curricula has been one of the major concerns of the Ministry of Education. The revision of the first-cycle curriculum in 1955 was intended to achieve the following objects: to initiate pupils into the study of civics and the principles of community life and to give them some idea of the activities of international organizations; to improve the co-ordination of the various subjects on the curriculum; to teach pupils to study at first hand the environment in which they live; to introduce manual training and social activities into secondary school syllabuses; to make use of modern audio-visual aids in teaching.

For some time now the Ministry's educational advisers have been planning new syllabuses for the first cycle and the various branches of the second cycle of secondary education. In so doing, they are guided by the following policy considerations: the division of subjects into compulsory and optional ones should be done in such a way as to cater for the different interests and aptitudes of individual pupils; the new syllabuses must be flexible enough to make it easy for pupils qualifying in one branch to continue their studies in another; the various subjects taught in each branch must form a coherent programme of study; introductory courses in the trades or vocations should be included as alternatives to pre-university courses; pupils should be encouraged to develop their powers of observation, capacity for experiment and research, and ability to grasp the various problems, rather than mere memorization.

Organization of an educational and vocational guidance programme. For the last 2 years, the Ministry of Education has been preparing the ground for the introduction of an educational and vocational guidance programme for secondary schools. This preparatory work has taken various forms: holding training courses for future guidance officers; devising and trying out progress tests in Persian and arithmetic; collecting and indexing descriptive information on the various trades and occupations in Iran (activities, conditions, etc.); devising intelligence tests; building up 'school career' files for pupils in the first cycle of secondary education; issuing pamphlets and arranging talks in order to familiarize senior secondary school teachers with the principles and methods of educational and vocational guidance.

Reform of the examination system. In accordance with the new regulations for secondary schools, framed in the light of the discussions and recommendations of the Teachers' Congress held in the summer of 1958, the curriculum has been reorganized so as to make it easier to assess, by means of examinations, the progress made by pupils and the fruits of their efforts, and, at the same time, to guide them towards the most suitable line of study or occupation. The subjects on the curriculum have been divided into 9 integrated subject groups, viz. Persian and Arabic; foreign languages; social studies (history, geography and civics); mathematics (arithmetic, algebra, geometry and technical drawing); experimental subjects (physics, chemistry, natural science and hygiene); art subjects (calligraphy and painting); religious and moral instruction; domestic science (for girls) and manual training (for boys); physical culture.

This classification makes it possible to keep a better balance between the various subjects taught in each branch. Another advantage is that if a pupil is weak in one of the subjects of a particular group and good in the others, it gives him the opportunity of rapidly overcoming his weakness and moving to a higher grade.

Under the new regulations, pupils who have their first-cycle secondary school certificate must have obtained a prescribed average mark in the mathematics group if they wish to take the mathematics branch of the second cycle, and the same average mark in the experimental subjects group if they choose natural science.

Similarly those wishing to take the literature course in the second cycle must have obtained the average in the social study group and those wishing to take the home economics course must have obtained the average in the corresponding subject group in the first cycle.

Diversification of branches of study in the first and second cycles. In view of the growing number of secondary school children in Iran and of the country's need for specialists in the various fields of industry, agriculture, commerce, etc., the Ministry has been paying particular attention in recent years to the establishment of technological, agricultural and vocational branches side by side with the other branches in the second cycle of secondary school.

Training of teachers. Various steps have been taken to remedy the shortage of primary and secondary school teachers graduating from the training schools and colleges. These include the revision of the curriculum in the primary teacher training schools (more hours devoted to educational theory and practice in teaching), the organization of courses to improve the qualifications of non-graduate teachers at present employed in secondary schools, the introduction of evening classes at secondary teacher training colleges, the publication of a series of books and pamphlets intended for practising teachers, etc.

[*Text prepared by Dr. M. Machayekhi, Ministry of Education, Teheran, in July 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 19,723,000.
Area: 629,345 square miles; 1,630,000 square kilometres.
Population density: 31 per square mile; 12 per square kilometre.

Summary of school statistics, 1953–57. Total enrolment in educational institutions at all levels was 1,245,855 students in 1957/58, representing about 6.5 per cent of the total population. There were in addition about 227,000 adults attending literacy and evening school courses. Of the total school enrolment 83 per cent were pupils in pre-primary and primary schools, 15 per cent in general secondary schools, 0.6 per cent in technical schools, less than 0.5 per cent in all teacher training institutions and just under 1 per cent in universities. Girls made up about 31 per cent of the enrolment at primary schools in 1957/58 compared with 28 per cent in 1953/54 and in general secondary schools 26 per cent against 24 per cent in 1953/54. In teacher training schools girls represented 11 per cent of enrolment and in teacher training colleges 18 per cent. At universities, the proportion of girls rose from 8 per cent in 1953/54 to nearly 13 per cent in 1957/58. The teaching staff in primary schools numbered 37,346 in 1957/58 of whom 33 per cent were women. The number of primary school teachers increased by 38 per cent over the period under review and the average primary pupil-teacher ratio was 27 in 1957/58 compared with 28 in 1953/54.

In public general secondary schools the staff increased by 63 per cent between 1953/54 and 1957/58. Enrolment increased strongly at all levels of education over this period and in particular by 37 per cent in primary schools, 55 per cent in general secondary, and 28 per cent in universities. (See Table 2.)

Enrolment trends in secondary education, 1950–57. Enrolment in general secondary schools more than trebled over this 8-year period and the proportion of girls to total enrolment increased from 21 per cent in 1951 to 26 per cent in 1957. The ratio of general secondary enrolment to the age group 15 to 19 years old increased from 5 to 9 over the period 1950–57. (See Table 1.)

Educational finance, 1958/59. Excluding higher and special education, expenditure in 1958/59 (fiscal year beginning 21 March) was 5,354 million rials, representing approximately 271 rials per inhabitant. Most of this sum was derived from the Central Government, school fees and examination fees contributing less than 0.4 per cent of the total spent. Capital expenditure amounted to 166 million rials or about 3 per cent of the total. The breakdown of administrative and instructional expenditures is given in Table 3C.

Source. Iran: Ministry of National Education, reply to Unesco questionnaire.

1. TRENDS IN SECONDARY EDUCATION, 1950–57

School year	Number of students enrolled by type of education				Average total enrolment[1] (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio[1]
	General		Teacher training				
	Total	Per cent female	Total	Per cent female			
1950	*50 000	...	...	...			
1951	82 097	21	...	...			
1952	101 140	21	1 709	14	96	2 103	5
1953	121 772	24	1 751	8			
1954	123 054	23	2 228	6			
1955	142 113	24	2 481	9			
1956	163 570	25	2 879	12	165	1 941	9
1957	188 803	26	3 368	11			

1. Calculated for general secondary schools only.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, private						
	Total	**1957/58**	**203**	**932**	**763**	**12 230**	**5 939**
	,,	1956/57	165	782	639	9 300	4 066
	,,	1955/56	98	398	354	6 077	2 762
	,,	1954/55	97	439	420	7 213	3 223
	,,	1953/54	115	365	350	5 344	1 730
Primary	Primary schools, public	1957/58	7 189	34 924	12 321	935 252	286 848
	Primary schools, private	1957/58	470	2 422	...	86 625	32 289
	Total	**1957/58**	**7 659**	**37 346**	[1]**12 321**	**1 021 877**	**319 137**
	,,	1956/57	7 301	35 319	[1]11 248	910 336	278 797
	,,	1955/56	6 724	32 801	[1]10 399	823 983	245 898
	,,	1954/55	6 223	28 608	[1]8 643	767 445	227 742
	,,	1953/54	5 956	27 055	[1]8 444	746 473	212 643
Secondary							
General	Secondary schools, public	1957/58	853	[2]5 984	[2]1 280	147 803	36 577
	Secondary schools, private	1957/58	147	[2]1 566	...	41 000	12 932
	Total	**1957/58**	**1 000**	**[2]7 550**	**[1 2]1 280**	**188 803**	**49 509**
	,,	1956/57	842	[1 2]6 976	[1 2]1 421	163 570	40 654
	,,	1955/56	731	[1 2]6 336	[1 2]1 179	142 113	34 022
	,,	1954/55	626	[1 2]6 023	[1 2]1 069	123 054	28 405
	,,	1953/54	527	[1 2]4 637	[1 2]823	121 772	28 712
Vocational	Technical schools, public	1957/58	26	456	72	5 088	745
	Agricultural schools, public	1957/58	31	135	—	1 632	—
	Schools of fine arts, public	1957/58	10	...	...	508	—
	Total	**1957/58**	**67**	**...**	**...**	**7 228**	**745**
	,, [3]	1956/57	26	...	...	3 795	794
	,, [3]	1955/56	12	...	...	1 614	542
	,, [3]	1954/55	11	...	...	1 108	402
	,, [3]	1953/54	9	...	...	887	148
Teacher training	Primary teacher training schools, public	1957/58	25	178	13	1 950	326
	Training schools for auxiliary teachers, public	1957/58	2	11	4	73	24
	Tribal teacher training schools, public	1957/58	6	81	—	189	—
	Agricultural teacher training schools, public	1957/58	12	128	—	1 041	—
	Schools of physical culture, public	1957/58	5	4	—	115	12
	Total	**1957/58**	**50**	**402**	**17**	**3 368**	**362**
	,,	1956/57	...	...	...	[4]2 879	[4]347
	,,	1955/56	...	...	...	[4]2 481	[4]212
	,,	1954/55	...	...	...	[4]2 228	[4]143
	,,	1953/54	...	...	...	[4]1 751	[4]143
Higher							
Teacher training	Teacher training colleges, public						
	Total	**1957/58**	**2**	**...**	**...**	**831**	**147**
	,,	1956/57	2	...	...	669	94
	,,	1955/56	2	...	...	[5] ...	[5] ...
	,,	1954/55	2	...	...	[5] ...	[5] ...
	,,	1953/54	2	...	...	418	56
General and technical	Faculties, public	1957/58	26	653	...	11 518	1 467
	Colleges, public	1957/58	7				
	Total	**1957/58**	**33**	**653**	**...**	**11 518**	**1 467**
	,,	1956/57	32	632	...	11 161	1 217
	,,	1955/56	31	543	...	[5]10 097	[5]950
	,,	1954/55	26	487	...	[5]9 944	[5]926
	,,	1953/54	25	394	...	9 012	746
Adult	Literacy courses	1957/58	4 614	8 396	...	216 596	...
	Evening schools	1957/58	134	561	...	10 235	...
	Total	**1957/58**	**4 748**	**8 957**	**...**	**226 831**	**...**
	,, [6]	1956/57	134	622	...	13 594	...
	,, [6]	1955/56	323	727	...	18 262	...
	,, [6]	1954/55	336	988	...	21 515	...
	,, [6]	1953/54	223	736	...	16 026	...

1. Public schools only.
2. Not including part-time teachers; their number in public secondary schools in 1957/58 was 2,384 (F. 593).
3. Technical schools only.
4. Not including enrolment in teacher training schools for auxiliary teachers and in tribal teacher training schools.
5. Students enrolled in teacher training colleges are included with those in general and technical higher education.
6. Evening schools only.

3. EDUCATIONAL FINANCE, 1958/59 (in thousand rials)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**5 353 979**
Central government	5 338 101
Tuition fees	10 000
Examination fees	5 878

B. EXPENDITURE BY PURPOSE

		Amount
Total expenditure[2]		**5 353 979**
Recurring expenditure		5 188 457
For administration or general control	552 504	
For instruction		
Salaries to teachers, etc.	3 040 676	
Other instructional expenditure	91 505	
Other recurring expenditure	251 105	
Higher education[3]	1 252 667	
Capital expenditure		165 522

C. TOTAL EXPENDITURE BY LEVEL AND TYPE OF EDUCATION[4]

	Amount		Per cent	
Total expenditure[4]		**5 353 979**		**100.0**
Central administration		509 304		9.5
Instruction		3 617 819		67.6
Pre-primary and primary education	1 064 473		19.9	
Secondary education	1 182 245		22.1	
General	849 396		15.9	
Vocational	239 133		4.5	
Teacher training	93 716		1.7	
Higher education	1 252 667		23.4	
Adult education	75 234		1.4	
Other education not specified[5]	43 200		0.8	
Other recurring expenditure, not specified		1 226 856		22.9

1. Official exchange rate: 100 rials = 1.32 U.S. dollars.
2. Budget estimate.
3. Universities and students abroad.
4. The distribution includes recurring expenditure of 5,188,457,000 rials and capital expenditure of 165,522,000 rials.
5. Includes special education.

IRAQ

THE EDUCATIONAL SYSTEM

The aims of education in Iraq are to equip the pupils with a fund of basic general culture, help them to discover and develop their capabilities and aptitudes, and bring them up so that they become good citizens, sound in body, mind and character.

The national school system comprises the following levels and types of education:

Primary education. A 6-year course, the curriculum being sufficiently flexible to allow for adaptation to the differing needs of urban and rural communities. There is provision for the teaching of English to be begun in the fifth class. At the end of the course a public examination is held the results of which determine admission to the intermediate stage of secondary schooling.

General secondary education. This is organized in two cycles: 3-year intermediate followed by 2-year preparatory. Studies at the intermediate level include Arabic, English, social sciences, mathematics, natural sciences, hygiene, religion and art. In the preparatory (upper secondary) cycle, there is differentiation into three sections or streams: literary, emphasizing Arabic, English and social sciences; scientific, in which mathematics and science are given more

prominence; and commercial. A public examination is taken at the end of the preparatory course.

Vocational and technical education. A number of institutions provide 5-year courses based on completion of primary schooling. There are also schools which offer 2- or 3-year courses following the intermediate cycle of general education.

Higher education. This is provided in the different colleges of the University of Baghdad, and other specialized institutions.

Administration

General responsibility for the educational system is vested in the Minister of Education. The Minister and senior members of his staff form the Education Council, a body which lays down educational policy, reviews and approves the budget, and approves curricula and textbooks. Under regulations issued in 1958 the Ministry was reorganized in nine departments as follows: Antiquities, Academy of Science, Research and Guidance (with sections for educational statistics, publications and libraries), Physical Education and Welfare, General Education (including a separate section for secondary education), Administration, Inspectorate-General (including inspectors of secondary school subjects), Vocational (sections for commercial, agricultural and industrial education, teacher training and fine and applied arts), Technical Affairs (sections for scholarships, curricula, textbooks and visual aids, examinations and certificates, cultural relations). Each department is headed by a director who is responsible to the Minister for the implementation of policy in his own sector.

Iraq is divided into 14 provinces, each of which has a director of education. Until recently the administration of education was fairly centralized but measures have now been taken to delegate more responsibility to the provincial authorities, particularly for primary education.

Public education is financed from the national budget (60 per cent from the central government budget and 40 per cent from the Development Board—now the Ministry of Planning). The following table shows that not only has there been a steady increase, in recent years, of the amount spent on education but that the annual education budget has, except in 1951 and 1952, represented an increasing proportion of the national budget.

Year	Education budget Dinars	National budget Dinars	Percentage
1950/51	3 599 231	25 717 229	13.8
1951/52	4 092 917	30 820 227	13.2
1952/53	4 946 731	44 480 289	11.1
1953/54	6 786 927	50 157 017	13.5
1954/55	8 517 768	53 798 028	15.8
1955/56	10 044 757	55 200 908	18.2
1956/57	12 457 077	66 032 455	18.9
1957/58	14 327 604	70 693 430	20.3

The average annual rate of increase in the education budget over the 7 years thus amounted to 22 per cent.

School teachers are civil servants, and their salaries, together with those of other public education officials, are included in the budget of the Ministry of Education. There is a basic salary scale, supplemented by family and cost-of-living allowances and special allowances for service in outlying districts.

[*Text prepared by the Unesco Secretariat in June 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 6,700,000.
Area: 171,600 square miles; 444,442 square kilometres.
Population density: 39 per square mile; 15 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58 enrolment at all levels of education (not including adult education) was 525,000, or about 8 per cent of the total population. Of these pupils, 83 per cent were in primary schools, 15 per cent in secondary general, vocational and teacher training schools, and 1 per cent in institutions of higher education. The proportion of girls was about 25 per cent in primary schools and 20 per cent in secondary schools; these proportions have not changed since 1953. Of the teaching staff in primary and secondary schools, numbering 16,500, 31 per cent were women. The pupil-teacher ratio was 34 for primary schools and 20 for general secondary schools, as compared with 29 and 17 respectively in 1953. The increase in total enrolment between 1953 and 1957 amounted to about 60 per cent, largely through an expansion of primary and intermediate education. (See Table 2.)

Enrolment trends in secondary education, 1930–57. Between 1930 and 1944, enrolment in public secondary schools increased more than five times. Furthermore, total enrolment in public and private secondary schools increased three and a half times between 1945 and 1957. In respect of general secondary education, it may be noted that the proportion of girls has tended to increase but very slightly. Enrolment in vocational schools, although showing steady increase over the whole period, still compares unfavourably in numbers with the enrolment in general secondary schools. Enrolment in teacher training schools showed little or no increase except in the last two years under review. Finally,

it may be seen from Table 1 that the average total enrolment increased rapidly during the entire period, after taking into consideration the increase of population.

Examination results in secondary education, 1953–57. In terms of the number of certificates granted there was a steady and remarkable increase between 1954 and 1957 for certificates of intermediate and secondary schools. The increase was much less in the case of certificates from vocational schools. As to teaching certificates, the number diminished between 1953 and 1955, but there was a sharp rise after that, parallel to the rise in enrolment of the teaching training schools. (See Table 3.)

Educational finance, 1959/60. The budget of the Ministry of Education for 1959/60 amounted to 24,583,250 dinars, representing an average expenditure of about 3.7 dinars per inhabitant, as compared with 1.4 dinars per inhabitant in 1954 (See *World Survey of Education:* II—*Primary Education*). Official exchange rate: 1 dinar = 2.80 U.S. dollars.

Sources. Iraq: Ministry of Economics, Principal Bureau of Statistics, *Statistical Abstract*, from 1948 to 1958; Ministry of Education, *Reports on Education in Iraq*, 1956/57, 1958/59; also replies to Unesco questionnaires.

1. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	2 082	9	120	—	...	...	[2]4	193	[2]2
1931	2 828	10	148	—	...	...			
1932	3 444	12	241	...	...	...			
1933	3 791	12	281	...	...	...			
1934	4 659	10	253	...	...	...			
1935	6 138	14	201	...	...	...	[2]11	208	[2]5.1
1936	7 904	13	256	...	...	...			
1937	10 755	14	231	...	...	...			
1938	13 629	14	243	...	...	...			
1939	13 959	15	325	...	...	...			
1940	13 969	18	464	...	...	...	[2]13	230	[2]5.6
1941	12 926	20	642	...	...	...			
1942	11 191	20	804	...	1 694	30			
1943	11 128	22	913	...	1 641	30			
1944	11 309	22	790	...	1 315	32			
1945	19 929	18	779	...	1 238	22	26	282	9.4
1946	20 424	19	548	...	1 360	21			
1947	23 047	19	662	...	1 798	19			
1948	26 928	19	656	...	1 594	23			
1949	30 300	19	832	...	1 673	28			
1950	32 443	19	1 071	...	1 489	31	44	288	15
1951	33 768	19	1 066	...	1 550	22			
1952	40 567	20	1 192	...	1 391	19			
1953	46 463	20	1 674	...	1 744	28			
1954	53 881	20	2 205	...	1 577	...			
1955	57 453	20	2 477	...	1 644	30	71	346	21
1956	62 722	20	3 154	34	4 632	25			
1957	70 272	20	4 233	...	6 681	29			

1. From 1930 to 1944 public education only.

2. Relating to the enrolment in public general education and vocational education.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	2 037	12 268	3 849	416 603	101 227
	Primary schools, private	1957/58	72	669	312	21 066	7 376
	Total	**1957/58**	**2 109**	**12 937**	**4 161**	**437 669**	**108 603**
	„	1956/57	1 919	11 853	3 852	388 065	96 553
	„	1955/56	1 826	11 082	3 472	353 464	86 789
	„	1954/55	1 663	10 272	3 308	314 909	77 316
	„	1953/54	1 549	9 521	3 124	280 378	69 595
Secondary							
General	Secondary schools, public	1957/58	178	2 442	850	51 504	12 237
	Secondary schools, private	1957/58	67	1 130	103	18 768	1 766
	Total	**1957/58**	**245**	**3 572**	**953**	**70 272**	**14 003**
	„	1956/57	218	3 193	831	62 722	12 580
	„	1955/56	205	2 926	764	57 453	11 669
	„	1954/55	215	2 877	758	53 881	10 717
	„	1953/54	197	2 679	657	46 463	9 274
Vocational	Technical schools	1957/58	5	...	...	1 247	—
	Trade and craft schools	1957/58	3	...	...	312	—
	Agricultural schools	1957/58	2	...	...	600	—
	Domestic science schools	1957/58	...	...	...	1 363	*1 363
	Medical schools	1957/58	2	...	...	329	...
	Institute of Fine Arts	1957/58	1	...	...	382	...
	Police school	1957/58	1	...	...	...	...
	Total	**1957/58**	**...**	**...**	**...**	[1]**4 233**	**...**
	„	1956/57	22	255	74	3 154	1 061
	„	1955/56	10	...	...	2 477	...
	„	1954/55	10	...	...	2 205	...
	„	1953/54	11	...	...	1 674	...
Teacher training	Teacher training schools and courses						
	Total	**1957/58**	**...**	**...**	**...**	**6 681**	**1 954**
	„	1956/57	...	100	40	4 632	1 173
	„	1955/56	...	...	...	1 644	485
	„	1954/55	...	...	...	1 577	...
	„	1953/54	14	78	14	1 744	485
Higher							
Teacher training	Teacher training College, public	1957/58	1	...	...	1 068	...
	Queen Aliya College, public	1957/58	1	...	...	392	392
	Institute of Physical Education	1957/58	1	...	...	79	—
	Total	**1957/58**	**3**	**...**	**...**	**1 539**	**...**
	„	1956/57	3	145	62	1 464	683
	„	1955/56	3	...	...	1 383	...
	„	1954/55	3	...	...	1 287	...
	„	1953/54	2	199	...	1 191	589
General and technical	Colleges	1957/58	[2]10	...	...	[2]3 899	...
	Faculty of Al Sharia	1957/58	1	...	...	166	...
	Total[2]	**1957/58**	**11**	**...**	**...**	**4 065**	**...**
	„	1956/57	12	377	38	3 897	549
	„	1955/56	12	...	...	4 039	...
	„	1954/55	10	...	...	4 133	...
	„	1953/54	11	...	...	4 034	471
Special	Reformatory school						
	Total	**1957/58**	**1**	**...**	**...**	**154**	**3**
	„	1956/57	1	...	...	110	3
	„	1955/56	1	...	...	122	...
	„	1954/55	1	...	...	141	...
	„	1953/54	1	...	...	101	...
Adult	Elementary evening schools	1957/58	114	1 543	...	27 296	...
	Schools for illiterates	1957/58	423	1 261	...	27 733	...
	Total	**1957/58**	**537**	**2 804**	**...**	**55 029**	**...**
	„	1956/57	570	2 807	...	52 034	...
	„	1955/56	587	2 588	...	53 864	...
	„	1954/55	440	2 344	...	48 447	...
	„	1953/54	331	1 544	...	29 521	...

1. Not including data on police school.

2. Not including data on police college.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Intermediate school certificate	5 002	...	4 325	...	9 020	...	9 526	...	13 806	...
Preparatory (upper secondary) school certificate	2 462	...	1 987	...	2 486	...	3 000	...	7 799	...
Vocational school certificates:										
Technical	106	...	78	...	92	...	104	...	136	...
Agricultural	16	...	31	...	32	...	28	...	30	...
Medical	78	...	80	...	121	...	119	...	109	...
Fine arts	19	...	42	...	39	...	36	...	14	...
Home arts	34	...	25	...	25	...	48	...	46	...
Teaching certificate	1 135	284	838	248	708	246	1 371	341	1 636	490

IRELAND

THE EDUCATIONAL SYSTEM

The fundamental principles underlying the educational system of Ireland are set out in the Constitution as follows:

Article 42.

1. The State acknowledges that the primary and natural educator of the child is the family and guarantees to respect the inalienable right and duty of parents to provide according to their means for the religious and moral, intellectual, physical and social education of their children.
2. Parents shall be free to provide this education in their homes or in private schools, or in schools recognized or established by the State.

3(1). The State shall not oblige parents, in violation of their conscience and lawful preference, to send their children to schools established by the State or to any particular type of school designated by the State.

(2). The State shall, however, as guardian of the common good, require in view of actual conditions that the children receive a certain minimum education, moral, intellectual and social.

4. The State shall provide for free primary education and shall endeavour to supplement and give reasonable aid to private and co-operative educational initiative, and when the public good requires it, provide other educational facilities or institutions with due regard, however, for the rights of parents, especially in the matter of religious and moral formation.
5. In exceptional cases, when the parents for physical or moral reasons fail in their duty towards their child, the State, as guardian of the common good, by appropriate means shall endeavour to supply the place of the parents but always with due regard for the natural and imprescriptible rights of the child.

Article 44.

2(4). Legislation providing state aid for schools shall not discriminate between schools under the management of different religious denominations nor be such as to affect prejudicially the right of any child to attend a school receiving public money without attending religious instruction at that school.

(5). Every religious denomination shall have the right to manage its own affairs, own, acquire and administer property, movable and immovable, and maintain institutions for religious and charitable purposes.

(6). The property of any religious denomination or any educational institution shall not be diverted save for necessary works of public utility and on payment of compensation.

Together with the foregoing constitutional provisions, the following Acts form the main statutory basis of the educational system:

The Intermediate Education Acts, 1878 to 1924.

The Ministers and Secretaries Act, 1924, under which the Department of Education was established and its functions defined.

The School Attendance Act, 1926, which provides, *inter alia*, for compulsory full-time attendance at a national (primary) school or other suitable school by every child of 6–14 years of age who is not validly excused on certain defined grounds.

The Vocational Education Acts, 1930 to 1953.

The Children Acts, 1908 to 1957—providing for reformatory and industrial school organization.

The administration of public education in so far as the State is concerned is vested in the Department of Education under the Minister for Education, who is a member of the Government and responsible to Parliament in relation to the work of his Department. The Department has, under its survey in varying degree, the education provided in primary and secondary schools and in reformatory and industrial schools as well as the preparation or training of teachers for service in various types of school. Agricultural schools come within the administrative sphere of the Department of Agriculture. The universities and university colleges are chartered bodies independent of state control but in receipt of state aid by way of grants voted annually by parliament through the Minister for Education. An Institute for Advanced Studies was set up in 1940.

A Council of Education, established in 1950, advises the Minister for Education, in so far as pertains to the powers, duties and functions of the State, upon such matters relating to educational theory and practice as they think fit and upon any educational question referred to them by him. The members of the council, who are appointed by the Minister, belong to different religious, educational, cultural and other bodies and organizations.

The structure of the school system is shown in the diagram on page 689.

A system of National Education was established in 1831. In schools recognized under this system, still known as 'national schools', provision is made for free primary education. Pupils may be enrolled at the age of 4 years and may be retained on rolls until they reach the age of 18 years. The normal course of primary education in national schools extends for 8 years, including 2 years in classes for infants; post-primary courses are also provided in some schools. National schools are under the control of local managers who are usually clergymen and who have the power of appointment of teachers, subject to the approval of the Department of Education. The managers are charged with the direct government of the schools in accordance with the Department's rules and regulations for national schools. The remuneration of national school teachers is paid in full by the Department, which also makes grants towards the cost of building, reconstructing, heating and cleaning of the schools.

Secondary education is given mainly in two types of school, namely those of the grammar school type, which will be referred to throughout this article as secondary (grammar) schools, and those of the technical school type, which will be referred to as secondary (vocational) schools.

Secondary (grammar) schools are all private institutions, owned and maintained by the churches, religious orders, boards of governors or others. They receive state aid, however, in the form of capitation and other grants.

Secondary (vocational) schools are administered by local Vocational Education Committees under powers derived from the Vocational Education Act 1930 and subsequent amending Acts.

Reformatory and industrial schools are conducted by voluntary managers who own the schools and are responsible for the upkeep of the buildings, the appointment of the staff, the expenditure of the funds and all details of the school management. They receive grants from the Department of Education and also from the local authorities. Reformatory schools exist, generally speaking, for the detention of youthful offenders over 12 years and under 16 years who may be detained to a date not later than their nineteenth birthday. Industrial schools are for children up to the age of 16 years who have been found wandering, begging, etc., or who have been convicted by the courts of certain offences. Provision is made for the education and training as well as the maintenance of children committed to reformatory and industrial schools. In many cases they attend schools outside the institution in which they reside.

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary (grammar) schools. This system dates from the establishment of the Intermediate Education Board under the Intermediate Education (Ireland) Act in 1878. The purpose of this Act was to promote intermediate secular education through the introduction of a system of public examinations, on the results of which (a) exhibitions, prizes, medals and certificates would be awarded to deserving candidates, and (b) fees would be paid to schools. The board was empowered to frame regulations for and to conduct these examinations. A series of later Intermediate Acts increased the financial provision for and extended the powers of the board, e.g., the Act of 1900, which enabled them to appoint a number of inspectors, and to advance money to school managers for the provision of science and laboratory equipment and appliances. The most important of these Acts, however, was that of 1914 which provided for: (a) the setting up of a Register of Intermediate School Teachers under the supervision of a Registration Council, and (b) the payment to the board of a sum not exceeding £40,000, referred to in the Act as the 'Teachers' Salaries Grant'. The salaries grant was the first step in the improvement of the status of secondary teachers, as the setting up of the Registration Council was the first step towards the grading of their qualifications. In June 1923, the Intermediate Education Board was dissolved and its functions transferred to the Commissioners for Intermediate Education, who were in turn, under the provisions of the Ministers' and Secretaries' Act of 1924, replaced by the Minister for Education and his Department.

Meanwhile, a representative Commission on Secondary Education had been set up in 1921 and had furnished a

series of Recommendations in 1922. As a major step towards realizing these recommendations, the Intermediate Education (Amendment) Act, 1924, was introduced. This Act provided, *inter alia*, that the various grants hitherto payable to secondary schools should be replaced by one grant payable on a capitation basis in respect of all recognized pupils who followed an approved course of study and made a prescribed number of attendances during the school year. Up to that year, secondary teachers had not been paid by the State. The new system now introduced provided that a secondary school be required to employ a certain number of registered teachers in proportion to the number of its pupils, and that each of these teachers should be entitled to receive a prescribed minimum basic salary. In addition to such basic salary, it was provided that teachers would receive direct from the Department of Education increments based on the length of their approved teaching service. The present schemes of secondary schools' capitation and other grants and of secondary teachers' salaries, together with the programme and examination system, all derive from the 1924 Act and from the Recommendations of the Commission on Secondary Education referred to above.

Secondary (vocational) schools. The passing of the Technical Instruction Act by the British Parliament in 1889 marked the first real attempt to deal with the question of technical education on a comprehensive and organized basis. The Act empowered local authorities (in Ireland, the urban or rural sanitary authority) to formulate schemes of technical instruction and to raise a rate in aid of such instruction. It also empowered the local authority to appoint a committee to act on its behalf in the administration of the Act. However, the total moneys available (from grants and rateable contributions) were, outside the cities, entirely inadequate to finance the schemes of instruction envisaged. The City Corporations were the only bodies which could carry out the provisions of the Act to any extent. To remedy the situation the Agricultural and Technical Instruction Act (Ireland) was passed by the British Parliament in 1899 and came into operation in April 1900. A Department of Agricultural and Technical Instruction was established in Dublin with responsibility for the allocation of funds previously administered from London and an annual endowment of £55,000 was provided for the purpose of technical instruction.

Schemes were organized by the new Department for instruction in science, technology, and art in urban areas, and manual instruction, rural industries, and domestic science in rural areas. To administer these schemes statutory committees, consisting of members of the local rating authority and other selected persons, were set up in the different areas. Permanent technical schools were established in the cities and some larger urban areas (by 1927 there were 65 such schools), but in the rural areas instruction was provided mainly by itinerant teachers who gave short intensive courses in woodwork and domestic economy at temporary centres. Instruction, in the main, was confined to afternoon and evening classes, in both urban and rural areas. The schemes were financed by grants from the Department and local rate contributions.

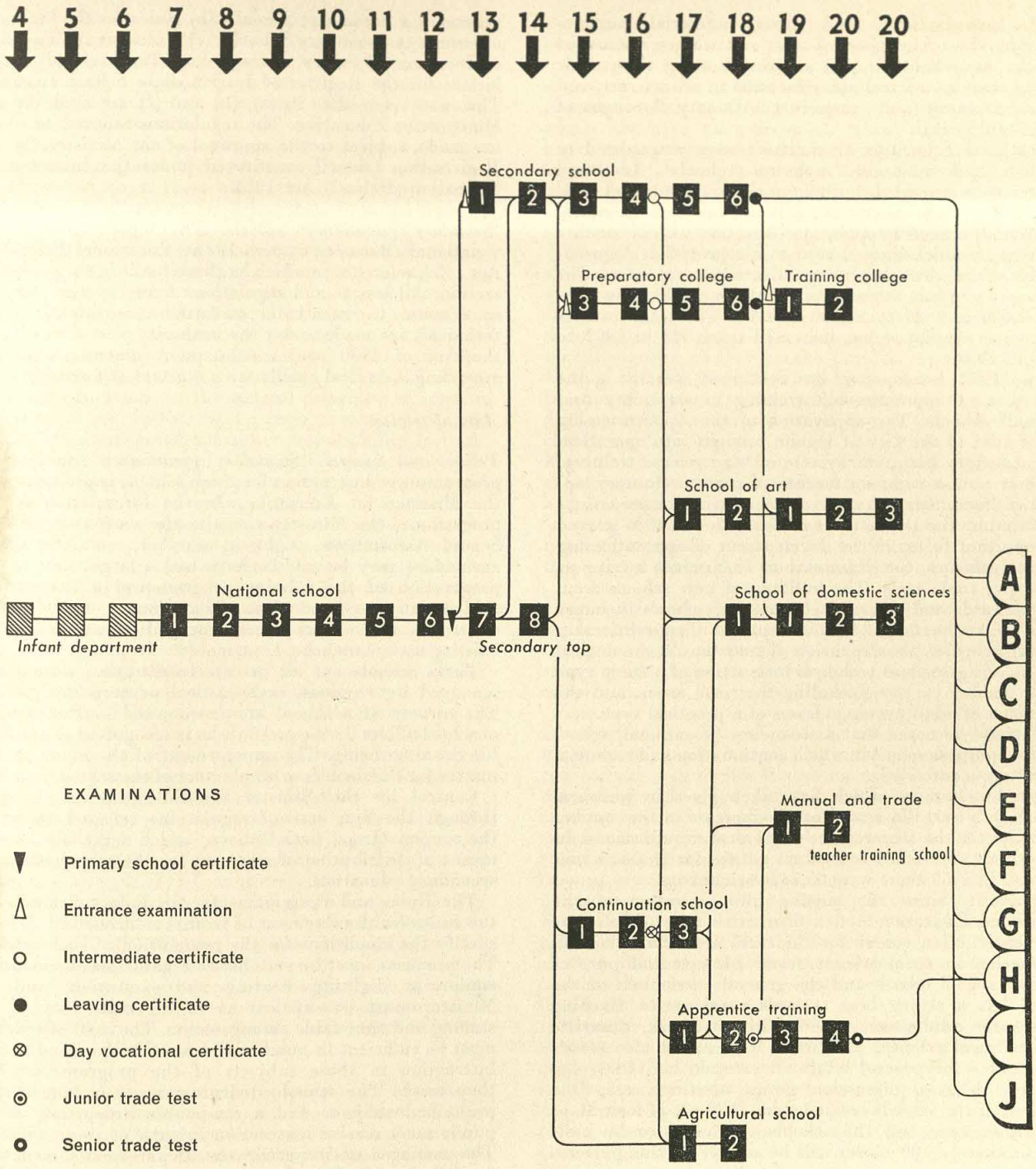
Following the establishment of native Government in 1922, technical education was assigned to the Department of Education in 1924, and two years later the Minister for Education appointed a commission 'to inquire into and advise upon the system of technical education in relation to the requirements of trade and industry'. The principal recommendations made by this commission were embodied in the Vocational Education Act passed by Dáil Éireann in 1930. The Act was later amended to enable additional funds to be provided towards the extension of vocational education. In general, however, vocational and technical education continues to be administered in accordance with the provisions of the Vocational Act of 1930. The Act made provision for a new system of post-primary education known as 'continuation education'. This was defined as 'education to continue and supplement education provided in elementary schools and includes general and practical training in preparation for employment in trades, manufactures, agriculture, commerce, and other industrial pursuits and also general and practical training for improvement of young persons in the early stages of such employment'. The Act gave Vocational Education Committees, to which the immediate control and organization of vocational education was assigned, power to establish and maintain 'continuation schools'. The Act also made provision for the continuance and expansion of technical education, which it defined as 'education pertaining to

GLOSSARY

agricultural school: vocational training school of agriculture.
apprentice training: part-time trade training school.
continuation school: vocational secondary school with technical, rural, commercial or domestic science courses.
infant department: pre-primary classes attached to *national school.*
manual and trade teacher training school: specialized teacher training course for teachers in vocational schools of trades and industries.
national school: state-aided primary school with infant department and lower secondary top, covering period of compulsory schooling.
preparatory college: state general secondary school for pupils intending to become primary teachers.
school of art: vocational secondary school of fine arts with *preliminary course* leading to *teacher training and diploma course* at higher level.
school of domestic science: upper vocational secondary school of domestic science with course in *housecraft* followed by *teacher training.*
secondary school: general secondary school.
training college: teacher training college.

UNIVERSITY FACULTIES AND INSTITUTIONS OF EQUIVALENT STATUS

A. Arts.
B. Science.
C. Medicine.
D. Agriculture.
E. Commerce.
F. Law.
G. Veterinary medicine.
H. Engineering.
I. Architecture.
J. Other faculties.


4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 20
Secondary school
1 2 3 4 5 6
Preparatory college
3 4 5 6
Training college
1 2
School of art
1 2 1 2 3
National school
Infant department
1 2 3 4 5 6 7 8
Secondary top
School of domestic sciences
1 1 2 3
A B C D E F G H I J
Manual and trade
1 2
teacher training school
Continuation school
1 2 3
Apprentice training
1 2 3 4
Agricultural school
1 2
EXAMINATIONS
Primary school certificate
Entrance examination
Intermediate certificate
Leaving certificate
Day vocational certificate
Junior trade test
Senior trade test

trades, manufactures, and other industrial pursuits (including the occupations of girls and women connected with the household) and in subjects bearing thereon or relating thereto and includes education in science, art, and physical training (and music in the County Boroughs of Dublin and Cork)'.

Vocational Education Committees were empowered to establish and maintain 'technical schools'. Increased finances were provided, both from central funds and local rates. At present there are 238 permanent secondary (vocational) schools in operation—together with 36 smaller buildings in which limited courses are provided. Approximately 100 of the schools erected are in rural areas. The number of pupils in attendance at day courses has increased from 2,600 in 1927 to 23,000 in 1958. The total number of teachers employed has increased from 822 in 1927 to 2,658 in 1958.

Since 1932 development has continued steadily in the regulation of apprenticeship training in secondary (vocational) schools. The application of the Apprenticeship Act of 1931 in the City of Dublin brought into operation, on a statutory basis, the system of 'day release training' which is now a common feature of many voluntary apprenticeship schemes. A new scheme of trade examinations instituted by the Department of Education in 1935 proved an important factor in the development of apprenticeship training schemes, the examinations themselves serving as qualifying trade tests. The building of new schools from 1930 onwards and the reconstruction of schools in larger urban centres has helped the development of apprenticeship training schemes, the expansion of trade and technological courses, the growth of technical instruction of a trade type in the smaller centres, including the rural areas, and the expansion of adult evening classes of a practical type.

It should be noted that a secondary (vocational) school is a dual purpose school in which continuation and technical education is provided.

The development which has taken place in technical education is best illustrated by the increase in the number of entries for the Department's technical examinations. In 1931 there were 6,305 individual entries for those examinations. In 1958 there were 25,347 such entries.

Gradually, since the coming into operation of the Vocational Education Act, a distinctive type of full-time day continuation course for the rural areas had evolved. Instruction in rural science forms an essential part of the day school course and the general curriculum of the school has a strong bias towards rural needs. Evening courses for adults are provided in woodwork, domestic science, rural science, and Irish. The school also serves as a centre for general adult educational activities, e.g. lectures, debates, discussion group meetings, etc. One hundred of the schools erected since 1930 are of a rural, or semi-rural, type and the schools remaining to be built (approximately 100 more) will be mostly of this pattern.

Legal basis

Secondary (grammar) schools. The principal laws are the Intermediate Education Acts 1878 to 1924, the substance of which has been given in the preceding section. The principal rules and regulations are: (a) Rules and Programme for Secondary Schools; (b) Rules for the Payment of Grants to Secondary Schools; (c) Rules for the Payment of Incremental Salary to Secondary Teachers; (d) Regulations for the Register of Intermediate School Teachers. The rules referred to in (a), (b) and (c) are made by the Minister for Education. The regulations referred to in (d) are made, subject to the approval of the Minister, by the Registration Council constituted under the Intermediate Education (Ireland) Act 1914.

Secondary (vocational) schools. The legal basis of the vocational education system is the Vocational Education Act 1930, reference to which has been made in the preceding section. All orders and regulations made by the Minister in relation to vocational education (continuation and technical) are made under the authority vested in him by the Act of 1930 or its subsequent amendments. The amending Acts deal chiefly with matters of finance.

Administration

Policy and control. Secondary (grammar) schools. The programme of instruction for these schools is prescribed by the Minister for Education. In the formulation of the programme, the Minister consults the various Secondary School Associations, eight in number, and the school authorities may be said to have had a large share in the preparation of the existing programmes in the various subjects of the curriculum. The Council of Education referred to above is at present engaged on a review of the existing secondary school curriculum.

These schools are all private institutions, owned and managed by religious, ecclesiastical or corporate bodies. The owners of a school are represented in the conduct of school affairs by the person who is recognized as manager for the time being. The appointment of the manager is a matter for the owners or conductors of the school.

Control by the Minister for Education is exercised through the four sets of regulations referred to under the section 'Legal basis' above, which serve also as the means of distribution of state aid for the advancement of secondary education.

The Rules and Programme for Secondary Schools and the Rules for the Payment of Grants to Secondary Schools specify the conditions for the recognition of such schools. The premises must be suitable as regards accommodation, equipment, lighting, heating and sanitation, and the Minister must be satisfied as to the suitability of the staffing and time-table arrangements. The staff of teachers must be sufficient in number and must be qualified to give instruction in those subjects of the programme which they teach. The school curriculum must include certain prescribed subjects and a reasonable proportion of the pupils must receive instruction in each of those subjects. The manager must permit the Department's inspectors to visit the school for the purpose of testing the efficiency of the instruction given and of ascertaining if the Department's regulations are being observed. The rules also provide for the withdrawal of recognition from a school in certain circumstances—where the attendance falls below 12 pupils or where the instruction given in the school is inefficient.

Secondary (vocational) schools. These schools are under the immediate control of 38 Vocational Education Committees composed of members of the local rating authority and other selected persons. The committee is appointed by the local rating authority and holds office for the same period as that authority; it is an independent statutory body and not a sub-committee of the rating authority. Committees can frame their own programmes within the general powers given them under the Act, subject to the approval of the Minister for Education. It is the duty of every committee to establish and maintain in its area a suitable system of continuation education, and to supply or aid the supply of technical education in its area.

For these purposes committees are empowered, *inter alia*, to establish and maintain schools and courses of instruction and are required to appoint teachers and such other staff as may be necessary. Committees in cities are also empowered to establish and maintain Day Technical Colleges to provide education 'in the general principles of science, commerce, or art suited to the requirements of persons employed in positions of control or responsibility in trade or industry'. The principal officer under each committee is the Chief Executive Officer, who acts as secretary and directs and supervises the educational scheme for the area.

Each committee prepares annually, and submits to the Minister for Education for approval, an educational scheme setting out the courses of continuation and technical instruction it is proposed to provide. The scheme, after examination by the Department, is usually approved by the Minister, sometimes with amendments. The scheme, when approved by the Minister, is put into operation by the committee and time-tables of all courses and classes are submitted in due course to the Department.

While the immediate control of vocational education is in the hands of the Vocational Education Committees the Minister exerts an overriding control through powers of sanction and approval, as well as through the direct powers specifically reserved to him under the Act.

In practice, a great deal of the actual control is in the hands of the Chief Executive Officer who supervises the administration of the scheme prescribed for the area and the day to day work of the committee. The headmaster has immediate control of the school of which he is in charge. Proposals for the appointment of teachers and headmasters are subject to the Minister's approval and the actual appointments must also be sanctioned by him. The Chief Executive Officer is appointed as a result of a competition held by a statutory board—the Local Appointments Commission—and in accordance with qualifications specified by the Minister for Education.

Supervision and inspection. The inspection of secondary schools, grammar and vocational, is conducted by the inspectorate of the Department of Education. The inspectors are recruited through a statutory board, the Civil Service Commissioners, and are university graduates with an honours degree or, for vocational school inspectors, an equivalent qualification, and a very good knowledge of the Irish language. A specified minimum period of teaching or industrial experience is usually required of the applicant as a condition of eligibility to compete for the post. An inspector is a specialist in his subject and is expected to keep himself fully abreast of all developments in his particular field of study subsequently.

The main functions of the inspectors are to examine and report on the work in the schools, the condition of the premises and the general staffing arrangements. They also advise teachers on syllabuses, work programmes and improved teaching methods. Secondary (grammar) school inspectors exercise general supervision over the Secondary School Entrance Examination, prepare question papers for the Intermediate and Leaving Certificate examinations and supervise the marking of the answer books.

Specialist inspectors of secondary (vocational) schools also act as co-examiners in the Department's examinations; they assist in the selection of teachers for training and conduct final qualifying tests for teachers. They assist in the organization of refresher courses for teachers and other special courses and they take part in interview boards dealing with the selection of candidates for special courses. District inspectors (vocational), in addition to the above duties carry out general inspection of all schools and classes in their districts; they consult with the Chief Executive Officer regarding the planning and organization of courses and examine and report on the annual educational and financial schemes. They inspect, and assist in the selection of school sites and advise on the accommodation required in schools proposed for building. When required, they attend meetings of Vocational Education Committees.

Finance. Secondary (grammar) schools. These schools are financed through: capitation and other grants paid to the manager by the Department of Education; incremental salary paid to the teachers by the Department of Education; students' fees and scholarships.

The fees charged vary according to circumstances and are fixed at the discretion of the schools concerned. The majority of pupils attend day schools, where the fees charged are well within the means of the average parent. Scholarships awarded on the results of a competitive examination and tenable in these schools or in secondary vocational schools, are awarded annually by the County and County Borough Councils to children of the lower income groups. These scholarships vary in value up to £85 per annum and are tenable for a period of 4 to 5 years. In addition a limited number of scholarships and prizes are awarded annually by the Department of Education on merit, without regard to income, on the results of a special examination and on the results of the Intermediate Certificate Examination.

Payment of teachers in these schools comprises two elements, basic salary paid by the school authorities (a minimum of £200 per annum for non-resident teachers) and incremental salary paid by the Department of Education. Scales of 'standard salary', i.e. incremental salary plus minimum basic salary of £200 per annum, are at present (1959) as follows: women and single men, £443–£806 (17 increments)—married men £486–£1,018 (18 increments). Children's allowances and rent allowances (non-pensionable) are paid in addition to the salary scales for married men. Allowances are also payable to all teachers for honours degrees and for teaching through the medium of Irish. There is a 5 per cent deduction from all pensionable emoluments for superannuation purposes.

No state aid is provided for the building and equipment of the schools. State grants are not available for welfare services in these schools.

Secondary (vocational) schools. Each Vocational Education Committee has a Vocational Education Fund, operated through a bank, out of which all expenditure is met. The annual income of committees is derived from three main sources, namely, grants from the Department of Education, a local contribution from the Rating Authority, and the balance (comparatively small) from tuition fees and miscellaneous sources. Subject to the approval of the Minister, committees may charge fees for attendance at courses of instruction except in the case of compulsory courses under Part V or Part VI of the Act of 1930; the fees charged range from 2/6 to £1 for evening classes and from 10/- to £3 for full-time continuation courses. Fees are frequently remitted in whole or in part in necessitous cases. Many committees award scholarships which cover tuition fees and class materials; a number of committees award travel-aid scholarships to students coming long distances to school. With the consent of the Minister for Education, committees may borrow money to meet capital expenditure and, with the consent of the Minister for Local Government, the rating authorities may also make grants to committees for the same purpose. The manner in which a committee proposes to spend its funds is shown in an annual financial scheme setting out the total estimated revenue and expenditure, which is subject to the approval of the Minister for Education. Where an increase in the annual local contribution is budgeted for, the proposed increase must be approved by a special estimates sub-committee, comprised of the members of the local rating authority (who are also members of the Vocational Education Committee). When the scheme has been finally approved by the Minister for Education and the prescribed certificate issued, the local authority must (unless the proposed increase exceeds 1d. in the £) pay on demand to the Vocational Education Committee the contribution specified in the certificate. Committees are allowed, subject to the sanction of the Minister, to proceed by yearly instalments—of not more than 2d. in any one year—to a maximum demand, on the local rating authority, of 1/3 in the £ (where the demand increase exceeds 1d. in the £ the rating authority must agree to the proposed excess). The average local contribution from the rating authorities to Vocational Education Committees is now (1959), approximately 1/- in the £.

The biggest item of expenditure is payment of teachers' salaries. Permanent full-time teachers are paid according to salary scales authorized by the Minister for Education. The present (1959) scales are as follows: women and single men, £450–£760 (15 increments), married men £526–£961 (16 increments). Allowances and deductions for superannuation purposes are as for secondary (grammar) school teachers.

Buildings and equipment are financed in either of two ways, namely, by borrowing by the Vocational Education Committee on the security of its own funds or by grants from the local rating authority. Schools vary in size from small three-roomed schools in rural areas to large technical institutes in cities. The average school has usually five classrooms for, respectively, woodwork, metalwork, science or rural science, domestic science, commerce and general subjects. Standards of space vary according to the nature of the classroom and range from 600 square feet for a science room to 880 square feet, with storage accommodation up to 250 square feet, for woodwork and metalwork rooms.

TYPES OF SECONDARY EDUCATION

When a pupil has completed his course of education in the national (primary) school at the age of 13–14 years he has the choice of proceeding to either a secondary (grammar) or secondary (vocational) school. The choice of school is not influenced by the Department of Education but is a matter for decision by the child's parents. The curriculum of the secondary (grammar) school is of the academic type; the secondary (vocational) school aims at continuing the pupil's education in Irish, English and mathematics and at the same time makes provision for practical subjects such as manual instruction, rural science, domestic science, commerce. The complete course of the secondary (vocational) school is generally of about 2 years' duration. Thus pupils whose parents do not wish them to continue at school beyond the age of about 16, as well as pupils who desire to follow later a technical course of study, will in most cases chose a secondary (vocational) school in preference to a secondary (grammar) school. In general the secondary (vocational) school may be regarded as having for its aim the improvement of young people who will engage in trades or other practical types of occupation, whereas the secondary (grammar) school will be expected to fit its students for posts secured through competitive examinations or to qualify them for admission to the universities or institutions of similar standing.

It should also be mentioned that managers of national (primary) schools may on certain conditions obtain recognition for courses of instruction in the secondary (grammar) school programme. For such recognition to be granted a high standard must be maintained in the work of the ordinary primary classes of the school and the staff in charge of the classes following the secondary programme must be adequate in numbers and qualifications. The accommodation must be suitable. It is a further condition for recognition of these courses in national schools that secondary education is not otherwise available to the pupils or within the means of their parents.

The school year for secondary (grammar) schools is from 1 August to 31 July; the actual period of operation is from about the first week of September to the middle of the following June. Vacation periods at Christmas and Easter are about 3 weeks and 2 weeks respectively. The school week extends from Monday to Saturday with a half-day free on Saturday and on one other day during the week. The school day usually begins at 9 a.m. and finishes at 3.30 p.m. with a break of 1 hour for lunch at 1 p.m. The usual duration of a class period is 45 minutes.

The school year in schools under Vocational Education Committees is from 1 September to 31 August. Full-time day continuation courses operate from about the first week in September to the end of June. Short vacation periods

are allowed at Christmas and Easter. The school week has a minimum of 25 hours. The majority of schools work from Monday to Friday, with a free day on Saturday. In city and some urban schools there is usually a free half-day during the week, with class for a half-day on Saturday. The school day is usually from 10 a.m. to 4 p.m. in rural schools, with a break of 1 hour for lunch at 1 p.m. In urban and city schools classes usually start at 9.30 a.m. and go on to 4.30 p.m. or sometimes 5 p.m.

General secondary schools

The curriculum of a secondary (grammar) school must include instruction in a syllabus approved by the Minister for Education in the following subjects: Irish, English, history and geography, mathematics, and science, or a language other than Irish or English, or commerce. It should also include provision for singing and physical training or organized athletic games, and domestic science in schools for girls.

A pupil may not be admitted to an approved course of study in a secondary (grammar) school unless he is sufficiently advanced in knowledge and intelligence to enable him to follow, with reasonable success, a course of secondary education. In order to test the pupils' capabilities in this respect the manager of the school must cause an entrance examination of new pupils to be held generally not later than 15 October each year. Pupils who have passed certain specified examinations conducted by the Department of Education based on the sixth and seventh standard programmes in the national (primary) schools may be exempted from the entrance examination, if the manager so desires.

The normal duration of the course is 5 to 6 years—3 or 4 years as a junior pupil following the course for the Intermediate Certificate examination and 2 years as a senior pupil following the course for the Leaving Certificate examination. The purpose of the Intermediate Certificate is to testify to the completion of a well-balanced course of general education suitable for pupils who leave school at about 16 years of age, and, alternatively, to the fitness of the pupils for entry on more advanced courses of study in a secondary (grammar) or secondary (vocational) school. The approved course for pupils for this certificate must include not less than 6 of a list of 21 specified subjects, 4 of which must be Irish, a second language, history and geography (1 subject) and mathematics. To pass the examination and qualify for the award of the certificate a pupil must, as a rule, pass in 5 subjects, which must include Irish and, in the case of boys, mathematics.

The aim of the Leaving Certificate is to testify to the completion of a good secondary education and to the fitness of a pupil to enter on a course of study at a university or an educational institution of similar standing. Senior pupils who have followed an approved course in Irish and 4 other subjects of a specified list of 23 subjects for 2 years are eligible for admission to the examination for the award of the certificate. The Leaving Certificate (pass) is awarded to a candidate who reaches the pass standard in Irish and in at least 4 other subjects or who obtains honours in 3 subjects and a pass in a fourth, Irish being 1 of the 4 subjects.

Candidates at both the Intermediate and Leaving Certificate examinations may be awarded honours in individual subjects and at the examination as a whole if they attain certain specified standards. The examination in any subject does not include an oral test at present but it is proposed to introduce such a test as part of the examination in the subject Irish at the Leaving Certificate stage as from 1960 onwards. The prescribed subjects for the certificate examinations are as follows: Irish, English, Latin, Greek, French, German, Italian, Spanish, Hebrew, history, geography, mathematics, science (including physics, chemistry, botany and physiology and hygiene), agricultural science, music, art and drawing, manual instruction and commerce.

Teaching staff. In order to become a registered teacher in a secondary (grammar) school an applicant must: (a) (i) hold a degree of a university in Ireland or Great Britain or of such other university as may be recognized for this purpose and a recognized qualification in training in teaching of such university obtained after attendance at a satisfactory course of training in the theory and practice of education accompanied by practice in teaching under supervision; or (ii) hold a recognized certificate or diploma in art or domestic science obtained after a satisfactory course of study in a school or college approved for the purpose or hold the Diploma in Music Teaching of University College, Dublin; (b) have at least one year's satisfactory experience as a teacher in a recognized secondary school under the Department of Education; and (c) pass a test of competency in oral Irish.

A teacher registered in accordance with the provisions of (a) (i) above must have spent at least 5 to 6 years of preliminary preparation subsequent to completion of his course as a student in a secondary school, i.e. 3 to 4 years' study for a university degree, 1 year at least at a course of training in the theory and practice of education accompanied by practice in teaching under supervision and a further one year's satisfactory experience as a teacher in a recognized secondary school. Non-graduate teachers registered in accordance with the provisions of (a) (ii) are eligible to teach only the subject in which they have acquired the particular recognized certificate or diploma. These certificates and diplomas are obtained as a result of the satisfactory completion of a course of specialized study in the subject concerned extending over a period of at least 3 years. In the case of domestic science, the courses accepted are in general those provided in residential training colleges recognized and grant-aided by the Department of Education. The qualification in art may be obtained as a result of satisfactory attendance at the National College of Art or at special courses organized by the Department. The Diploma in Music Teaching of University College, Dublin, can be obtained only as a result of satisfactory attendance at a prescribed course of study in that university.

Teachers may improve their competence in their particular subjects by attendance at special courses organized by the Department from time to time, such as courses in Irish, geography, mathematics, etc.

Vocational and technical schools

All the schools belonging to Vocational Education Committees and providing courses in accordance with the provisions of the Vocational Education Act 1930 are commonly called 'vocational schools'. Technical education as well as continuation education is given in these schools, the preponderance of the work of the schools (75 per cent of the total attendance hours at all types of courses) being, however, in the field of continuation education.

Reference has already been made to the definition of 'continuation education' contained in the Vocational Education Act 1930 and to its growth and development since the passing of the Act. The bulk of the work is done by means of full-time day courses in secondary (vocational) schools. For admission to these courses pupils must have attained the age of 14 years, or be over 13 years and have spent a full year in the sixth standard in a primary school. It is not the practice to insist upon any further qualification for entry, by way of educational attainment or otherwise, except as may occasionally be rendered necessary because of shortage of accommodation.

The curriculum for continuation education in these schools is not a uniform one applicable to boys and girls alike, in city, town and country. The general purpose of helping each pupil to secure his own ultimate good is universal; the immediate purpose of preparation for entry to employment is conditioned by a number of circumstances. Different types of courses are organized, the most typical being: junior technical course (boys); junior rural course (boys); junior domestic science course (girls); junior commercial course (girls, usually).

The general pattern of the weekly programme of 25–30 hours is somewhat as follows: practical subjects—one-third; semi-practical subjects—one-third; literary and general subjects—one-third. Examples of practical subjects are woodwork, metalwork, domestic science, typewriting. Semi-practical subjects comprise subjects such as science, rural science, technical drawing, book-keeping. The literary and general subjects constitute an extension of the work begun in the primary school and the aim is to maintain, and as far as is feasible to increase, the literary and general knowledge of the pupils. Subjects in this section include English, Irish, arithmetic, geography, civics. Religious instruction is included in all courses, and subjects such as art, physical education and choral singing are included wherever possible.

The junior rural course is a course to suit the requirements of boys and girls living in country districts. Rural science and domestic science are major subjects and in addition to the usual practical work in the classroom, kitchen, and school garden the pupils are encouraged to undertake home projects of an agricultural, horticultural, or (in the case of girls) domestic science type.

The duration of these full-time courses is 2 or 3 years, at the end of which time average pupils should have reached the standard of the Day Vocational Certificate. This certificate, which may be regarded as a type of school-leaving certificate, is awarded on the results of examinations conducted by the Department of Education. Basically it is a certificate of competence in a small group (2 to 4) of practical and semi-practical subjects, to which other subjects may be added as options. This certificate has considerable value when employment is being sought and it is essential for entry to certain occupations. There is no obligation on pupils to take these examinations.

Part V of the Act of 1930 contains provision for compulsory attendance at courses of continuation education in any area to which that part of the Act is applied by order of the Minister for Education. In any such area young persons between the ages of 14 and 16 years who are not attending some full-time school, whether in employment or not, are obliged to attend special courses provided by the Vocational Education Committee. As is laid down in the Act, a course consists of 180 hours of instruction per year and an employer must afford time and liberty to a young person to attend without any deduction from wages or any addition to the hours of employment. Part V of the Act is in operation in the cities of Cork, Limerick, and Waterford, and in each area the course is provided through 1 full day (5 hours) of instruction in each of 36 weeks. The courses are supplemented by voluntary evening classes in handicrafts, and other subjects and by a variety of activities of an educational, recreational, or cultural nature.

Reference has already been made to the definition of 'technical education'; as at present organized in schools under Vocational Education Committees it can be classified as follows: full-time technical and technological courses; technical education for apprentices; miscellaneous courses for adults.

Full-time technical and technological courses. For those who wish to secure some form of recognized qualification, such as graduateship of a professional institute, a small number of special full-time courses are available in the larger centres of population. Courses of this type at present in operation include architecture, art, mechanical engineering, surveying, industrial science, electrical engineering, marine engineering, radar maintenance, radio maintenance, radio engineering, radio officers, dietetics, hotel management, institutional management, hospital cooks, hotel cooks, dress designing. Full-time courses leading to the college diploma are also provided at the National College of Art, which is under the direct control of the Department of Education.

Technical education for apprentices. The greater part of the technical education for apprentices is provided by means of evening classes, where attendance is voluntary though in some instances employers encourage attendance and contribute towards the cost of tuition fees. In the cities and in a number of the larger towns, there are special classes confined to apprentices, but in the smaller centres the numbers belonging to particular trades would not justify this arrangement. In such cases apprentices are accommodated in the ordinary classes for adults.

The advantages of providing technical education for apprentices during normal working hours instead of in evening classes has become more widely recognized in recent years, and the principle is now accepted and being put into practice by a substantial number of employers, notably by large national concerns such as the Electricity Supply Board, Córas Iompair Éireann (transport), Bord na Móna (peat development), and Comhlucht Siúcra

Éireann (sugar manufacture). Many retail firms in the City of Dublin allow apprentices time off during working hours to attend courses in retail distribution in the technical schools.

These day courses for apprentices are organized either as day release courses, where the apprentices are released for a number of hours each week, or as 'sandwich courses', where attendance at classes is full-time for some continuous period.

Miscellaneous courses for adults. In all vocational education schemes provision is made for courses for adults, that is, for those who have completed full-time schooling and are as a rule in some occupation or other. These courses are usually conducted in the evening after ordinary working hours. Wherever there is an established vocational school the adult classes are held in that building, but classes are also held in other centres throughout the country in halls, libraries, etc.

In the cities and the larger towns, courses are provided in a wide variety of subjects and many of these are of a specialized nature for persons who wish to receive instruction and training which will be of assistance to them in their occupations. Examples are the courses in the various branches of commerce and business administration, engineering, science and technology, in the major technical institutes. Courses in handicrafts, domestic science subjects, art, music, Irish and other languages, physical education, etc., have a wider appeal.

In the smaller towns and in rural areas the programme of classes for adults is naturally more restricted in scope than in the centres referred to above. In the rural areas, there is a growing demand for courses especially related to actual practical needs and courses in such subjects as farm building and farm machinery are becoming regular features. Courses in rural science are also becoming more definite in aim than hitherto, instruction in fundamentals being supplemented by intensive study of some particular aspect of the subject, such as soil testing. Efforts are also being made with fair success to establish day courses of 1 or 2 days per week for young farmers. These developments are rendered possible by the fact that increasing numbers of young people in the rural areas have learnt the elements of these subjects by attending the junior rural course in a day vocational school.

In the case of courses for rural housewives, there is a tendency in recent years to depart from the usual evening course in some branch of domestic science and to develop courses which cater for all aspects of women's work in the rural homestead. Subjects such as home decoration, poultry-keeping, dairy management, gardening, home-nursing, are being introduced, with assistance from the instructors and officers of the other local authorities when subjects are outside the scope of the teachers attached to the vocational education committee. Other developments in this field include the experiment of conducting classes for small groups of housewives in a dwelling-house and the provision of a home advisory service.

In conjunction with the schemes of technical education which are in operation, the Department conducts examinations annually. These examinations, which are divided to conform as closely as possible with occupational requirements, involve practical, written, and oral tests appropriate to the various subjects and are arranged in stages to suit the different standards. Certificates are awarded to successful candidates.

Teaching staff. The principal types of teachers employed by Vocational Education Committees, their qualifications and training, and the nature of their teaching duties are as follows:

Manual instructors (woodwork) are selected from young men who have some trade experience and are qualified by means of a 2-year training course conducted by the Department of Education. They are recognized for the teaching of woodwork, mechanical drawing, and other allied subjects to both young boys attending the day vocational schools and adults attending evening classes. They are also recognized for the instruction of apprentices to the woodworking and building trades.

Manual instructors (metalwork). Selection, training and recognition are on the same lines as for the woodwork type, substituting metalwork and other engineering subjects for woodwork, etc.

Domestic science teachers are selected from girls who have a good general education to secondary school leaving standard, together with evidence of aptitude for domestic science work. The training course, conducted in two special state-aided colleges, is of 3 years' duration.

Teachers of commerce must hold as a minimum a university degree (B.Comm.). Recognition to teach shorthand or typewriting requires additional qualifications. They may also be recognized to teach general subjects.

Teachers of rural science must hold a university degree (B.Agr.Sc.) together with a certificate of satisfactory attendance at a short course in teaching methods, or they may be selected from young men with practical experience of agriculture who have completed a good course of secondary education and be qualified by means of a 2-year training course conducted by the Department of Education.

Teachers of science must hold a university degree (B.Sc.) or a diploma in science of a recognized technical college.

Teachers of art must hold the diploma of a college of art, together with a success in examinations relating to teaching methods or the Art Teachers' Certificate of the Department of Education. They are recognized for the teaching of all branches of art, including crafts of various kinds.

Teachers of general subjects are usually university graduates (B.A. and/or B.Comm.); for the teaching of Irish an additional qualification—Teastas Timire Gaeilge—is required.

Physical training teachers are required to hold the diploma of a recognized college or institute.

The qualifications for teachers not specified above are prescribed as required.

Other specialized schools

Schools of music (under the Vocational Education Committees) are in operation in Dublin and Cork. Instruction in instrumental and vocal music is provided at various levels. The instruction is mostly on an individual basis but choir and orchestral work is also undertaken. Pupils are

prepared for the different stage examinations of the recognized examining bodies, as well as for other musical competitions.

Art schools are in operation in Dublin, Cork and Waterford. The Cork and Waterford schools are under the respective Vocational Education Committees but the Dublin school—the National College of Art—is directly under the Department of Education. Instruction in the schools is provided at appropriate levels in the different art subjects and students are entered for the various stage examinations of the Department of Education, as well as for other recognized examinations. The National College of Art awards its own Diploma—the Associateship of the National College of Art (ANCA).

Out-of-class activities

Various out-of-class activities are organized by the school authorities and by the students, though the range of such activities varies considerably with the size of the school, whether it is a boarding school or day school, the distance its students have to travel to and from school each day, etc. Debates and concerts are conducted particularly in boarding schools, and out-of-door games are organized through amateur associations to which teams from the schools are affiliated. Many schools have associated past pupils' unions which help to maintain contact between the schools and outside interests and developments.

Out-of-class activities are well organized in most schools under Vocational Education Committees. Students' unions, which are in operation in quite a number of schools, do much to foster activities of this kind. Organized games include football and hurling for boys and camogie and basketball for girls. Interschool matches are played and school league competitions organized.

School drama is a very popular form of out-of-class activity. It is an activity in which day and evening (adult) students can co-operate. Plays are produced locally and at regional dramatic festivals. School debates are held and this is a form of activity which is growing in popularity, especially in the adult evening classes.

The organization of Macra na Tuaithe clubs based on the rural vocational schools has led to a big expansion in home project work, particularly in boys' classes. Most schools organize annual excursions and outings for the day pupils—usually towards the end of the school session.

TRENDS AND PROBLEMS

Secondary (grammar) schools. Recent years have seen a big expansion in the number of students attending secondary (grammar) schools and this interest in the provision of secondary education for their children still continues to grow among parents. New schools are accordingly being opened in more remote localities than formerly and existing schools have to be enlarged. The cost of erecting new schools or extending existing ones places school authorities under the strain of a financial debt which can be extinguished only over a number of years. At the same time standards of equipment have to be maintained or improved to meet the new demands of the more advanced methods of teaching the different subjects of the curriculum. The shortage of science teachers is not acute but it has shown itself in a modified form, while there is a general demand for an extension of the provision for the teaching of the subject in the schools. The standard reached in Irish in secondary schools is satisfactory but there is some disappointment that greater progress is not being made towards the goal of making it the everyday spoken language of the pupils. It is hoped that the introduction of an oral test as part of the examination in the subject at the Leaving Certificate examination from 1960 onwards will contribute to this end by causing greater emphasis to be laid on oral fluency and giving an impetus towards a more widespread use of Irish both inside and outside the school. A report from the Council of Education on the existing curriculum of the secondary school is awaited, and when it becomes available its recommendations as to what modifications or improvements should be made in the curriculum the better to suit it to present-day needs will be considered in consultation with the school associations.

Secondary (vocational) schools. More pupils are now remaining on for a third year in the day vocational schools and, consequently, it is likely that full-time day continuation courses will be organized in the future on a 3, rather than a 2, year basis. In anticipation of this development a new examination is being planned—to meet the needs of pupils who have completed a 3-year course.

The coming into force of new apprenticeship legislation (at present under consideration) is bound to lead to a big expansion of apprenticeship training schemes. More technical training for agriculture will also be required. At the present time the Departments of Agriculture and Education are co-operating in the organization of a special training scheme for young farmers, to be held during the winter months. The courses of instruction will be provided in the rural vocational schools.

Modern developments in agriculture, industry, and commerce are creating new demands for various types of technical education. The system of vocational education is sufficiently flexible to cope with these demands—through the provision of courses and types of instruction suited to modern needs. The future, therefore, would seem to presage a further development of the system in both the fields of continuation and technical education.

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STATISTICS

Population (mid-year 1958 estimate): 2,853,000.
Area: 27,136 square miles; 70,283 square kilometres.
Population density: 105 per square mile; 41 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment (not including adults taking part-time and evening courses) was nearly 620,000 pupils, being 21 per cent of the total population. Of these pupils, 81 per cent were in national (primary) schools, 12 per cent in general secondary schools, 4 per cent in vocational schools, 2 per cent in higher education and 1 per cent in special education. In primary and secondary schools, there were as many girls enrolled as boys, though in the teacher training institutions the proportion of girls was about two-thirds. At the university level, only 25 per cent of the students were girls. Of the total reported teaching staff numbering over 21,000 teachers, 54 per cent were women. In the primary schools the pupil-teacher ratio was 37 in 1957/58.

Between 1953 and 1958 primary school enrolment increased by 3 per cent. However the increase in general secondary schools was 21 per cent; in vocational schools, 14 per cent; in teacher training, 13 per cent; and in higher education, 15 per cent. (See Table 1.)

Enrolment trends in secondary education, 1930–57. Enrolment in general secondary schools doubled between 1930 and 1955, and continued to increase by about 5 per cent each year. During the period of 28 years, the proportion of girl pupils increased progressively from 41 to 48 per cent. However, in public vocational schools the trend of girls' enrolment seems to have been the reverse, at least since the period 1941–44. Total enrolment in these vocational schools nearly tripled between 1931 and 1957, and in the last 3 years the increase was also about 5 per cent each year. The number of pupils in teacher training (preparatory) colleges has increased slowly in recent years, after a substantial decline in the 1930s and the early 1940s. Taken altogether, the average total enrolment in secondary schools increased constantly for each 5-year period, and for 1955–57 it was twice as large as for 1930–34. With an apparent decrease in the estimated population 15–19 years old, the enrolment ratio for 1955–57 was more than twice as high as at the beginning of the period covered in Table 2.

Examination results in secondary education, 1953–57. The number of secondary school leaving certificates awarded each year increased by 18 per cent between 1953 and 1957 while the proportion of girls receiving these certificates remained at 52 per cent. The increase in the number of day vocational training certificates awarded between 1953 and 1957 was over 45 per cent. (See Table 3.)

Educational finance, 1957. In the fiscal year beginning in April 1957, total expenditure for education (from the central and local governments and from university funds) amounted to nearly 17 million pounds sterling, averaging about £6 per inhabitant. Recurring expenditure, being about 91 per cent of total expenditure, was distributed by level and type of education as shown in Table 4B.

Source. Ireland: Central Statistical Office, reply to Unesco questionnaire.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	National (primary) schools						
	Total	**1957/58**	**4 869**	**13 554**	**9 195**	**504 401**	**250 475**
	,,	1956/57	4 869	13 402	9 067	503 381	249 863
	,,	1955/56	4 871	13 262	8 965	500 894	249 476
	,,	1954/55	4 872	13 231	8 949	495 163	245 984
	,,	1953/54	4 874	13 144	8 903	490 157	243 434
Secondary *General*	Recognized secondary schools, private	1957/58	489	[1]3 516	[1]1 719	66 221	31 732
	Primary schools with recognized secondary classes, private	1957/58	84	...	...	6 021	5 667
	Total	**1957/58**	**573**	**[2]3 516**	**[2]1 719**	**72 242**	**37 399**
	,,	1956/57	567	[2]3 320	[2]1 649	68 510	35 520
	,,	1955/56	555	[2]3 191	[2]1 620	64 913	33 662
	,,	1954/55	541	[2]3 022	[2]1 526	61 925	32 111
	,,	1953/54	532	[2]3 074	[2]1 575	59 763	30 881

1. In addition, there were 1,441 (F. 961) part-time teachers.

2. Not including teachers in secondary classes attached to primary schools.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Second. [cont.]							
Vocational	Vocational and technical schools, public	1957/58	[3]267	[4]2 658	557	[5]22 961	[5]10 449
	Schools of domestic science, aided private	1957/58	13	...	...	[5]375	[5]375
	Other schools, aided private	1957/58	3	...	...	651	413
	Total	**1957/58**	**283**	**[4 6]2 658**	**[6]557**	**23 987**	**11 237**
	„	1956/57	276	[4 6]2 606	...	22 730	10 754
	„	1955/56	269	[4 6]2 619	...	21 855	...
	„	1954/55	259	[4 6]2 548	...	21 211	...
	„	1953/54	240	[4 6]2 453	...	21 053	...
Teacher training	Preparatory colleges, public						
	Total	**1957/58**	**6**	**46**	**28**	**520**	**340**
	„	1956/57	6	46	28	517	340
	„	1955/56	6	46	28	511	334
	„	1954/55	6	46	28	516	330
	„	1953/54	6	46	28	507	323
Higher							
Teacher training	Class for manual instructors, public	1957/58	1	...	...	19	—
	Training colleges for domestic science teachers, private	1957/58	2	35	25	135	135
	Training colleges for primary teachers, private	1957/58	6	81	37	1 055	726
	Total	**1957/58**	**9**	**[7]116**	**[7]62**	**1 209**	**861**
	„	1956/57	10	[7]112	[7]59	1 233	863
	„	1955/56	12	[7]108	[7]55	1 172	785
	„	1954/55	14	[7]101	[7]52	1 127	702
	„	1953/54	15	[7]99	[7]52	1 020	629
General and technical	Universities	1957/58	2	711	94	8 782	2 237
	Theological college	1957/58	1	48	—	544	—
	Technical courses in secondary vocational schools	1957/58	(7)	...	...	855	206
	National college of art	1957/58	1	19	...	665	...
	Total	**1957/58**	**[8]4**	**[8]778**	**...**	**10 846**	**[9]2 443**
	„	1956/57	[8]4	[8]762	...	10 327	[9]2 377
	„	1955/56	[8]4	[8]742	...	9 868	[9]2 385
	„	1954/55	[8]4	[8]693	...	9 817	[9]2 323
	„	1953/54	[8]4	[8]636	...	9 445	[9]2 178
Special	Schools for blind children	1957/58	2	4	2	98	...
	Schools for deaf and dumb children	1957/58	3	39	25	444	...
	Schools for mentally retarded children	1957/58	5	21	14	472	...
	Schools in orthopaedic hospitals	1957/58	7	35	34	524	...
	Schools in sanatoria and convalescent homes	1957/58	6			319	...
	Schools for children with cerebral palsy and poliomyelitis	1957/58	3	5	5	87	...
	Reformatory schools	1957/58	3	27	...	194	...
	Industrial schools	1957/58	49	347	...	4 135	...
	Total	**1957/58**	**78**	**478**	**...**	**6 273**	**...**
	„	1956/57	77	473	...	6 379	...
	„	1955/56	73	438	...	6 143	...
	„	1954/55	69	441	...	6 255	...
	„	1953/54	68	477	...	6 499	...
Adult	Extra-mural courses at university colleges	1957/58	...	...	...	434	144
	Vocational part-time and evening courses[10]	1957/58	...	[11]...	[11]...	61 792	30 768
	Total[10]	**1957/58**	**...**	**[11]...**	**[11]...**	**62 226**	**30 912**
	„ [10]	1956/57	...	[11]...	...	66 496	33 543
	„ [10]	1955/56	...	[11]...	...	73 676	37 323
	„ [10]	1954/55	...	[11]...	...	70 304	36 315
	„ [10]	1953/54	...	[11]...	...	71 144	36 690

3. Permanent centres only; in addition, there were 475 temporary centres.
4. Including part-time teachers (1,121 in 1957/58) and those teaching in vocational part-time and evening courses for apprentices and adults.
5. Full-time students only.
6. Public schools only.
7. Not including teachers in classes for manual instructors and for rural science teachers.
8. Not including technical courses.
9. Not including National College of Art.
10. Including all part-time and evening classes for apprentices and others.
11. Included under secondary vocational.

2. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational[2]		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	28 994	41	...	...	608	57			
1931	30 004	41	7 925	51	605	57			
1932	30 966	40	9 173	52	613	56	41	265	*15*
1933	32 384	41	10 228	51	604	57			
1934	33 577	41	11 809	53	585	58			
1935	35 111	42	12 597	52	585	58			
1936	35 890	43	13 128	52	594	56			
1937	36 092	43	12 818	48	572	57	50	266	*19*
1938	36 676	43	13 529	47	572	57			
1939	37 674	43	15 057	53	410	60			
1940	38 713	43	14 934	52	269	61			
1941	39 537	44	14 184	57	250	67			
1942	39 787	45	13 212	57	241	73	54	269	*20*
1943	40 040	45	13 025	57	324	74			
1944	41 178	45	14 102	57	421	71			
1945	41 799	45	14 322	54	438	68			
1946	42 927	45	14 170	53	464	68			
1947	43 780	46	14 771	52	478	65	60	253	*24*
1948	45 413	46	16 330	50	486	66			
1949	47 065	46	18 978	51	475	63			
1950	48 559	46	18 042	...	493	64			
1951	50 179	47	19 011	...	498	64			
1952	52 151	47	19 780	...	498	64	72	239	*30*
1953	54 019	47	19 932	47	507	64			
1954	56 411	48	20 299	47	516	64			
1955	59 306	48	20 780	46	511	65			
1956	62 429	48	21 786	46	517	66	85	235	*36*
1957	66 221	48	22 961	46	520	65			

1. Not including secondary classes attached to primary schools.

2. Public schools only.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Secondary schools' leaving certificate	5 072	2 640	5 266	2 632	5 442	2 778	5 711	2 945	5 961	3 108
Day vocational training certificate	2 624	...	3 383	...	3 582	...	3 514	...	3 813	...

4. EDUCATIONAL FINANCE, 1957 (in pounds sterling)[1]

A. EXPENDITURE BY PURPOSE

	Amount
Total expenditure[2]	**16 894 295**
Recurring expenditure	15 374 745
For administration or general control[3]	643 997
For instruction	
Salaries to teachers, etc.	11 442 793
Other instructional expenditure	314 048
Other recurring expenditure	2 973 907
Capital expenditure	1 518 545
Debt service	1 005

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.
2. Closed accounts. Expenditure of the central and local governments and from university funds.
3. Includes expenditure of £ 154,437 by the Vocational Education Committees.
4. Includes also, expenditure for adult education and some expenditure for vocational education at the third level.

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**15 374 745**		**100.0**
Central administration		541 431		3.5
Instruction		11 859 407		77.1
Primary and special education	7 879 316		51.2	
Secondary education	2 866 701		18.7	
General	1 618 420		10.5	
Vocational[4]	1 160 095		7.6	
Teacher training	88 186		0.6	
Higher education	1 113 390		7.2	
Other recurring expenditure		2 973 907		19.4
For primary education	1 120 332		7.3	
For secondary education	1 284 726		8.4	
For higher education	383 992		2.5	
For special education (reformatory and industrial schools)	184 857		1.2	

ISRAEL

THE EDUCATIONAL SYSTEM

The Education Ordinance of 1933 organized education in Palestine in two main systems: the Arab Public System, maintained, administered and inspected by the Government of Palestine, acting through its Department of Education, and the Hebrew Public System, maintained, administered and inspected by the Va'ad Leumi (National Council) elected by the organized Jewish community, acting through its Department of Education, and controlled by the Government Department of Education. That Ordinance also recognized the various private schools existing in the country and provided for grants-in-aid to them out of public funds at the discretion of the Government. The Arab Public System was maintained by government funds from general taxation, though local authorities were allowed to subscribe out of their rates for the payment of additional teachers. The Hebrew Public System was maintained with funds from three main sources—a grant from the Government, contributions by local authorities from their general revenue and/or education rates, and fees paid by the parents.

There was no statutory law of compulsory education, nor was there any legal or administrative machinery for its enforcement.

After the establishment of the State of Israel in May 1948, the Compulsory Education Law, 1949, made attendance at school for the age group 5 to 13 + compulsory

and free. It also laid the responsibility for public education for that group on both the Central Government and the local authorities, and up to 1953 the Government paid part of the teachers' salaries in primary schools, while the local authorities paid the rest and also bore maintenance expenses. In 1953 the Government began paying the full salaries of the teachers in primary schools. In addition, the Government bears the maintenance expenses, fully or partly, of a fairly large number of schools for immigrants in poor localities. The Compulsory Education Law, 1949, also makes attendance compulsory at evening classes, at government cost and free of charge to the student, of youths between 14 and 17 who have not completed a primary school course. The State Education Law, 1953, made primary education a state function and banned outside influence, party or political, from state schools.

Local authorities normally appoint local education committees to deal with the maintenance of schools, registration of pupils, etc. Additional services, e.g. supply of books, food, medical attention, etc., may also be given either gratis if the local budget can afford it, or else a special rate approved in advance by the Minister of Education and Culture can be imposed on parents for the purpose.

A number of private agencies function in the field of education in Israel. Some of them are philanthropic, some are religious, while others are of a social character. Some confine themselves to supplying kindergarten education for children under the age of 5; others maintain systems of primary and sometimes secondary schools of a religious nature with or without government aid (this applies to both Jews and Christians); and still others, mainly labour voluntary bodies, supply education or services for children in public schools in certain localities. There are very few strictly private agencies functioning for the profit of the owners or partners.

The structure of the school system is shown in the diagram on page 703.

THE DEVELOPMENT OF SECONDARY EDUCATION

If secondary education is taken to mean (a) education beyond the primary school age, (b) study for its own sake, especially of the classical texts, and (c) an intermediate step towards higher or professional education, then this kind of education was normal in Jewish life for many centuries, though it applied only to boys and not to all social strata. From the second half of the nineteenth century onwards, with the introduction of modern ways of life and the emergence of Jewish nationalism, secondary education of the Jewish population in Palestine acquired two additional aims: the provision of vocational instruction in agriculture and in trades and industrial occupations, and the efficient and fruitful synthesis of traditional Jewish learning and modern arts and science. Five dates are of importance in this respect. In 1870, before Jewish immigration to Palestine started on an appreciable scale and before the establishment of the Zionist Organization, the Mikve Israel agricultural school was founded near Jaffa. In 1882 the Tora U-Melakha school was founded in Jerusalem for general and vocational training for boys. These two schools, which were at first partly primary and partly secondary, were founded by the Alliance Israélite Universelle of Paris. In 1904 a secondary school, with parallel sections for business and teacher training, was opened in Jerusalem and became in 1914 the well-known Hebrew Teachers' College. In 1906 the Gymnasia Ivrit (now the Gymnasia Herzlia secondary school in Tel Aviv) was established in Jaffa—the oldest secondary school in Israel. In 1913 a Women's Teachers' College was opened in Jaffa, giving 4 years of secondary education. Before the beginning of the first world war two more secondary schools were founded and plans laid for a religious secondary school.

Between 1919 and 1948 great progress was made in secondary education. With the growth of the Jewish population, the number of youths of secondary school age increased, the ideal of settling on the land gained momentum, and the need for further vocational training was felt. At the same time the ideal of education towards a 'Hebrew personality' took root, and so primary and secondary schools tended to became grouped in three main categories: general, *mizrahi* (religious) and labour. This division had no legal foundation, but was sustained by interested parties which worked within the framework of the Department of Education of the Va'ad Leumi (the elected body representative of nationalist Jewry under the Mandatory regime) and through it in the Department of Education of the Mandatory Government.

Non-Jewish secondary education was catered for partly by the Government of Palestine, which opened several secondary schools and added secondary classes to a number of primary schools, partly by Church and missionary bodies—some of their schools dating from Turkish times—and partly by the private enterprise of Muslim or Christian societies or individuals.

Jewish academic secondary education grew in the three main cities (Jerusalem, Tel Aviv and Haifa), in the old villages and in the new settlements. Private or co-operative schools were established. From 1930 onwards, municipal and local authorities started to open municipal secondary schools. Their income was mainly from fees, though to a lesser degree than in the other schools, but eventually small grants by the Va'ad Leumi and local councils were given in the form of scholarships. Moreover most schools agreed to accept free of charge or at reduced rates a small number of needy but promising pupils. Some of the schools had boards of governors and parents' committees which co-operated with the principals of the schools and teachers in educational matters and in seeking means for improvements. Until about 1935, the school course was of 12 years' duration, of which the first 4 years were primary and the rest secondary, following the old European system. This was then changed to 4 classes of secondary education added to the 8 primary grades. In the upper 2 grades (eleventh and twelfth) humanities and science sections were introduced. The continuation classes in the workers' settlements (*kibbutzim* and *moshavim*) began as classes added to primary schools and eventually became complete schools. Each settlement had its own school or a number of settlements had a common school; all these schools were boarding schools, intended to prepare young people for life in the agricultural settlements and therefore stressing natural sciences, especially biology, and practical work in agriculture.

Government Arab schools, private Christian and Muslim schools and some private Hebrew schools entered their pupils for the Palestine Matriculation Examination, held under the auspices of the Palestine Board of Higher Studies in which the Mandatory Government as well as the public used to be represented. This examination was purely external and won the recognition of many universities abroad.

Between the two world wars the Bagrût (Matriculation) examination of the Va'ad Leumi was introduced in the Hebrew schools in co-operation with representatives of the institutes of higher learning in the country and of the Mandatory Government. This examination was in two parts. The first or preliminary part was taken at the end of grade 10 (in Bible, Hebrew grammar and grammar of a foreign language) and was partly external. The second part was taken at the end of the twelfth year and consisted of six subjects—literary composition, Bible, English, mathematics and two additional subjects to be selected according to the branch of studies chosen by the student. This was normally an external examination, and the candidate had to get a 'pass' mark in all subjects except one, in which a lower mark was accepted. In the case of pupils from well-reputed schools, their school marks in grades 11 and 12 were taken into account in the award of the final marks. The Bagrût certificate was accepted for admission by all institutes of higher learning in the country without further examinations. In the 1940s, external examinations were introduced for candidates who, owing to war conditions and other reasons, did not attend secondary schools. This examination was of the same standard as the regular examination but candidates who did not have a certificate of 10 years' school attendance were required to pass preliminary examinations in a number of school subjects.

Non-Jewish vocational and agricultural education in Turkish times and under the British régime was on a small scale and restricted almost entirely to Christian missionary efforts, except for the Kadoorie agricultural school in Tulkam and the Technical School in Haifa Bay which were established and maintained by the Palestine Government.

Legal basis

There is no special law governing secondary education in Israel. The State Education Law, 1953, though intended to regulate primary education deals also with teachers' colleges for primary schools. None the less, the Ministry of Education and Culture has laid down a number of regulations concerning the licensing of teachers in secondary schools, the Bagrût examinations, reduced school fees, etc.

Administration

Although there is no law on the subject (1959), secondary education is in fact the responsibility of the Ministry of Education and Culture, and the Ministry has a division of secondary education and a number of inspectors (supervisors) of secondary schools. The head of the division has regular meetings with these inspectors at which the progress of the schools is reviewed and ways and means of improving matters are discussed. When specific recommendations are agreed upon or matters of importance are met, they are referred either to the 'pedagogic secretariat' of the Ministry if they are mainly of an educational nature, or to the Director-General if they are of an administrative or more general character, and they may then be brought before the management board of the Ministry, and eventually before the Minister himself. The initiative for reforms and changes need not rest with the division of secondary education: it can and sometimes does begin with the Ministry, or the Knesset (Parliament), or the Director-General, or with other officers of the Ministry.

Curricula, notes on method, suggestions and regulations are published in the Director-General's circular. There is a unit in the Ministry for the approval of textbooks, and textbooks for secondary schools are dealt with by appropriate experts and committees. The syllabus of the Bagrût school-leaving examination is generally approved by a joint committee of representatives of the Ministry, the Hebrew University of Jerusalem, and the Technion (the Israel Institute of Technology) of Haifa, inasmuch as the Bagrût certificate grants admission to those institutions.

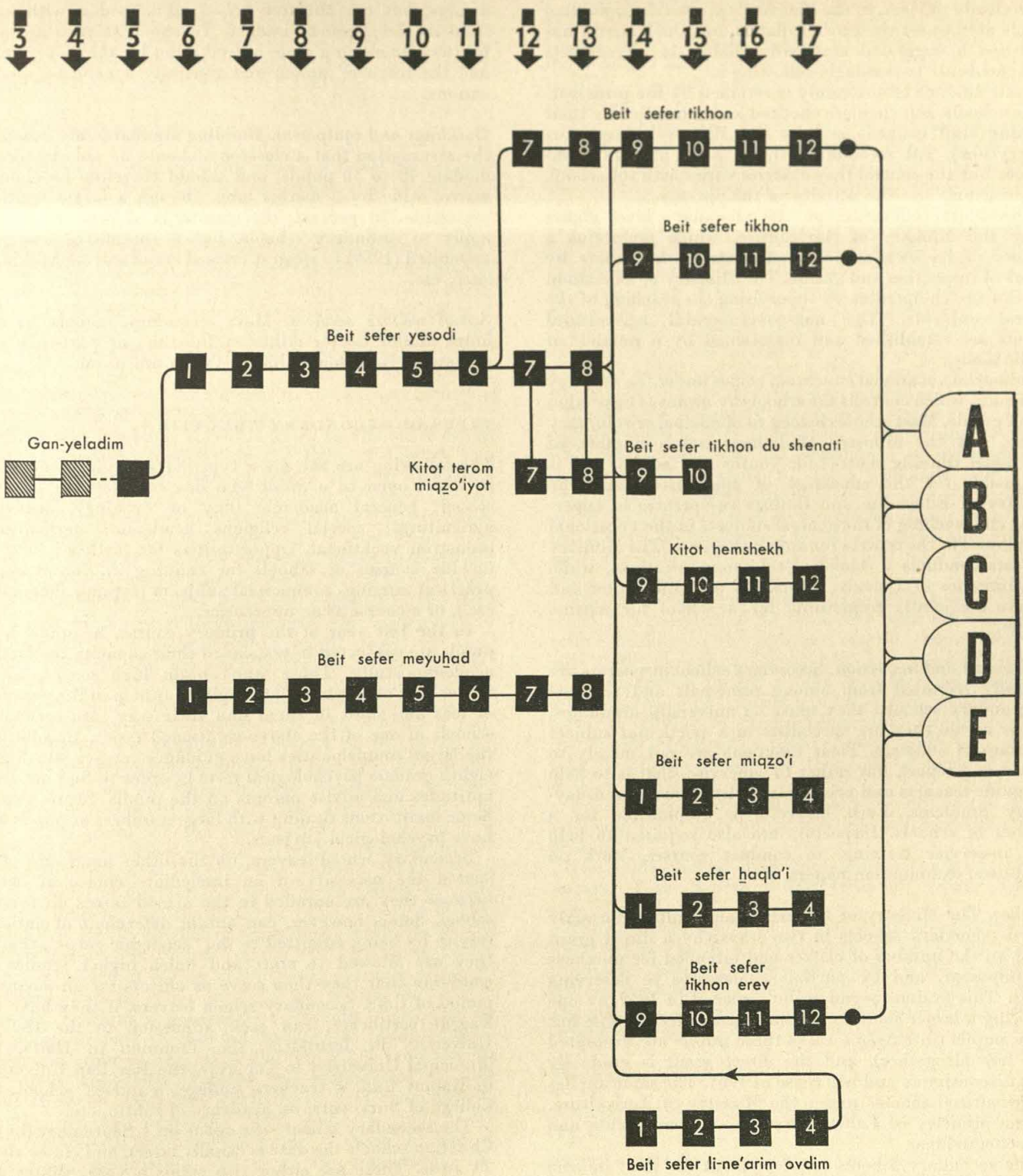
Control. The provision of secondary education is a function which the Government has not yet (1959) assumed. The control of secondary education is therefore left almost entirely to the owners of the schools, i.e., municipal and local authorities or public bodies or individuals. The licensing of teachers is in the hands of the Ministry, but they are appointed and dismissed by the owners, subject,

GLOSSARY

beit sefer haqla'i: vocational secondary school of agriculture.
beit sefer li-ne'ari'm ovdim (school for working youth): compulsory evening classes for 14 to 17-year-olds who have not completed primary school.
beit sefer meyuhad: school for handicapped and/or maladjusted children.
beit sefer miqzo'i: vocational secondary schools of industries and trades, and home economics.
beit sefer tikhon: general secondary school, sometimes including the two upper classes (7 and 8) of the primary course.
beit sefer tikhon du shenati: 2-year secondary school with pre-vocational training.
beit sefer tikhon erev: evening school providing general secondary education.
beit sefer yesodi: primary school.
gan-yeladim: pre-primary school, attendance being compulsory (and free) for 5-year-olds.
kitot hemshekh: secondary classes attached to rural primary schools in labour settlements and taking no examinations, referred to in the text as 'continuation classes'.
kitot terom miqzo'iyot: pre-vocational classes.

HIGHER EDUCATION

A. Universities: the Hebrew University, Jerusalem; the Municipal University, Tel Aviv; and the Bar-Ilan University, Ramat Gan.
B. Technion (the Israel Institute of Technology), Haifa.
C. Institutes for higher vocational education.
D. Teacher training colleges.
E. Academies of music, art, etc.


3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Beit sefer tikhon
7 8 9 10 11 12
Beit sefer tikhon
9 10 11 12
Beit sefer yesodi
1 2 3 4 5 6 7 8
Gan-yeladim
Kitot terom miqẓo'iyot
7 8
Beit sefer tikhon du shenati
9 10
Kitot hemshekh
9 10 11 12
Beit sefer meyuḥad
1 2 3 4 5 6 7 8
A
B
C
D
E
Beit sefer miqẓo'i
1 2 3 4
Beit sefer ḥaqla'i
1 2 3 4
Beit sefer tikhon erev
9 10 11 12
1 2 3 4
Beit sefer li-ne'arim ovdim

theoretically at least, to the Ministry's approval. Individual schools used to set their own syllabus, but the Ministry has published a suggested standard syllabus in all subjects and schools are increasingly following it.

A fair amount of autonomy is retained by the principals of the schools, but they are checked and controlled by their teaching staff councils and by the Ministry's inspectors (supervisors). All secondary schools have parents' committees but the control they exercise varies with the school, the principal, and the activity of the parents.

Agricultural education at the secondary level comes under the Ministry of Agriculture, which maintains a number of its own schools and controls the others by means of inspection and grants. The Ministry of Education and Culture co-operates by supervising the teaching of the general subjects. The non-governmental agricultural schools are established and maintained by a number of public bodies.

Industrial vocational education comes under the Ministry of Labour, which controls the schools by means of inspection and of grants. Most schools belong to municipal or voluntary bodies, but the Ministry of Labour has a number of vocational training centres for youths and adults, and is responsible for the education of apprentices, and the Ministry of Education and Culture co-operates in supervising the teaching of the general subjects in the vocational schools and in the centres for apprentices, etc. The Ministry of Posts conducts a school of telecommunications, while the Ministries of Defence, Transport and Education and Culture are jointly responsible for a school for marine officers.

Supervision and inspection. Secondary school inspectors are generally recruited from among principals and teachers of secondary schools; they must be university graduates, and as a rule they are specialists in a particular subject or group of subjects. Their functions are not merely to inspect and report, but rather to supervise, that is to help and guide teachers and principals in their general and day-to-day problems. Each inspector is responsible for a number of schools. Inspectors are also required to help with in-service training, to conduct courses, work on syllabuses, examination papers, etc.

Finance. The Ministry of Education and Culture formerly helped secondary schools in two ways: by a direct grant based on the number of classes and intended for purchase of equipment, and by partial scholarships to deserving pupils. This system began to be replaced in 1957 by one involving a larger share in the payment of fees of able but needy pupils (in extreme cases these pupils are exempted from fees altogether), and the direct grant is gradually being discontinued and will cease in 1961. The same applies to agricultural schools under the Ministry of Agriculture, but the Ministry of Labour continues to pay grants and give scholarships.

Thus secondary schools are dependent for their income on (a) fees and (b) allocations from their owners if they are public bodies such as municipalities, local councils, voluntary agencies, churches, etc. This accounts for the very small number of schools owned by private individuals for profit. Buildings and equipment are supplied by the owners, but the Ministry helps public bodies with loans from its development budget. Teachers' salaries are paid by the owners on a scale agreed upon by the Government and the teachers' union, and generally depend on qualifications.

Buildings and equipment. Building standards are based on the assumption that a classroom should be able to accommodate 40 to 50 pupils, and should therefore be about 7 metres wide by 8 metres long, though a larger width is preferable. In general, the standards of primary schools apply to secondary schools, but a committee has been appointed (1959) to suggest revised standards for buildings, sites, etc.

School welfare services. Most secondary schools have a nurse and/or doctor either in full-time or part-time employment. No other welfare services are usual.

TYPES OF SECONDARY EDUCATION

The following are the main types of secondary education in Israel open to a pupil who has completed a primary school: general academic (day or evening); academic agricultural; special religious academic; agricultural; industrial vocational. Opportunities for further education include courses or schools for training in, for example, practical nursing, commercial subjects (typing, shorthand, etc.), or a course as an apprentice.

In the last year of the primary course, in grade 8, all pupils are subjected to tests as to their capacity for further academic study. Those who obtain high marks, about 30 per cent of all pupils, are eligible for help in the payment of fees and most of them find their way into secondary schools of one of the above-mentioned types. In addition, the larger municipalities have guidance centres which give eighth graders psychological tests in order to find out their aptitudes and advise parents on the pupils' future career. Some institutions dealing with large numbers of pupils also have psychological advisers.

Secondary school leavers, on the other hand, are often spared the necessity of an immediate choice of career because they are enrolled in the armed forces on leaving school. Some, however, can obtain deferment of national service by being admitted to the 'academic corps', that is, they are allowed to start and finish higher studies on condition that they then serve as officers for an adequate period of time. Secondary school leavers, if they have the Bagrût certificate, can seek admission to the Hebrew University in Jerusalem, the Technion in Haifa, the Municipal University in Tel Aviv, the Bar Ilan University in Ramat Gan, a teachers' college, a nurses' school, the College of Surveyors, an academy of music, etc.

The secondary school year opens on 1 September (in the Christian schools the date is usually later), and closes about 23 June. There are either two terms a year, winter and summer, or three, with breaks in December (Hanuka for Jewish schools or Christmas for Christian schools) and March or April (Passover or Easter). Schools close on religious holidays, according to the religion of the school. The school week is of 6 days with a break on Saturday in Jewish schools,

and of 5 or 6 days in non-Jewish schools with a break usually on Friday and Saturday or Friday and/or Sunday. The school day in Jewish schools is normally from 8 a.m. to 2 p.m. in one shift, and in non-Jewish schools generally 8 a.m. to 12 noon and 1.30 p.m. to 3.30 p.m.

General secondary schools

The Hebrew general secondary school in Israel has evolved a number of types: the 4-year school after 8 primary years, the 6-year secondary after 6 years' primary, the so-called 'continuation classes' and 'educational institutions' of labour settlements, the religious academic 4-year schools, the recently established 2-year schools after 8 primary grades, and the academic agricultural semi-comprehensive schools.

The Arab municipal general secondary school offers a 4-year course based on 8 years' primary schooling, while the Christian secondary schools differ according to their country of origin and generally give an 11-year primary-plus-secondary course as opposed to the 12-year course in Hebrew and Arab public schools.

The 4-year academic school is based on the old Western European pattern modified in the light of English and American usage. This type of school aims at imparting general education and the development of character and personality, and serves as a preparation for further studies at institutions of higher learning. As a rule, there is no special selection of pupils on admittance, and theoretically every primary school leaver can enrol. With the increasing number of eighth graders who have qualified in the tests for scholarships and reduced fees, and the inadequacy of accommodation, schools prefer to accept those who have passed the test and are eligible for aid. A fair number of pupils used to leave in mid-course, i.e., after grade 10, but the tendency towards selection and the newly established 2-year course schools may remedy this defect. Differentiation by aptitude is effected by means of the branches of specialization offered in the different sections in grades 11 and 12. These include: humanities, biology, mathematics-science, Oriental studies, agriculture, etc.; in Israel it is usual for the more gifted pupil to select a mathematics or science section. In religious schools greater emphasis is given to study of the Talmud. The subjects taught and the number of lessons given weekly in some of these branches are shown in the table. The first foreign language is usually English or sometimes French; the second foreign language is French (or English), Arabic or Latin. The level aimed at is that of university entrance of a high standard, and in some subjects an advanced level is possible. Teaching is generally on 'Socratic' lines, that is, the pupils prepare themselves through the study of textbooks and other sources while the role of the teacher is to test their knowledge, correct and supplement it, and guide them on. Oral and written tests and examinations are the rule and promotion from grade to grade is on achievement. All the pupils in grade 12 enter the Bagrût final state examination, and those who pass obtain the Bagrût certificate, qualifying for entry to a university. A school leaving certificate has recently been introduced which schools may award to all pupils on finishing grade 12 but which does not entitle them to admission to higher studies.

A 6-year secondary school is similar to the 4-year school except that grades 7 and 8 are attached to it, and there is thus a fuller syllabus, making it possible to expand the scope and/or depth of the syllabus of grades 9 to 12. The number of schools which follow this pattern is still very restricted.

The 'continuation classes' or 'educational institution' type of 4-year school is to be found only in labour settlements of the *kibbutz* or *moshav* type and is intended for the children of *kibbutzim* or *moshavim*, though outsiders are accepted. In these schools there are no examinations and the pupils are not entered for the Bagrût examination, but individuals or groups sometimes take it as external candidates. Each school may have its own syllabus, and as a rule stress is laid on science and also on art. A fair amount of time is given to practical agriculture.

The special religious academic 4-year schools are few in number and are intended to give a religious education of a high order coupled with a formal academic secondary education. They are all situated in agricultural settlements.

The 2-year secondary school with vocational or agricultural training is an innovation (1959) meant for pupils who, *prima facie*, will not complete a 4-year course. In particular it is intended for those who have had a pre-vocational or pre-agricultural intensive course in grades 7 and 8, and who will thus on completion of this school have had 4 years of training in a trade or in agriculture and will have a chance of working in their field for 2 years before being called up for military service.

The academic agricultural semi-comprehensive 4-year school is a compromise for those who want a full academic course leading to the ordinary Bagrût examination and also a full agricultural theoretical and practical training as a preparation for life on the land. A small number of 4-year agricultural schools have therefore adapted themselves to offering an enriched curriculum and entering for the Bagrût examination those of their pupils who wish to take it. These schools may therefore be considered in a sense as comprehensive.

Evening secondary schools are generally of the 4-year academic type, with humanities and mathematics-science branches.

The tables below show the subjects taken in various sections of the 4-year general secondary school and the time allotted.

The teaching staff are required to be university graduates, with at least an M.A. for teachers of grades 11 and 12. In practice, however, a large proportion of the teachers are still not graduates but are retained because of long service. The situation is expected to improve with the increasing output of graduates from the universities.

Vocational and technical schools

Vocational and technical education towards a career is not regulated by law, although the Apprenticeship Law, 1953, provides that no youth under 18 shall be accepted in certain trades to be named by the Minister of Labour except as an apprentice unless he has completed vocational school. The trades so far named are printing, carpentry and metalwork.

Schools are mainly of the 3 or 4-year type, with a smaller

TIME-TABLE FOR ARAB SECONDARY SCHOOLS, GRADES 9 TO 12

(in periods per week)

Subject	Humanities section				Mathematics—physics section			
	Class				Class			
	9	10	11	12	9	10	11	12
Arabic	5	6	7	7	5	6	4	4
Hebrew	5	6	6	6	5	6	4	4
English	5	5	5	5	5	5	5	5
Mathematics	4	5	4	—	4	4	5	6
General literature	—	—	3	3	—	—	—	—
History	3	3	4	4	3	3	2	—
Geography	2	2	2	—	2	2	2	—
Physics	2	2	—	—	2	2	6	5
Chemistry	3	—	—	—	3	—	5	5
Biology	2	2	—	—	2	2	—	—
Physical training	2	2	2	2	2	2	2	2
Class adviser's lesson	1	1	1	1	1	1	1	1
Philosophy or history of science	—	—	—	2	—	—	—	—
Elective subjects	2	2	2	—	2	3	—	—
Total	36	36	36	30	36	36	36	32

TIME-TABLE FOR SECONDARY SCHOOLS, GRADES 9 TO 12 IN CERTAIN SECTIONS

(in periods per week)

Subject	Humanities and 2 languages				Biology				Oriental studies				Mathematics science			
	Class				Class				Class				Class			
	9	10	11	12	9	10	11	12	9	10	11	12	9	10	11	12
Bible	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Hebrew	5	5	5	5	5	5	4	3	5	5	5	5	5	5	4	3
Talmud	2	2	2	2	2	2	—	—	2	2	—	—	2	2	—	—
First foreign language	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Second foreign language	—	4	4	4	—	—	—	—	3	5	6	6	—	—	—	—
World literature	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—
Mathematics	4	4	4	2	4	4	3	3	4	4	4	—	4	4	4	6
History	3	2	4	4	3	2	3	—	2	3	6	6	3	2	4	—
Geography	2	2	—	—	2	2	—	—	2	2	2	2	2	2	—	—
Physics	2	2	2	—	2	2	4	4	2	2	—	—	2	2	6	6
Chemistry	3	—	—	—	3	—	4	5	3	—	—	—	3	—	3	4
Biology	2	2	—	—	2	2	5	4	2	2	—	—	2	2	2	—
Civics	—	—	—	2	—	—	—	2	—	—	—	2	—	—	—	2
Philosophy or history of science	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—
Social sciences	—	—	—	—	—	—	—	—	—	—	2	2	—	—	—	—
Physical training	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Class teachers' period	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cadet instruction	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Elective subjects	2	2	2	—	2	6	2	—	—	—	—	—	2	6	2	—
Total	37	37	37	35	37	37	37	33	37	37	37	35	37	37	37	33

number of 2 or 1-year schools, and in addition there are part-time courses. As mentioned above, agricultural and fishery schools and courses are under the Ministry of Agriculture, while other vocational and technical schools and courses (with a few exceptions such as the school of telecommunications) are under the Ministry of Labour.

Part-time courses are intended for youths already in employment or preparing for immediate employment. The 'sandwich' system of alternating full-time schooling with work is not followed in Israel. In agricultural and vocational 3- and 4-year schools the pupils normally give half a day to classwork and half a day to shop or field work, while in the 1- or 2-year schools most of the time is given to practical work and technical subjects.

Agricultural schools. The principal aim of agricultural education and agricultural schools is to encourage and train youths, and urban youths in particular, to settle on the land. The 'Return to the Land' motto has been one of the great ideals of Jewish education for the last three generations. The scope for hired agricultural labour in Israel is very limited because most of the settlements are either communal or co-operative, or based on small farms worked by the settler and his family. The main aim of agricultural education is therefore to train skilled members of such settlements and also instructors for new settlers, and for this purpose the 3-year school is sufficient. An increasing number of youths wish, however, to go on to the faculty of agriculture of the Hebrew University, and for this purpose the 4-year school has been evolved so that the fourth year pupils sit for the special agricultural Bagrût examination for admission to that faculty. There are some 2-year schools for more restricted specialization, such as horticulture. There is also a 3-year school of fishery.

Recruitment of pupils is sometimes made on the result of the advice of vocational guidance agencies, and otherwise on the results of the parents' wishes, or the youth's own inclination, or as a result of the campaign made in grade 8 on behalf of agricultural education.

TIME-TABLE FOR AGRICULTURAL SCHOOLS (4-YEAR COURSE)

(in periods per week. This instruction takes half a day; the other half is devoted to various kinds of farm work)

Subject	Class			
	9	10	11	12
Agricultural subjects	3	9	10	8
Biology	3	4	4	3
Chemistry	2	3	2	3
Physics	2	2	2	—
Mathematics	4	2	2	3
Jewish subjects	6	4	4	—
Social sciences	2	2	4	7
English	4	2	2	3
Physical training	1	1	—	—
Gadna (Cadets)	2	2	1	—
Total	29	31	31	27

Domestic science and vocational schools for girls. The aim of domestic science and vocational education for girls is to train them for life on the land in settlements, for home crafts and industries, for work in shops and factories, and as instructors to new settlers. There are a number of 2- and 3-year schools, and also 3- and 4-year schools at the end of which some of the girls may take the general Bagrût

examination. The programme in a 3-year domestic science school is shown in the accompanying table. The vocational schools give courses in sewing, embroidery, weaving, carpet-making, metalwork, applied art, hairdressing, etc. Commercial subjects are also offered in some schools.

TIME-TABLE FOR DOMESTIC SCIENCE SCHOOLS
(3-YEAR COURSE)
(in periods per week)

Subject	Class		
	9	10	11
Hebrew	2½	1½	2½
Bible	1½	1½	1½
Geography and civics	2	—	—
History	—	2	2
English	3	2	2
Algebra	2	1	1
Geometry	1	1	1
Physics	2	1	—
Chemistry	2	1	—
Biology	2	2	2
Dietetics	—	2	2
Cooking	2	2	2
Materials and home economics	—	2	2
Storage and calculation	—	—	3
Gadna (Cadets)	2	2	2
Total of theoretical subjects	22	21	23
Practical work	22	23	21
Total	44	44	44

Technical and industrial schools. More than 80 per cent of the pupils attend 3- or 4-year schools, and less than 20 per cent attend 1- or 2-year schools. Most schools teach a number of related trades. The most popular are metalwork (fitting, lathework, smithing), electricity (including radio and electronics), mechanical trades, woodwork, ceramics, etc.

The pupils are sometimes selected on the advice of vocational guidance centres and the like, but mostly they are recruited from among youth who, either on economic grounds or because of their experience in the primary school, have come to the conclusion that they should not try the general secondary school.

The following table shows subjects and time-allotments in a 4-year course for automotive mechanics.

The practical teaching in the workshops is as a rule done by means of job sheets and blueprints which allow the pupil to prove his individual ability and work at his own pace.

Nurses' schools. Nurses' schools accept girls with 10 years' schooling for 3 years, and thus their first 2 years are within the secondary education stage. These schools are attached to hospitals and are under the Ministry of Health. The girls receive theoretical and practical teaching and training from the start. There are shorter courses in practical nursing for boys and girls who have finished primary school.

Out-of-class activities

The degree of participation of pupils in school government and social life varies with the individual school. In some, particularly those in the labour settlements, it is more developed than in others. The same applies to social life: in most schools the pupils meet outside school hours and often have social evenings, etc. School cultural clubs exist in a number of schools, for subjects taught in school, e.g., biology, physics, literature, the Bible, etc., or for other subjects such as music, painting, etc.

There are numerous youth movements, such as scouting, which absorb the interest and spare time of many secondary school boys and girls who act as leaders for their juniors in the primary schools or in the lower secondary classes. An important movement started some years ago and called 'Youth for Youth' is composed of secondary school pupils who devote a few afternoons or evenings a week to visiting poor quarters or settlements. They organize games and entertainments for underprivileged children or help them to prepare lessons, to understand school work, to learn the language, to learn health and hygiene principles, etc.

TIME-TABLE FOR VOCATIONAL SCHOOLS—
AUTOMOTIVE MECHANICS' 4-YEAR COURSE
(in periods per week)

Subject	Class			
	9	10	11	12
Hebrew	3½	2½	1½	1½
Bible	1½	1½	1½	1½
Social sciences	2	2	—	—
History	—	—	2	2
English	3	3	2	2
Algebra	3	2	—	—
Geometry and trigonometry	2	2	—	—
Mathematics (additional)	—	—	3	3
Physics	2	—	—	2
Mechanics	—	2	—	—
Thermodynamics	—	—	2	—
Chemistry	—	—	2	2
Turning and fitting technology	2	2	—	—
Machine parts and strength of materials	—	2	2	—
Motors and vehicles	—	2	3	6
Technical drawing	3	3	3	—
Hygiene	—	—	1	—
Calculations	—	—	—	1
Gadna (Cadets)	2	2	2	—
Total of theoretical subjects	24	26	25	21
Total of shop work	20	18	20	24
Total	44	44	45	45

TRENDS AND PROBLEMS

Apart from some specific difficulties mentioned above, there are a number of more general problems in secondary education.

The need is keenly felt of a general law of education which would lay down the stages of schooling and the division between primary and post-primary education. Such a law would contribute to a better integration of secondary education and to its more rational distribution according to the need and ability of the pupils. It would be desirable for such law to extend compulsory education to

the beginning of age 15, so that after the 6-year system of secondary education has been introduced it can be divided into two cycles and the lower 3 years added to compulsory education.

More attention is now naturally given to students who are below average. More should be done for gifted children by way of free education and grants to their parents, if necessary, until they complete their secondary education.

More should be known about the requirements of manpower over a number of years in advance, so that students may be more effectively advised in their choice of the various kinds of secondary education and so that the geographic distribution of schools may be planned more adequately.

There is a great need of adequate budgets for building and equipment and of proper development funds to meet the requirements of both old and new schools. The establishment of boarding facilities in some central schools is highly desirable, as well as the provision of gymnasiums and reading and recreation rooms.

Ways and means have to be found for attracting gifted young persons, properly trained, to the teaching profession. Proper arrangements for in-service training are desirable.

More attention must be paid to the planning of, and personnel responsible for, extra-curricular activities in secondary education. Special emphasis ought to be given to such activities during vacations. The aims and methods of art education in extra-curricular activities need to be clarified.

There is need for a systematic following up of the way in which the official syllabus is carried out, so that *ad hoc* changes may be made as required and more fundamental changes after some years of experience.

The Ministry of Education and Culture, in co-operation with the Hebrew University, has begun a process of checking on the humanities and science branches of the academic secondary schools. The quantitative aspect of teaching has often been criticized, and should be adapted to modern requirements. A better correlation between the various subjects in both branches should be aimed at and this should be done in co-operation with the teachers themselves. Agricultural and vocational education should be planned in co-operation with the leaders of industry. Considerable thought should be given to the problem of how theoretical and practical subjects can be made interdependent.

In teaching, the method of individual work and preparation by the pupils should be stressed and teachers should be trained accordingly. Textbooks should be written with this in view.

Experience has shown that 4 years is insufficient to cover adequately the required curriculum in the evening secondary schools and their course should consequently be extended to 5 years.

A thorough revision of examination requirements has lately been undertaken, as regards content, form and evaluation. One of the important improvements which have lately been introduced is to exempt a student from examination in one subject if he submits a paper prepared by him on that subject and approved by the supervisor. It is also proposed to exempt from examination in one subject pupils from certain schools in recognition of the educational level and achievements of these schools. This should greatly help schools doing experimental and research work.

Co-operation with parents is developing on approved lines. New impetus should be given to this co-operation by holding special seminars for the parents of children attending the same classes. An educational publication in which parents took part would be of great help in this connexion.

A special agency for planning educational research and its application should be set up and should publish the results for the public at large.

[*Text prepared by the Israeli National Commission for Unesco in August 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 1,997,000.
Area: 7,992 square miles; 20,700 square kilometres.
Population density: 250 per square mile; 96 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment (not including adult education courses and schools for working youth) reached nearly 480,000 pupils, representing about one-fourth of the total population. Of these pupils, 16 per cent were enrolled in kindergartens, 72 per cent in primary schools, 8 per cent in secondary and vocational schools, and 3 per cent in higher education. The proportion of girls was 46 per cent in primary schools, 53 per cent in secondary schools, 29 per cent in vocational schools, and 86 per cent in teacher training colleges. The average number of pupils per teacher in primary schools was 24, counting both full-time and part-time teachers; this ratio was 10 in secondary schools and 12 in vocational schools. Between 1953 and 1957, primary school enrolment increased by 43 per cent; secondary general education by 25 per cent; vocational education by 61 per cent; teacher training by 53 per cent; other types of higher education by 59 per cent. The number of pupils receiving special education more than doubled in the same period. (See Table 2.)

Enrolment trends in secondary education, 1930–57. Figures shown in Table 3 are not comparable between the period 1930–46, which refers to Jewish education in Palestine, and the period since 1947, referring to Hebrew and Arab education in the State of Israel. As a result of rapid expansion between 1947 and 1957 the average total enrolment for the period 1955–57 was more than three times that for 1947–49. For the more recent period, the average total enrolment represented about 25 per cent of the estimated population 15–19 years old.

Examination results in secondary education, 1954–57. From 1954 to 1957, the annual numbers of persons who passed the Special Matriculation Examination were as follows: (1954/55) 2,558; (1955/56) 2,819; (1956/57) 2,981; (1957/58) 2,758.

Educational finance, 1957/58. For the year 1957/58, total recurring expenditure of the Central Government for education amounted to 73 million Israeli pounds, being an average of 37 pounds per inhabitant. (See Table 1.)

Source. Israel: Central Bureau of Statistics, reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1957/58 (in Israeli pounds)[1]

Recurring expenditure by level and type of education [2]	Amount		Per cent
Total recurring expenditure[2]		**73 222 795**	**100.0**
Central administration		3 512 922	4.8
Instruction		69 709 873	95.2
Pre-primary education		4 807 369	6.6
Primary education		43 505 180	59.4
Secondary education		6 868 691	9.4
General	[3] 2 015 144		2.8
Vocational	3 078 873		4.2
Teacher training	1 774 674		2.4
Higher education		5 862 084	8.0
Special education		1 504 797	2.0
Adult education[4]		974 264	1.3
Other education[5]		354 904	0.5
Expenditure not allocated		5 832 584	8.0

1. Official exchange rate: 1 Israeli pound = 0.56 U.S. dollar.
2. Expenditure of the Central Government only.
3. This sum comprises government subsidies only. The Government does not maintain general secondary schools.
4. Includes religious culture, etc.
5. Includes extra-curricular activities.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Hebrew kindergartens	1957/58	1 900	2 364	2 364	73 487	35 917
	Arab kindergartens	1957/58	109	148	128	3 992	1 643
	Total	**1957/58**	**2 009**	**2 512**	**2 492**	**77 479**	**37 560**
	,,	1956/57	1 998	2 519	2 488	76 828	37 089
	,,	1955/56	1 880	2 439	2 416	72 412	35 085
	,,	1954/55	1 466	1 886	1 873	56 315	27 307
	,,	1953/54	...	...	...	...	...

Note. Data refer to public schools and to private schools under the supervision of the Ministry of Education. Arab institutions refer to official institutions only.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Hebrew primary schools	1957/58	1 100	4 045	1 532	321 343	156 873
	Arab primary schools	1957/58	119	638	120	26 401	8 554
	Total	**1957/58**	**1 219**	**[1]4 683**	**[1]1 652**	**347 744**	**165 427**
	„	1956/57	1 157	[1]4 440	[1]1 421	311 400	148 069
	„	1955/56	1 102	[1]3 823	[1]...	279 975	132 266
	„	1954/56	1 059	[1]3 624	[1]1 048	258 183	120 447
	„	1953/54	1 016	9 773	4 987	242 852	113 632
Secondary							
General	Hebrew secondary schools	1957/58	71	236	40	16 728	9 477
	Hebrew secondary evening schools	1957/58	19	3	—	2 841	1 305
	Hebrew continuation classes	1957/58	89	101	26	6 232	3 198
	Arab secondary schools and continuation classes	1957/58	5	23	1	945	96
	Total	**1957/58**	**184**	**[2]363**	**[2]67**	**26 746**	**14 076**
	„	1956/57	184	[2]439	[2]84	23 509	12 751
	„	1955/56	168	[2]390	[2]...	22 994	11 894
	„	1954/55	168	[2]384	[2]57	22 189	11 405
	„	1953/54	165	2 161	542	21 435	10 836
Vocational	Vocational schools	1957/58	52	646	178	7 638	1 941
	Agricultural schools	1957/58	37	464	83	5 599	1 900
	Total	**1957/58**	**89**	**[3]1 110**	**[3]261**	**13 237**	**3 841**
	„	1956/57	82	[3]1 116	[3]227	11 528	3 358
	„	1955/56	80	[3]999	[3]...	11 014	3 311
	„	1954/55	76	[3]1 028	[3]234	10 374	3 130
	„	1953/54	69	[3]1 028	[3]233	8 229	2 308
Higher							
Teacher training[4]	Hebrew teacher training colleges	1957/58	25	637	249	5 022	4 295
	Arab teacher training colleges	1957/58	1	11	6	40	40
	Total	**1957/58**	**26**	**648**	**255**	**5 062**	**4 335**
	„	1956/57	24	573	207	4 174	3 669
	„	1955/56	27	525	176	3 595	3 285
	„	1954/55	24	473	162	3 428	3 104
	„	1953/54	21	441	150	3 312	3 126
General and technical	Hebrew University[5]	1957/58	1	756	...	4 357	1 411
	Institute of Technology[5]	1957/58	1	485	...	2 298	185
	Bar-Ilan University	1957/58	1	60	...	240	121
	School of Law and Economics	1957/58	1	...	...	1 337	189
	Municipal University of Tel Aviv	1957/58	1	71	...	278	161
	School of Social Sciences	1957/58	1	20	...	96	...
	Schools for qualified nurses	1957/58	12	...	...	876	...
	Schools for social workers	1957/58	1	...	...	52	36
	School for surveyors	1957/58	1	...	...	36	—
	School of Arts and Crafts	1957/58	1	...	...	118	34
	Total	**1957/58**	**21**	**...**	**...**	**9 688**	**[6]2 137**
	„	1956/57	21	...	...	8 206	[7]1 770
	„	1955/56	21	...	...	7 731	[6]1 577
	„	1954/55	20	...	...	[8]7 229	[6 8]1 375
	„	1953/54	8	...	...	6 079	1 313
Special	Schools for handicapped children	1957/58	64	536	379	5 486	2 120
	Classes for handicapped children in regular schools	1957/58	135	[9]...	[9]...	2 557	...
	Total	**1957/58**	**199**	**[10]536**	**[10]379**	**8 043**	**...**
	„	1956/57	160	[10]486	[10]336	6 778	...
	„	1955/56	147	[10]426	[10]281	6 759	...
	„	1954/55	129	[10]348	[10]225	4 725	2 057
	„	1953/54	74	[10]300	[10]179	3 804	1 612

1. Not including part-time teachers: 1957/58, 9,764 (F. 6,694); 1956/57, 8,738 (F. 6,095); 1955/56, 7,961 (F. ...); 1954/55, 6,957 (F. 4,645).
2. Not including part-time teachers: 1957/58, 2,228 (F. 654); 1956/57, 1,979 (F. 444); 1955/56, 1,798 (F. ...); 1954/55, 1,858 (F. 517).
3. Including part-time teachers, as follows: 1957/58, 885 (F. 190); 1956/57, 899 (F. 175); 1955/56, 833 (F. ...); 1954/55, 780 (F. 159); 1953/54, ...
4. Including data on preparatory classes (secondary level).
5. Including research students.
6. Not including school of social sciences and schools for qualified nurses.
7. Not including data for schools for qualified nurses.
8. Not including students of the Municipal University of Tel Aviv.
9. Included in primary education.
10. Schools only. Including part-time teachers: 1957/58, 358 (F. 267); 1956/57, 325 (F. 244); 1955/56, 283 (F. ...); 1954/55, 224 (F. 154); 1953/54, ...

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Adult	Public Hebrew lessons for adults	1957/58	966	576	...	14 545	...
	Classes for illiterates	1957/58	96	85	...	1 524	...
	Primary education for adults	1957/58	81	...	...	1 330	...
	Secondary education for adults	1957/58	9	...	...	176	...
	Institutions and seminaries for advanced studies and language proficiency	1957/58	221	...	...	[11] 6 970	...
	Courses in religious subjects	1957/58	46	339	...	[11] 7 464	...
	Study circles	1957/58	27	34	...	[11] 2 458	...
	University Summer courses	1957/58	339	...	...	[11] 1 613	...
	Workers' High Schools	1957/58	18	18	...	406	...
	Total	**1957/58**	[12] **1 803**	...	...	[11] **36 486**	...
	„	1956/57	[12] 2 053	...	...	[11] 39 124	...
	„	1955/56	[12] 2 634	...	...	[11] 45 723	...
	„	1954/55	[12] 1 410	...	...	[11] 30 553	...
	„	1953/54	992	...	...	20 239	...
Other	Hebrew schools for working youth	1957/58	280	1 005	329	11 256	4 980
	Arab schools for working youth	1957/58	1	3	1	63	6
	Total	**1957/58**	**281**	[13] **1 008**	[13] **330**	**11 319**	**4 986**
	„	1956/57	293	[13] 903	[13] 266	11 421	4 889
	„	1955/56	278	[13] 817	[13] ...	10 819	4 752
	„	1954/55	248	[13] 779	[13] 245	11 350	5 154
	„	1953/54	240	[13] 771	[13] 215	11 106	4 897

11. May include double counting of students who are enrolled in more than one course.
12. Number of classes.
13. Including part-time teachers as follows: 1957/58, 976 (F. 322); 1956/57, 903 (F. 266); 1955/56, 725 (F. ...); 1954/55, 674 (F. 215); 1953/54, ...

3. TRENDS IN GENERAL AND VOCATIONAL SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education				Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational				
	Total	Per cent female	Total	Per cent female			
1930	1 311	44	513	...			
1931	1 475	47	463	...			
1932	1 437	49	472	...	2	16	*13*
1933	1 720	51	591	...			
1934	2 045	50	447	...			
1935	2 860	50	739	...			
1936	3 478	52	846	...			
1937	3 979	54	320	...	5	30	*16*
1938	5 054	53	341	...			
1939	5 582	52	471	...			
1940	6 010	51	539	...			
1941	6 152	52	609	...			
1942	6 176	53	603	...	7	39	*18*
1943	6 631	54	734	...			
1944	7 070	54	1 067	...			
1945	7 256	55	2 011	...	9	47	*19*
1946	7 029	...	1 865	...			
1947	7 247	...	1 829	...			
1948	7 473	56	2 002	44	11	...	...
1949	10 226	54	3 725	43			
1950	13 224	52	...	...			
1951	17 101	50	5 338	32			
1952	19 481	50	6 142	30	*25	125	*20
1953	21 435	51	7 188	...			
1954	22 189	51	10 374	30			
1955	22 994	52	11 014	30			
1956	23 509	54	11 528	29	36	142	*25*
1957	26 746	53	13 237	29			

Note. From 1930 to 1946, data refer to Jewish education in Palestine only.

ITALY

THE EDUCATIONAL SYSTEM

The fundamental principles which underly the Italian educational system are defined in Articles 9, 33, 34, 117 and 118 of the Constitution of the Italian Republic. The main purpose of these principles is to promote the free development of the child's personality and to guarantee freedom of education subject to respect for the law.

Schools are open to all, without distinction as to sex, race or religion, and education is compulsory and free of charge for all children up to the age of 14 years. The rights of linguistic minorities are protected by the establishment of special schools where members of these minorities are taught their mother tongue in addition to Italian.

'Private groups and individuals have the right to establish schools and educational institutes without state support.' The State ensures to private schools which meet the requirements prescribed by the law, equality in studies, complete freedom of teaching, and scholastic treatment equivalent to that of pupils of state schools by means of state examinations on the termination of the various study cycles.

The Ministry of Education, which traces its origin to the office of the Royal Secretary of State for Public Instruction, established in 1847 in the Kingdom of Sardinia, is responsible for the administration, co-ordination and supervision of all activities of which education, culture and the arts are the ultimate purpose. The Ministry is responsible, among its other functions, for the moral and physical instruction and the school welfare of the children and youth of the country by establishing schools of all types and at all levels; it is also responsible for the supervision of private schools and the provision of educational assistance by the granting of scholarships, prizes and accommodation free of charge in boarding-schools to poor and deserving pupils.

In the provinces school administration is carried out by the *provveditorati agli studi* (offices of the provincial superintendents of education which exist in all provincial capitals). Each of these offices is headed by a *provveditore agli studi* (provincial superintendent), who is subordinate to the Ministry of Education; he supervises secondary education throughout the province, ensures the application of the laws and regulations, co-ordinates the various measures and provisions adopted with a view to increasing the efficiency of teaching, appoints all temporary teachers with the exception of technical school teachers in charge of technical subjects, peruses reports on the administration of school funds, authorizes the acceptance of gifts and bequests to these funds, appoints boards of examiners for school entrance and leaving examinations, sends *commissari* (inspectors) to private schools for the *scrutini* (awarding of marks for the year's work) and the examinations. He also supervises the careers of teachers in so far as he attends to the matter of salary increments, inflicts disciplinary sanctions, keeps the teachers' register up to date, etc.

The local, communal and provincial authorities do not exercise any control over state schools, but facilitate their operation by providing premises, furnishings, secretarial and general service staff, electric power, water supply, etc.; they may, however, manage officially recognized or private schools.

The following bodies, also, carry out specific activities in secondary education: Consorzi Provinciali per l'Istruzione Tecnica (Provincial Unions for Technical Education), the Ente Nazionale per l'Educazione Marinara (National Organization for Maritime Education) and Centri Didattici Nazionali (National Teaching Centres).

The purpose of the provincial unions for technical education, established by Act No. 7 of 7 January 1929 and reorganized by Royal Legislative Decree No. 1946 of 26 September 1935, is to promote the development and improvement of technical education within each province. With this in view the unions take, support and co-ordinate measures for the establishment of institutes, schools and free courses; they suggest the steps to be taken having regard to local economic needs, and make proposals concerning the revision, co-ordination and adaptation of the curricula so that they will correspond to local economic requirements.

The National Organization for Maritime Education administers the vocational schools which train staff for the lower grades of the mercantile marine and specialized staff for enrolment in the *corpo degli equipaggi marittimi* (state naval forces).

The National Teaching Centres are bodies established by Act No. 1545 of 30 January 1942, to carry out studies, research and teaching experiments under the supervision of the Ministry of Education, but each operates independently under the direction of a council. Each centre concerns itself with questions relating to a particular branch of school organization (pre-primary, primary, lower general secondary, classical, technical and vocational), or with such general questions inherent in educational activities as physical instruction, relations between the school and the pupils' parents, study and documentation. The activities of these centres usually take the form of seminars and in-service training courses for teachers, experimental classes, the application of new methods, the provision of educational documentation and information.

The National Teaching Centres already established and in operation are situated in Florence, Brescia and Rome.

The oldest-established of these centres is the Research and Documentation Centre in Florence, which controls the Biblioteca Pedagogica Nazionale (National Educational Library) and the Museo Nazionale della Scuola (National School Museum).

A committee, presided over by the Minister of Education and consisting of three members, is responsible for co-ordinating and controlling the activities of the National Teaching Centres.

Lastly, Article 117 of the Italian Constitution empowers the regions to promulgate legislation with regard to vocational and artisan instruction, and the constitutions of the autonomous regions give them wide powers in matters of public education. The administrations of the four regions already constituted as autonomous bodies (Sicily, Sardinia, Val d'Aosta and Trentino-Alto Adige) have already exercised such powers and promulgated regulations on vocational education.

The structure of the Italian school system is shown in the diagram on page 715.

THE DEVELOPMENT OF SECONDARY EDUCATION

The first modern school regulations in Italy can be traced back to 1859, when the State of Piedmont was faced with the task of educating the young.

Under the Casati Law, so-called after the Minister who studied and prepared the reforms, the entire educational system was organized in three branches: higher education, secondary classical education, and thirdly, technical and primary education. The third branch also comprised the teacher training schools, which were reorganized in 1896.

Secondary classical education was intended to give pupils the necessary instruction in literature and philosophy so as to qualify them for admission to the university, and was divided into two successive stages: the *ginnasio* and the *liceo*. At the *ginnasio* the course lasted 5 years and at the *liceo* 3 years. Subsequently, the *ginnasio* was divided into the lower *ginnasio* with a 3-year course and the upper with a 2-year course.

Technical instruction was intended to provide pupils with both general and special education which would fit them for certain branches of the public service, industry, commerce and management in agriculture. Technical education, also, was in two stages: lower (technical schools with a 3-year course) and upper (technical institutes with, firstly, a 3-year, and, subsequently, a 4-year course).

At the technical institutes, which comprised special sections (accountancy, physics and mathematics, land-surveying, nautical science and industry), vocational training was provided in addition to a general education.

The task of the teacher training schools where the course lasted 3 years was to train primary school teachers. A complementary school (*scuola complementare*), with a 3-year course, a kindergarten (*giardino d'infanzia*) and a complete course of elementary classes for apprenticeship training were successively attached to the teacher training schools.

This law was later extended to the other three regions when they became part of the Kingdom.

Subsequently, the curricula and time-tables for every type of school and institute were fixed; the provisions concerning the *scrutini* and the examinations were amended from time to time, but the structure of the educational system as established by the Casati Law was to remain unchanged until 1923.

This educational system was criticized on the ground that the teaching given was of an excessively piecemeal nature and placed the main stress on the training of the pupil's memory; it was consequently dull and seemed to have no other object than to teach pupils a limited number of ideas, without taking any interest in their general intellectual training.

In 1923, the educational system was reformed by Gentile, then Minister of Education. The reform proposed was far-reaching, affecting both the organization and the content of schooling. It was designed mainly to place less emphasis on memorization of facts and more on the process of reasoning from knowledge acquired.

The system of annual promotion on the basis of the pupil's average school marks was replaced by a system which endeavoured to test the pupil's intellectual maturity, by means of a state examination at the end of every study cycle. The structure of the *ginnasio* and the *liceo* remained unchanged. The teacher training schools were replaced by the teacher training institute (*istituto magistrale*), lower and upper.

The structure of the technical institute was completely transformed; the 3-year technical school course was abolished and a lower 4-year course of a general humanistic nature, common to all types of technical institutes, was introduced. Studies at the technical institutes were divided into two cycles of 2 years each; the first continued and completed the general educational preparation acquired in the lower course mentioned above, and the second was devoted exclusively to vocational training.

Lastly, a new type of school was established: the *liceo scientifico* (upper general secondary school, the curriculum including mathematics and the sciences), which provided training for pupils intending to study at a faculty of science.

Parallel with these institutions, towards the end of the nineteenth century and at the beginning of the twentieth century, commercial, agricultural and industrial schools and institutions were set up by private persons here and there wherever economic conditions rendered them necessary; they were designed exclusively to train managing staff and specialized workers for local industries.

These schools were placed under the supervision of the competent ministries, and the curricula and time-tables varied according to economic requirements, until in 1923 they were all reorganized on a common basis.

In 1928, they came under the control of the Ministry of Education and, in 1931, were reorganized on their present basis as technical schools and technical institutes.

Almost at the same time, the *scuole complementari* (complementary schools) the *scuole tecniche* (technical schools) and the *scuole di avviamento al lavoro* (pre-vocational training schools), provided for under previous legislation were reorganized by Act No. 490 of 22 April 1932 as *scuole secondarie di avviamento professionale* (general secondary pre-vocational training schools) and entrusted with the task of providing compulsory post-primary education for pupils up to the age of 14 years as well as preparatory training for the various trades, for practical agricultural work and for executive posts.

These schools, also, still maintain the form which they were given by the above-mentioned Act.

The existence, however, of lower courses which varied from one type of school to another obliged pupils to make a premature choice when they had hardly left elementary school.

In order to obviate these inconveniences, the lower

courses of the technical institute, the teacher training institute and the *ginnasio* were unified by Act No. 899 of 1 July 1940 in the *scuola media* (lower general secondary school).

This school by giving its pupils a grounding in the humanities as well as practical training, tests their inclinations and develops their abilities; in co-operation with their parents, it helps them to choose their future careers for which it gives them the necessary preparation.

Legal basis

The following are some of the principal laws and decrees relating to secondary education:

Royal Decree No. 1054 of 6 May 1923, concerning the organization of secondary education and national boarding schools.

Royal Decree No. 965 of 30 April 1924, relating to the internal organization of the committees and Royal Institutes of Secondary Education.

Act No. 899 of 15 June 1931 to reorganize secondary technical education.

Act No. 490 of 22 April 1932, to convert Royal Legislative Decree of 6 October 1930, concerning the *scuola secondaria di avviamento al lavoro* (secondary pre-vocational training school), into in Act.

Royal Decree Law No. 1946 of 26 September 1935, to reorganize the *Consorzi Provinciali per l'Istruzione Tecnica* (Provincial Unions for Technical Education).

Royal Legislative Decree No. 2038 of 21 September 1938, relating to the establishment and abolition of technical institutes, and their conversion into state establishments.

Act No. 899 of 1 July 1940, concerning the establishment of the *scuola media* (lower general secondary school).

The Vice-Regent's Legislative Decree No. 816 of 7 September 1945, to modify the organization of the *scuola media*, to establish classes linking up with the *liceo scientifico*, the *istituto magistrale* (teacher training institute) and the technical institutes, and to make provision for the managing and teaching staff.

Legislative Decree No. 690 of the Provisional Head of the State dated 20 May 1947, providing for the promotion of technical education.

Legislative Decree No. 1277 of the Provisional Head of the State, dated 7 May 1948, to revise the legal and financial status of the technical staff of technical schools and institutes.

Legislative Decree No. 1278 of Provisional Head of the State dated 7 May 1948, to revise the legal and financial status of the technical staff of the *scuole secondarie di avviamento professionale* (lower secondary pre-vocational training schools).

GLOSSARY

conservatorio di musica e liceo musicale: vocational training school of music.

ginnasio e liceo classico: upper general secondary school with curriculum emphasizing literary studies and including Greek; course comprises lower stage (*ginnasio*) and upper stage (*liceo classico*).

istituto d'arte: vocational training school of art with course for training specialist teachers (*magistero*).

istituto magistrale: teacher training school.

istituto tecnico agrario: vocational secondary school of agriculture.

istituto tecnico commerciale e per geometri: vocational secondary school of commerce and surveying.

istituto tecnico industriale: vocational secondary school of industry, often specializing in one field of study (mining, textiles, metallurgy, etc.).

istituto tecnico nautico: vocational secondary school of nautical studies (navigation, marine engineering and shipbuilding).

liceo artistico: upper general secondary school with curriculum emphasizing fine arts.

liceo scientifico: upper general secondary school with curriculum emphasizing mathematics and sciences and including a modern language.

magistero: see *istituto d'arte.*

scuola d'arte: vocational training school of art.

scuola di avviamento professionale: pre-vocational training school.

scuola di magistero professionale (femminile): specialized teacher-training school for teachers in vocational schools for girls.

scuola elementare: primary school.

scuola materna (del grado preparatorio): pre-primary school.

scuola media: lower general secondary school.

scuola professionale femminile: vocational training school for girls.

scuola tecnica agraria: vocational training school of agriculture.

scuola tecnica commerciale: vocational training school of commerce.

scuola tecnica industriale: vocational training school of industry.

UNIVERSITY FACULTIES AND HIGHER INSTITUTES

A. Law.
B. Arts.
C. Political science.
D. Medicine.
E. Engineering.
F. Science.
G. Industrial chemistry.
H. Pharmacy.
I. Veterinary science.
J. Agriculture.
K. Economics and commerce.
L. Statistics and actuarial science.
M. Nautical studies.
N. Oriental studies.
O. Architecture.
P. Education.
Q. Fine arts.

EXAMINATIONS

Certificato di proscioglimento dall'obligo dell'istruzione inferiore: certificate awarded to pupils completing their period of compulsory schooling at primary school.

Diploma di abilitazione all'insegnamento: diploma certifying that the student is qualified to teach.

Diploma di artiere specializzato: diploma of specialized craftsman.

Diploma di maestro d'arte: diploma of master artisan.

Diploma di perito: diploma of vocational competence.

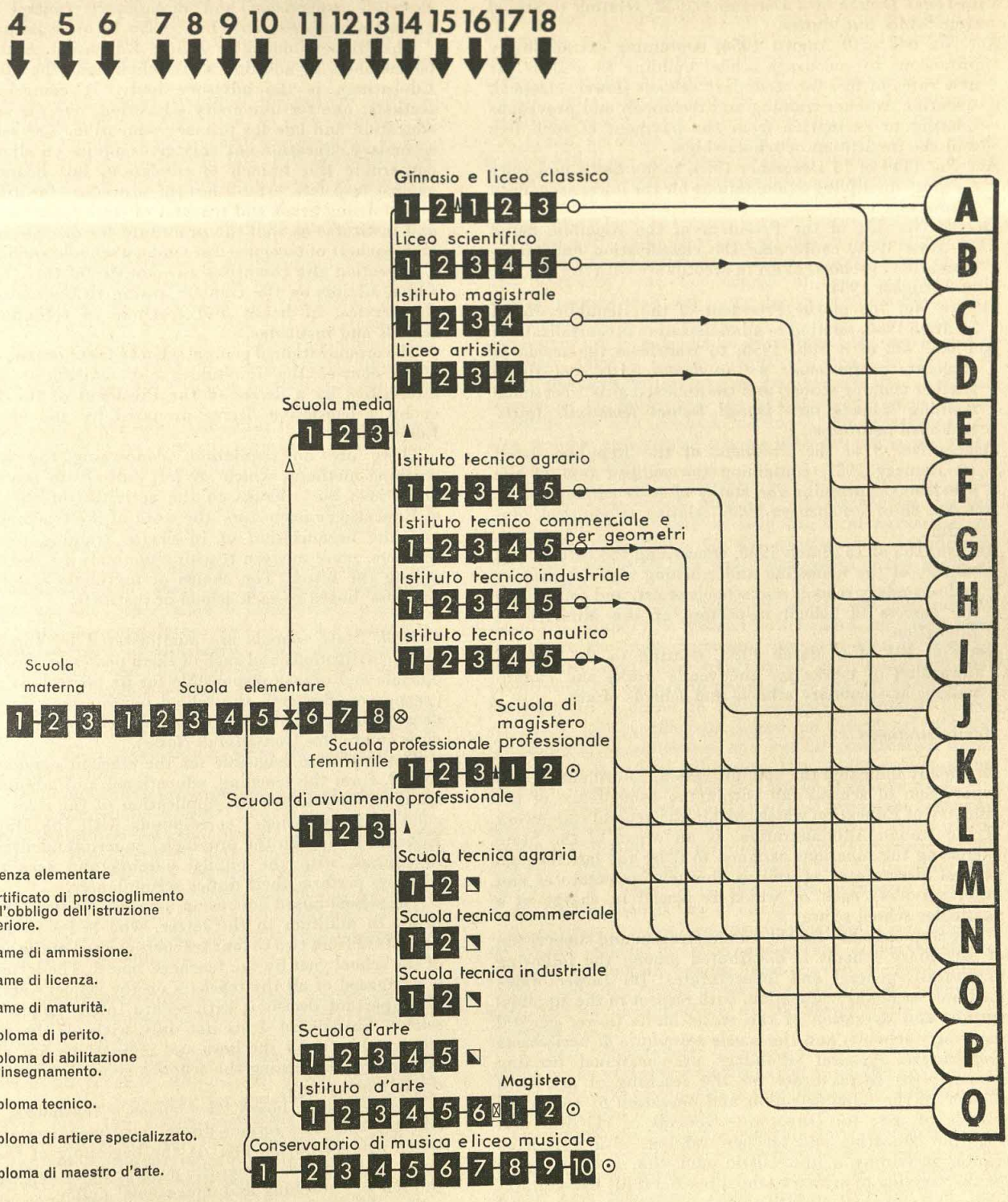
Diploma di tecnico: technician's diploma.

Esame di ammissione: entrance examination.

Esame di licenza: leaving examination.

Esame di maturità: 'maturity' examination completing upper secondary studies and leading to higher education.

Licenza elementare: primary leaving certificate.


4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
Ginnasio e liceo classico
1 2 1 2 3
Liceo scientifico
1 2 3 4 5
Istituto magistrale
1 2 3 4
Liceo artistico
1 2 3 4
Scuola media
1 2 3
Istituto tecnico agrario
1 2 3 4 5
Istituto tecnico commerciale e per geometri
1 2 3 4 5
Istituto tecnico industriale
1 2 3 4 5
Istituto tecnico nautico
1 2 3 4 5
Scuola materna
1 2 3
Scuola elementare
1 2 3 4 5 6 7 8
Scuola professionale femminile
1 2 3 1 2
Scuola di magistero professionale
Scuola di avviamento professionale
1 2 3
Scuola tecnica agraria
1 2
Scuola tecnica commerciale
1 2
Scuola tecnica industriale
1 2
Scuola d'arte
1 2 3 4 5
Istituto d'arte
1 2 3 4 5 6 1 2
Magistero
Conservatorio di musica e liceo musicale
1 2 3 4 5 6 7 8 9 10
A B C D E F G H I J K L M N O P Q
Licenza elementare
Certificato di proscioglimento dall'obbligo dell'istruzione inferiore.
Esame di ammissione.
Esame di licenza.
Esame di maturità.
Diploma di perito.
Diploma di abilitazione all'insegnamento.
Diploma tecnico.
Diploma di artiere specializzato.
Diploma di maestro d'arte.

Ministerial Decree of 1 December 1952, relating to school time-tables and duties.

Act No. 645 of 9 August 1954, containing extraordinary provisions to encourage school building as well as the new rates of fees for secondary schools (lower, classical, scientific, teacher training and technical) and provisions relating to exemption from the payment of such fees and the institution of scholarships.

Act No. 1440 of 15 December 1955, to lay down new rules for state qualifying examinations for the lower secondary school teachers.

Decree No. 537 of the President of the Republic dated 12 June 1955, concerning the classification and transformation of schools of art in accordance with Act No. 651 of 9 August 1954.

Decree No. 766 of the President of the Republic, dated 30 June 1956, relating to administrative decentralization.

Act No. 782 of 8 July 1956, to transform the *scuola di magistero professionale per la donna* (girls' vocational teacher training school) and the annexed girls' vocational training schools into *istituti tecnici femminili* (girls' technical institutes).

Decree No. 3 of the President of the Republic dated 10 January 1957, containing the codified text of the provisions concerning the status of state employees.

Act No. 88 of 7 February 1958, relating to physical education.

Act No. 165 of 13 March 1958, concerning the careers and salaries of the managing and teaching staff of primary and secondary schools and schools of art, and concerning the careers of school inspectors of the Ministry of Education.

Act No. 184 of 6 March 1958, relating to the *scrutini* (awarding of marks for the year's work) and examinations at secondary schools and schools of art.

Administration

As already indicated the administration, co-ordination and supervision of schools fall within the competence of the Ministry of Education which, within the general framework of the Italian Administration, is an organ of the State exercising the functions assigned to it by the law through general directorates as well as through inspectorates and other services, each of which is placed in charge of a particular school sector.

The responsibility for the administration and supervision of secondary schools is distributed among the following directorates-general and inspectorates: (a) Inspectorates for lower secondary education, with respect to the administration and operation of the *scuole medie* (lower general secondary schools) and the *scuole secondarie di avviamento professionale* (general secondary pre-vocational training schools); (b) Inspectorate for the teaching of art, with respect to the administration and operation of secondary schools of art; (c) Directorate-General of classical and scientific education and teacher training, with respect to schools providing a humanistic education and institutes for the training of primary school teachers; (d) Directorate-General of technical education, with respect to technical and vocational schools of the first and second cycles; (e) Inspectorate for private lower secondary schools, which exercises supervision and disciplinary control over all private schools governed by Act No. 86 of 19 January 1942.

The Higher Council of Public Education, consisting of 60 members in addition to its chairman (the Minister of Education), is the advisory body. It comprises three sections; one for university education, one for secondary education and one for primary education. The section for secondary education not only gives advice on all questions concerning this branch of education, but hears appeals against transfers, establishes the procedure for disciplining or dismissing heads and teachers of state secondary schools and institutes as well the procedure for disciplining heads and teachers of recognized secondary schools and institutes. This section also comprises a committee of three members, which advises on the transfer, owing to the necessities of the service, of heads and teachers of secondary state schools and institutes.

The organization of general school education, the duration of the courses, the time-tables and curricula are normally established by a decree of the President of the Republic or by a legislative decree prepared by the Minister of Education.

There are no regulations concerning the choice of teaching methods, which are left entirely to the teacher's discretion; but, thanks to the activities of the Ministry of Education's inspectors, the work of the teaching centres and the organization of in-service training courses for teachers, more modern teaching methods are disseminated among the latter. The choice of textbooks is left to the teachers' board of each school or institute.

Control. State schools are administered by the State as public institutions and each of them possesses the following officials and organs responsible for its operation: the head (*preside* or *direttore*), the school board (*consiglio di presidenza*), the teachers' board (*collegio dei professori*) and the class committee (*consiglio di classe*).

The head is responsible for the efficient conduct of the school, from the teaching, educational and administrative standpoints; ensures the application of the relevant legal rules and regulations; corresponds with the Ministry of Education through the provincial superintendent; remains in contact with the pupils' parents and sees that the teachers perform their duties scrupulously.

The school board acts as an advisory body to the school head. In addition to the latter, who is its chairman, it consists of from two to four teachers elected at the beginning of the school year by the teachers' board. The latter, which is composed of all the teachers on the school's staff, takes all important decisions with regard to the conduct of the school. This board deals not only with all the questions entrusted to it by the laws and regulations but also with all matters concerning the school's general, educational or disciplinary policy.

The teachers' board also chooses textbooks, decides whether the most serious disciplinary measures should be taken against pupils, etc. At the beginning of the school year, it also decides upon the general trend to be given to the school's teaching and educational policy.

The class committee is composed of all the teachers who teach in each class. It is responsible for ensuring the co-ordination of the curricula of the various subjects; at the

end of each term, and at the time of the final *scrutinio*, it appraises each pupil's conduct and progress; it adopts certain disciplinary measures against pupils, decides whether new pupils may be enrolled in the class during the school year, etc.

Financially independent technical institutions have a board of administration, appointed by the Ministry of Education and composed of a chairman, the head of the school or institute concerned, who acts as its secretary, and representatives of the local authorities, of the Ministry of Education and of all other bodies or persons making an important contribution to the maintenance of such schools.

The board of administration is responsible for administering the resources of the school as well as contributions from the Ministry of Education. It therefore makes decisions concerning the purchase and sale of material, the granting of special allowances to staff members, the acceptance of bequests, gifts, etc., and directly appoints the regular and temporary teachers of technical subjects.

Supervision and inspection. The Ministry of Education exercises two kinds of supervision over schools: administrative control over the general conduct of the institutions in order to ensure that the funds allocated to them are properly administered and that all the relevant laws and regulations are observed; and a technical-didactic supervision of the teaching staff.

Officials attached to the regional offices are responsible for the administrative control; the technical-didactic supervision, on the other hand, is carried out by central inspectors, who are appointed subject to a competitive examination of their qualifications from among school heads and teachers and high officials of the Ministry of Education of considerable seniority in the service.

In addition to their supervisory functions, all inspectors, both technical and administrative, carry out inquiries and research into school organization, from the teaching and legislative standpoints.

There are no legislative provisions concerning the supervision of school education by private bodies, such as parents' committees. Relations between parents and schools are left entirely to the discretion and understanding of the school heads who, through meetings and publications, endeavour to interest parents in the school and its problems, emphasizing all school and out-of-school activities undertaken with a view to improving the pupils' civic mindedness and cultural development.

Finance. School expenditure is financed partly by the Ministry of Education and partly by the local, communal and provincial authorities.

The following expenses are borne by the Ministry: salaries of teachers of all types of schools, cost of the equipment and of the material necessary for practical work in the *scuole medie* and the *scuole secondarie di avviamento professionale*, expenditure for the purchase of technical, scientific and teaching material and publications.

The Ministry also makes contributions and grants with a view to promoting all activities likely to improve the efficiency of school teaching.

The following procedure is followed for the financing of schools and institutes: direct orders for payment are sent in the case of technical schools and institutes which are corporate bodies enjoying administrative independence (industrial, agricultural, nautical and girls' technical institutes; technical schools of all kinds; vocational training schools, girls' teacher training schools, and the recently established commercial and surveyors' technical institutes), and credit accounts are opened in the case of all other schools which are not administratively independent (*scuole secondarie di avviamento professionale*, *scuole medie*, classical and scientific lyceums, teacher training institutes and most of the commercial and surveyors' technical institutes).

On the other hand, the expenses relating to the provision of premises and furnishings, heating, lighting, water supply and electricity, and the salaries of the secretarial and general service staff are borne by the communal or provincial authorities according to the type of school. The communes are responsible for the costs of the *scuole medie*, the *licei*, teacher training institutes, nautical institutes, *scuole secondarie di avviamento professionale* and technical schools of all kinds and the provinces for those of the scientific *licei* and technical institutes. The provinces must also provide agricultural schools with the farms necessary for practical work.

At present, under Act No. 645 of 9 August 1954, the State is providing an annual sum of 1,500,000,000 lire, for the years 1955–64, in order to help the local authorities to defray the expenditure for the construction, completion, extension, repairing and main furnishings of the *scuole di avviamento*.

As already indicated, teachers' salaries are paid entirely from the Ministry of Education's budget, of which they constitute the most important item. In fact, it may be maintained that three-quarters of the budgetary appropriation for education are used for the remuneration of teachers. In addition to their salaries, calculated in accordance with coefficients based on length of service, teachers receive allowances and fees for examination work, as well as a special allowance 'for additional teaching services', instituted by Act No. 165 of 13 March 1958.

Pupils attending schools are required to pay the following fees: for the first enrolment (*immatriculazione*) at a particular type of school; for attendance; for examinations; for diploma. The amount of the school fees is fixed by Act No. 645 of 9 August 1954. The *scuola secondaria di avviamento professionale* is free of charge.

In addition to school fees, pupils must pay a contribution for school reports, for insurance against accidents during physical instruction lessons, and for the various school welfare services. Pupils of technical schools and institutes must also pay contributions for the use of material during practical work.

The first concrete form of school aid to parents of needy pupils is the exemption of the latter from the payment of school fees; this exemption is gradually being extended to other categories of pupils.

This exemption is total or partial and is accorded on the basis of merit or because of the particular situation of the pupil or of his parents. In fact, in addition to pupils who obtain high marks for their progress or conduct, the following are exempted from the payment of school fees: persons disabled by the war or as a consequence of the war,

state service or their employment; their children; orphans of persons who died on the field of battle or as a consequence of the war, state service or their employment; children of those missing as a consequence of the war; children of large families; children of Italian citizens residing abroad; foreign students.

In addition to the exemption from the payment of school fees, deserving pupils in straitened circumstances can be accommodated free of charge in national boarding-schools until the end of their secondary education.

Scholarships, prizes, grants, etc. constitute another form of school assistance. Apart from the considerable number of scholarships which are granted by private persons or by bodies other than state organizations and which are limited, being restricted to pupils of a particular category or country, mention may be made of the scholarships instituted by Legislative Decree No. 690 of 29 May 1947 of the Provisional Head of the State for the benefit of pupils of the technical schools attached to the Provincial Unions for Technical Education; the scholarships established by Act No. 645 of 9 August 1954 to the amount of 500,000,000 liras; and, lastly, the scholarships awarded to the orphans of those who were killed in the war or as a consequence of the war or during the struggle for the liberation of the country, which amount to 100,000,000 liras (Act No. 402 of 3 May 1956).

Finally, the most direct form of assistance, designed to meet the pupils' most urgent needs, is given by the School Fund (*Cassa scolastica*), established, in every school, in accordance with Article 101 of Royal Decree No. 965 of 30 April 1924, by a grant of funds.

Buildings and equipment. Although, as already indicated, the local authorities are exclusively responsible for providing premises, the plans of school buildings must, before being executed be sent to the Ministry of Education's Central Service for the Building and Equipment of Schools, which is responsible for ascertaining whether the plans satisfy the standards established for school buildings.

In accordance with these standards, the school building must be erected preferably on an open site, so that it will possess a large area of free space and receive light and sun on all sides; the soil must be dry and not liable to cave in and must meet hygienic requirements in every way. In addition to a certain number of classrooms for technical and cultural lessons—the number of such rooms being proportionate to the number of pupils—every school building must have laboratories for the teaching of scientific subjects (physics and chemistry), specially equipped for experimental work by the pupils and provided with a work-room and study for the teachers; a large hall for meetings, lectures, concerts, etc.; a gymnasium for physical instruction; a teachers' room; offices for the secretarial staff and for the school head and school board, and a number of rooms for hygienic and sanitary purposes, e.g. a dressing-room, showers, etc.

Technical and vocational training schools must also be provided with suitable rooms for practical work. When productive enterprises are attached to these schools, the school buildings must be planned and constructed in such a way that the design is dictated by the nature of the working environment. Special criteria are prescribed for the construction, situation and lighting of such premises, according to the particular purpose for which they are designed. Each classroom must be large enough to accommodate some thirty pupils. Each pupil is entitled to 16 square feet and from 176½ to 353 cubic feet of space, according to his age, while the proportion between the width and length must be such that the former represents two-thirds of the latter.

Each classroom must be adequately ventilated and lighted, and heated internally so that the temperature never falls below 15 °C. and never exceeds 18 °C.

School welfare services. There are still no special legal provisions concerning health assistance for pupils. Nevertheless, for some time now, school heads most alive to modern social and pedagogical ideas have emphasized the need for a scientific approach to the physical and psychical problems confronting children before and at the age of puberty by means of co-operation between the schools and the medical profession.

On the basis of certain legal provisions relating to the observance of the most elementary hygienic rules and the prevention of infectious diseases in schools, these school heads have recruited the services of school medical advisers who, in addition to their normal duties—medical supervision, preventive treatment and first aid—also perform other tasks, which may be summed up as follows: a periodical medical examination; a report to parents on any abnormalities observed in the child's state of health; a report to teachers on any deficiencies noted in the child, so that they will possess the necessary knowledge for an appraisal of the child's personality and capacity to learn.

As this measure corresponds to an urgently felt need, it may reasonably be anticipated that it will be continued and that an appropriate organization will be set up by law.

Health assistance for teachers is provided by the Ente Nazionale per l'Assistenza al Personale Statale (ENPAS) (National Welfare Organization for State Employees), which looks after the welfare of all state officials and employees, and by the Istituto Kirner, a body corporate under public law, which looks after the welfare of the managing and teaching staff of all secondary schools.

TYPES OF SECONDARY EDUCATION

Secondary education comprises two main cycles.

The first cycle, which is for children between the ages of 10 and 13 years and covers two main types of school comprises (a) *scuola media* (lower secondary school), of which there is only one kind; and (b) *scuola secondaria di avviamento professionale* (lower secondary pre-vocational training school), of which there are various kinds—commercial, agricultural, industrial, nautical and girls' industrial schools.

There are also a number of technical schools which conclude this cycle; their task is to enable pupils who do not intend to enter higher educational establishments to specialize in a particular trade or profession. These schools include (a) technical schools (agricultural, commercial, nautical), providing a 2-year course; (b) various vocational training institutes (agricultural, commercial,

industrial, nautical)—the length of the course varies according to the specialization; (c) girls' vocational training schools.

The second cycle, which is for young persons between the ages of 14 and 18 years. The schools of this cycle are divided according to their purpose and the nature of the instruction given, into academic schools, where instruction is predominantly in the humanities, and technical schools.

The academic schools include the *liceo classico* (upper secondary schools with predominantly classical instruction), with a 5-year course, the *liceo scientifico* (upper secondary schools with predominantly scientific instruction), also with a 5-year course, and the *istituto magistrale* (teacher training institute), with a 4-year course.

The technical schools are as follows. Firstly the *istituti tecnici* (technical institutes), with various sections (agricultural, industrial, commercial, surveying, nautical, girls'), each section containing a number of sub-sections corresponding to different branches of specialized training; the technical institute's course lasts 5 years. Secondly the *scuole di magistero professionale per la donna* (girls' vocational teacher training schools) which provide a 2-year course.

Thus, children who have completed their primary education can choose between two types of schools where, up to the age of 14, they can conclude the period of compulsory education prescribed by the law: the *scuole secondarie di avviamento professionale* (providing a 3-year course), and the *scuole medie* (also providing a 3-year course). The *scuola di avviamento* is open to pupils who obtain the primary school leaving certificate (*licenza elementare*) at the end of the 5-year primary course, whereas those wishing to enter the *scuola media* must pass a special entrance examination.

The pupil's choice between the two types of schools depends on his parents' wishes and not on examinations designed to ascertain his aptitudes. Special vocational guidance centres were recently set up by the Provincial Unions for Technical Education, but they are concerned mainly with the child's physical possibilities. Their opinions are not regarded as binding, both owing to the respect due to the human personality, and to the fact that it is well known that enthusiasm and will-power can outweigh initial disadvantages caused by physical defects.

Broadly, students who intend to continue their studies until they obtain a university degree, or at least a diploma of a higher educational establishment, enter the *scuola media*, whereas those who intend to limit their studies to lower secondary education and to obtain a diploma qualifying them for a particular trade enter the *scuola secondaria di avviamento professionale.*

After completing the first cycle of secondary education, pupils who have obtained the leaving certificate of the *scuola media* can continue their studies in the *liceo classico*, the *liceo scientifico* (both pre-university schools), the *istituto magistrale* (teacher training institute) or the *istituto tecnico* (technical institute).

Pupils who have obtained the leaving certificate of the general secondary pre-vocational training school *diploma di licenza della scuola secondaria di avviamento professionale* can continue their studies:

1. Without passing an entrance examination, in the vocational training institutes (providing a 3-year or 4-year course according to the subject chosen) or in the technical schools (2-year course).

   Pupils who obtain the technical school leaving certificate can, after passing an entrance examination, attend the second class of the corresponding technical institutes.

   On the other hand, girls wishing to complete their studies for girls' careers can enter the vocational training school (3-year course) and then the girls' vocational teacher training school.
2. After passing an entrance examination, in the technical institutes (industrial, agricultural or girls' institute) and in the mechanics sections of the technical institutes for nautical studies.

The school year extends from 1 October to 30 September. The opening and closing dates are fixed every year by an ordinance of the Minister of Education. Usually, the courses last from the beginning of October to the end of May. This period is divided into terms. The courses are followed by the *esame di ammissione* (entrance examination), the *esame di idoneità* (examination for promotion from one class to another), the *esame di maturità* (in many ways equivalent to a matriculation or university entrance examination) and the *esame di abilitazione* (examination for a diploma certifying that the student is qualified to perform certain work). These examinations take place during the months of June and July, and again in September for those failing to pass them the first time. In August, activity in the school is limited to the functioning of the school secretariat and to administrative work relating to the pupils. Thus, for pupils not required to sit for the examination, the long vacation lasts from June to October. There is also a week's vacation at Christmas.

General secondary schools

The *scuola media* (lower general secondary school) was established only recently, in 1940, as the result of the unification of three types of lower secondary schools: the lower 3-year courses of the *ginnasio*, the lower 4-year course of the teacher training institute and the lower 4-year course of the technical institute. These types of schools resembled one another to such a degree that it was quite easy for pupils to pass from one to another, i.e., quite easy under the law of which the purpose was to promote the most appropriate guidance of children between 10 and 14 years of age, but pupils hardly ever did so because the various courses gradually and almost automatically became specialized owing to their inclusion in the curricula of particular types of schools; thus, in fact, pupils of the lower *ginnasio* arrived prepared for instruction at the *liceo;* those following the lower course of the teacher training institute were trained for the upper course of the same institute, and, lastly, most of those of the lower technical institute were prepared for the commercial technical institute. This pre-established direction given to studies was in contradiction with the principles of the 1923 reform.

Thus, the *scuola media* emerged in 1940 from the fusion of the three above-mentioned types of lower secondary school as a preparation for higher secondary education.

As stated in the 1944 study plans, the reason for this was 'to avoid beginning prematurely the child's cultural specialization and to give a common basis to the general lower secondary education of all sections of the population, so that the child's specialization will depend on his own aptitudes and not on the situation of his family'.

The *scuola media* is open to pupils who have completed their primary education and pass the special entrance examination; it offers a 3-year course.

TIME-TABLE AND CURRICULA OF THE 'SCUOLA MEDIA'

Subject	Year of study		
	I	II	III
Religion	1	1	1
Italian, Latin, history, geography and civics	16	15	15
Mathematics	3	3	3
Foreign language	—	2	2
Drawing	2	2	2
Physical instruction	2	2	2
Domestic science for girls	2	2	2
Music and singing (optional)	1	1	1

On completing his studies at the *scuola media*, the pupil sits for a school-leaving examination (*esame di licenza*), which gives access to all types of higher secondary schools, including those providing technical instruction. The board of examiners, in addition to deciding whether the pupil's examination results are satisfactory, is also required to express an advisory opinion concerning the most appropriate orientation of the pupil's future studies.

This brief description of the *scuola media* may be concluded with a reference to the wide-scale reform of teaching and educational methods now being carried out in the form of experiments under the guidance of the Centro Didattico Nazionale per la Scuola Secondaria (National Teaching Centre for Secondary Education).

The *liceo classico* (upper general secondary school placing emphasis on instruction in the classics) is the school most deeply rooted in Italian traditions; it is the school that at one time almost exclusively trained the nation's ruling class, and still does so today to a considerable extent. The 1923 reform, while promoting the renewal of the methods and spirit of this school, did not alter its structure, which was solid. The complete course of studies—suitably inter-related—lasted 8 years. The school as a whole comprised the *ginnasio* (lower and upper) and the *liceo*, and was therefore known as the *liceo-ginnasio*. The 3-year course of the lower *ginnasio*, during which the pupil received a grounding in the humanities and began the study of Latin and other subjects, was followed by the 2-year course of the upper *ginnasio*, where the pupil began to learn Greek while continuing the study of Latin. During the 3-year course of the *liceo* properly so-called, the study of classical languages took the form of a study of classical letters (or literature). The pupil continued the study of Italian literature, history, geography and mathematics, already begun at the *ginnasio*, and to these were added philosophy, the history of art, physics and science. He thus acquired a rich fund of knowledge. 'The aim of classical education is to prepare the pupil for university and higher studies.' This was laid down in the 1923 Act and is still applicable. It means that classical education is not an end in itself, but a preparation for further studies, and gives access to all university faculties. There is one exception, the Faculta di Magistero (Faculty of Teaching), which is open to those who have attended a secondary teacher training school and received training for primary school teaching, subject to their passing a special entrance examination.

Following on the establishment of the *scuola media*, which, as already indicated, took place in 1940, the lower 3-year course of specialized training of the *liceo-ginnasio* was abolished and the latter now comprises two classes of the upper *ginnasio* and three classes of the *liceo*. Thus, the course now lasts 5 years; but, as it recruits its pupils among those who have completed the 3-year course of the *scuola media*, its own study plan remains unchanged.

During the first 2 years, which completely correspond to the former 2-year course of the upper *ginnasio*, pupils study Italian, Greek, history and geography, mathematics, a foreign language (French, English, German or Spanish) already begun at the *scuola media*, and physical instruction; the curricula also provide for religous instruction, from which pupils are exempted at their request. The class teacher, who gives instruction in a whole series of subjects (Italian, Latin, Greek, history and geography), ensures real uniformity of teaching at this school.

Except for the foreign language all these subjects continue to be taught during the 3-year course of the *liceo* proper, but they are taught in seperate classes and by different teachers (two of the latter share the task of teaching literature in the three classes), and the pupils also study philosophy, natural sciences and chemistry, physics and the history of art.

The reason for dropping the foreign language at the beginning of the 3-year *liceo* course, was the fear that it would place an undue burden on the pupils. This is unfortunate, and today the lack of such teaching is particularly felt.

The syllabuses drawn up in 1944 contain instructions for the teaching of the different subjects in each class but leave the teachers considerable discretion with regard to the direction to be followed, and consequently with regard to the choice of textbooks and reading matter.

For selection purposes an examination is held for those wishing to follow the course of the *liceo* proper after completing the 2-year course of the *ginnasio*. It is an entrance and not a leaving examination and the board of examiners therefore consists mainly of teachers of the *liceo*, i.e., teachers in charge of the course which pupils wish to follow. Thus, it is an examination by means of written and oral tests designed essentially to ascertain the pupil's aptitude for classical studies. At the end of the *liceo* course, the pupil sits for the *esame di maturità classica* (an examination equivalent to a university entrance examination, with emphasis on classical studies).

The 'national inquiry for the reform of school education', announced in 1947, showed that, with the exception of very slight modifications, it was not thought advisable nor was it recommended that any changes should be introduced into the organization of this type of school. Confirmation of this is to be found in the report on the

proposed reform: 'The *liceo classico* has its own particular structure which should not be altered; it is simply desired that the instruction given be of a more classical nature, so that its high tradition shall not become a mere memory but shall be maintained as a living reality.' The same report suggested that the classical *liceo* should continue to give access to all university faculties, that is, that it should keep its character of superior training for higher education.

The *liceo scientifico* (upper general secondary school with emphasis on science) was established by the 1923 reform. Long before that reform, however, there had been a tendency to modernize the study of the humanities. In 1911, for instance, modern sections had been attached to the *liceo-ginnasio* in various towns. The instructions concerning the curricula indicated that the object of these sections was to 'train the citizen, develop his moral character, strengthen and refine his physical and spiritual activities for the greater welfare of the nation and mankind. The purpose was not to achieve immediate practical and utilitarian aims and there was no direct reference to the profession and kind of activity which the pupil will choose subsequently'. The directives also contained the following definition: 'The modern *liceo-ginnasio* maintains a temperate but living contact with our classical and Italic traditions—a contact which absorbs less of the pupils' time than at the *liceo classico*, but on the other hand it takes full advantage of the languages and literature of other countries and a deeper knowledge of the sciences so as to open the minds of the young to the renovating and livelier ideals of the modern spirit.' These definitions are also applicable to the *liceo scientifico*. At the modern *liceo*—as later at the *liceo scientifico*—pupils continued the study of Latin (but no longer Greek), and also received instruction in modern languages with more time for scientific subjects. At the same time, however, scientific instruction was provided at another type of school, namely in the physics and mathematics sections of the technical institutes. After the abolition of the modern sections of the *licei* and the physics and mathematics sections of the technical institutes, the scientific *licei* were established in 1923.

The scientific *liceo* was organized on a 4-year basis and therefore lacked a lower preparatory course. It was voluntarily attended by pupils from the lower teacher training institutes, lower technical institutes and the four classes of the *ginnasio*. The diversified origins of the school population was a disadvantage for the *liceo scientifico*. The pupils required some time to adapt themselves and become a homogeneous group, and the teaching suffered thereby, at least during the first year.

According to the law establishing the scientific *liceo*, the object of the latter is 'to develop and render more thorough the studies of pupils who wish to continue their education at the university faculties of science, medicine or surgery, with special emphasis on scientific work'. Changes gradually introduced into the organization of university education offered ever wider possibilities to pupils from the scientific *liceo*, to such an extent that today they can even enrol at other faculties, such as the faculties of engineering, statistical and actuarial sciences, economic and commercial sciences, chemistry, pharmacy, architecture, etc.

As the normal preparation for the scientific *liceo* was given at the lower technical institute or at the lower teacher training institute (4-year course), the complete course of a pupil, from the beginning of his secondary studies until their conclusion at the scientific *liceo*, lasted 8 years. On the abolition of the two above-mentioned lower courses and their replacement by the *scuola media* (3-year course), the complete course would have been reduced by a year if a class had not been added to the *liceo* so as to organize it on a 5-year instead of on a 4-year basis. This was done in 1945, immediately after the war, by the institution of a connecting class (*classe di collegamento*) between the *scuola media* and the scientific *liceo*. It was included provisionally in the structure of the *liceo* pending an organic reform of the educational system. This class still possesses the characteristics of those of the lower courses for which it was substituted. Italian, Latin, history and geography are taught by one and the same teacher. Pupils continue their study of a foreign language, begun at the *scuola media;* they are also taught mathematics, drawing, religion, and physical training.

In the other classes, pupils are taught Italian and Latin literature, a foreign language, history and philosophy, mathematics and physics, the natural sciences, chemistry, geography, drawing and physical training. The curricula also include religious instruction, subject to exemption on request. A comparision with the classical *liceo* shows that, apart from the teaching of a foreign language instead of Greek and drawing instead of the history of art, there is practically no difference between the two *licei*. At the *liceo scientifico* less time is devoted to literary studies—authors and periods of lesser importance being dealt with synoptically—and more time to purely scientific studies.

Teaching methods and classification of pupils. As already mentioned, the choice of teaching methods is left entirely to the teacher who, on his own responsibility, uses what he considers to be the most appropriate instruments for teaching the pupils entrusted to him.

At the end of each term, teachers of the same class meet together in order to form an opinion on the school progress of each pupil. They award from 1 to 10 marks for every subject. In order to be promoted from one class to another, a pupil must obtain 6 marks for every subject and 8 marks for behaviour. Pupils failing to obtain the requisite number of marks are entitled to sit for examinations specially organized for them in the autumn. At the end of each study cycle, there is a state examination for the corresponding diploma. At the end of each school year, in addition to awarding marks, teachers draw up a short report on each pupil; this report forms part of the school's records, but it is not of a binding nature and does not determine the orientation of the pupil's future studies, the choice of which is left entirely to his parents.

Recruitment, career and training of teachers. In general, registered teachers (*professori di ruolo*) are recruited competitively, on the basis of qualifications and an examination, from among holders of a university degree (*laurea*). The qualifications show the extent of the candidate's cultural and scientific training, whereas the examination is designed to ascertain his aptitude for teaching.

The successful candidate, when appointed, is known as a *professore straordinario;* after a 2-year probationary period, during which he must show his aptitude for teaching, he is given the status of a *professore ordinario.* The teacher's career is in accordance with an established roster of seniority, or in other words as soon as a teacher has acquired the prescribed length of service he is automatically entitled to promotion.

Unfilled registered teachers' posts as well as posts for unregistered teachers are provisionally assigned to persons with the necessary qualifications, who act as temporary teachers or as substitutes for permanent teachers temporarily absent.

Temporary teachers' posts are assigned by the provincial superintendents (*provveditori agli studi*) for the duration of a school year, after a competitive selection on the basis of qualifications.

The career and recruitment of teachers are governed by regulations which are identical for all types of schools, both classical and technical.

Vocational and technical schools

The various types of vocational and technical schools and institutes constitute the second of the two groups of secondary schools.

This branch of education is all the more complex and interesting as it aims, through the vocational training of the workers and the training of the experts necessary for the various branches of production, to improve and increase the rate of production and the economic welfare of the nation; it therefore represents one of the most important social and economic tasks of the modern state.

Vocational and technical education naturally covers all sectors of production and economy—from agriculture to industry, handicrafts, commerce, tourism, trade, navigation and social welfare. It is provided at schools and institutes which were, in the past, subordinate to various Ministries according to their particular economic sectors and the purposes they had in view, but which, from 1928 on, gradually came under the direction and control of the Directorate-General of Technical Education of the Ministry of Education and were organized according to a uniform system by two fundamental laws: Act No. 889 of 15 June 1931, and Act No. 490 of 22 April 1932 together with Royal Legislative Decree No. 2038 of 21 September 1938.

The following schools and institutes are subordinate to the Directorate-General of Technical Education: *scuole secondarie di avviamento professionale* (lower secondary prevocational training schools); *scuole tecniche* (technical schools) and *istituti professionali* (vocational training institutes); *scuole professionali femminili* (girls' vocational training schools); *istituti tecnici* (technical institutes); *scuole di magistero professionale per la donna* (girls' vocational teacher training schools); schools and institutes having a special organization.

The education given at these schools and institutes comprises pre-vocational, vocational, and technical education.

Pre-vocational education is given at the *scuole di avviamento professionale.* The latter are free and compulsory post-primary schools open to pupils between 11 and 14 years of age. The course lasts 3 years and is intended to train boys and girls in agriculture, industry, commerce and seamanship. Two or more types of school can be combined in the same institute.

The *scuole di avviamento professionale* provide cultural and technical instruction and practical training in the various branches of economic activity with which they are concerned. The technical and practical training can be adapted to local economic needs; this enables the schools to play a more important role in the national economic life, in harmony with the local environment and traditions.

The *scuole di avviamento* of the industrial type usually provide specialized training in one or more of the following: mechanics and carpentry, building, textiles, mining, graphic arts, decorative painting, etc.

The *scuole di avviamento* of the commercial type may be of a general or specialized character and train for the hotel trade or the corresponding services on ships.

Those of the maritime type provide specialized training in one or more of the following: navigation, mechanics, building.

Mixed pre-vocational schools of an agricultural and industrial type, i.e., for pupils of both sexes, provide separate instruction for the girl pupils when there are more than 10. Thus, girls' industrial pre-vocational schools have been established as annexes; they provide general cultural training, like the corresponding boys' schools, but they differ from the latter in that the technical and practical training relates to women's careers, domestic science, household accounting and housekeeping in general. Separate girls' industrial schools have also been established.

The following general subjects are taught in all types of pre-vocational schools and courses: Italian, history and geography, mathematics, the fundamental principles of physics and the natural sciences, elementary hygiene, drawing, a foreign language, choral singing, religion, civics. The instruction in technical subjects, although of an elementary and pre-vocational character, is already differentiated from school to school, with a view to specialized trade training at the next stage.

In order to be able to achieve their ends, the *scuole secondarie di avviamento professionale* must possess a farm, workroom or model office for practical work, according to the purpose in view.

Vocational education is designed to complete the practical preparation of pupils leaving the *scuole secondarie di avviamento professionale* and to train workers for the various economic sectors. It is therefore intended for manual workers and office employees.

Vocational training is given at technical schools, girls' vocational schools, and vocational institutes; it comprises general education, theoretical and technical instruction and practical work.

The technical schools provide a 2-year course for any of the following branches of production and economy: agriculture, industry, handicrafts, commerce.

The task of the agricultural technical school is to train small farmers; it confers the title of *agente rurale* (rural agent). The latter is more like a technician than an ordinary

worker, as he possesses the necessary qualifications for managing a small landed estate. In general, however, school pupils become small farmers or *métayers* or lessees. According to local economic needs, the agricultural school provides specialized training in viticulture and wine-making, horticulture, stock-breeding, cheese-making, olive-growing and the manufacture of olive-oil. The curriculum includes Italian, history, geography, mathematics, elementary agricultural physics, economics and rural accountancy, agricultural industries, agriculture, draughtsmanship for agricultural purposes, stock-breeding, rural legislation, religion. Other subjects or wider and more detailed programmes are taught according to the various specializations. At present, however, apart from the S. Ilario agricultural technical school in Genoa, which specializes in horticulture, all other schools of this type provide training of a general nature.

The task of the industrial and artisans' technical school is to train workers for the various industries and handicrafts. In general, such schools provide training for one or more of the following groups: electricians, chemical research workers, agricultural mechanics, motor fitters, mechanics for food industries (mills, paste factories and bakeries), radio-electricians, radio fitters, etc. Other specialized training courses are given according to local needs. At the end of the course, the pupil sits for the school-leaving examination and, if successful, obtains the technician's or artisan's diploma according to the subject in which he has specialized. The curriculum includes Italian, history, geography, mathematics, elementary physics, chemistry and electrotechnics, mechanics, machinery engineering, technology, occupational draughtmanship, religion. Other subjects are taught according to the occupation in view.

The commercial technical school provides training for those intending to occupy minor executive posts in offices and commercial enterprises. This school confers the diploma of *computista commerciale* (commercial accountant). The curriculum includes Italian, history, geography, mathematics, a first foreign language, accountancy, mercantile computation, book-keeping, commercial institutions, commercial practice, the preparation of commercial products, the natural sciences, physics, a second foreign language, handwriting, typewriting, shorthand, religion. Instruction is also given in subjects connected with the hotel industry.

The girls' vocational training school prepares pupils for girls' careers and housekeeping. The curriculum includes Italian, history, geography, mathematics, elementary accountancy, the natural sciences, the preparation of commercial products, drawing, the elements of the history of art, domestic science, hygiene, women's occupations, a foreign language and religion. At the end of the course, successful pupils obtain a diploma which qualifies them for admission to the girls' vocational teacher training schools.

The above-mentioned vocational and technical schools must possess the installations and equipment needed for practical work. Thus, for instance, agricultural schools need a sufficiently large farm of at least 20 to 25 acres, equipped with tools, farm buildings, model sheds and adequate head of cattle, agricultural machinery, etc. The industrial schools must be supplied with adequately equipped installations, workshops and laboratories; the commercial schools with a model office, typewriters, calculating machines, etc.; and girls' vocational training schools must possess workrooms equipped either for women's occupations (tailoring, laundering, embroidery, darning and lace-work, knitting, etc.) or for domestic science (model kitchen, dining-room, etc.).

Vocational training is given not only at the technical schools and the girls' vocational training schools, but also at the vocational institutes. These institutions train skilled workers, specialized craftsmen, artisans and employees below executive rank. They qualify their pupils for posts in the various branches of industry, agriculture, handicrafts, commerce, the tourist trade, traffic, navigation, etc.; the regular training course can be completed by special courses, refresher courses and courses covering related trades.

Vocational institutes therefore offer practical training rather than general education, although they do not completely ignore the pupil's cultural development. They teach the fundamental principles of citizenship, which help to develop the worker's sense of moral and social responsibility, and the cultural, theoretical and technical ideas which are indispensable for the exercise of the various trades. Pupils are also required to do practical work.

These schools do not apply rigid curricula, but *profili professionali* (vocational training schedules), containing a brief but complete definition of all the operations which constitute any particular trade, together with an enumeration and analysis of the working tools and an indication of the various degrees of technical skill required for the different operations.

The vocational training institutes are open to pupils who have attained the age of 14 years, but there is no maximum age-limit. One of the functions of these institutes is to provide people who are already employed with an opportunity to acquire a sound theoretical knowledge of their trades and obtain the corresponding specialist's diploma. This diploma represents the official recognition of their skill and will subsequently, it is hoped, enjoy full legal protection through the awarding of regular trade certificates.

Owing to the different kinds of pupils admitted to the vocational training institutes, the latter, although pursuing the same aims, can operate in two different ways: firstly, as day schools providing complete training—theoretical, technical and practical—for post-primary-school pupils or persons who are not engaged in any work; and secondly as complementary schools, i.e. schools designed to complete —usually in the evenings—the practical training received by the pupils at the enterprises or farms where they are employed, by providing them with theoretical and technical knowledge.

Owing to the varied range and complexity of workers' occupations, the duration of the various training courses for the qualified or specialized workers' diplomas for the different branches of industry and economy and for the corresponding trades naturally varies.

Another characteristic of the vocational training institutes is the fact that they are open not only to pupils holding the leaving certificate of the *scuola media* or that of the *scuola di avviamento*, but also to pupils without any certificate or diploma, except that the latter must pass an entrance examination. With a view to facilitating their preparation for this examination, preparatory courses are organized at the institutes themselves.

Technical education aims at preparing pupils for the exercise of technical and practical occupations on a higher level than that of purely executive work, which is intended to be directed and controlled by those acquiring technical skill.

This technical education is given at the technical institutes and at the girls' vocational teacher training schools.

The technical institutes provide a 5-year course. They are classified as agricultural technical institutes, commercial technical institutes, surveyors' technical institutes, industrial technical institutes, nautical technical institutes and girls' technical institutes. Like the technical schools, the institutes must have the installations and equipment needed for thorough practical training.

Agricultural technical institutes have specialized courses in viticulture and wine-making, stock-breeding and cheese-making, olive-growing and the manufacture of olive-oil, horticulture, fruit-growing and gardening, colonial agriculture, mountain economy. (The agricultural technical institutes alone provide a further special course, lasting a year, at the end of the regular 5-year course.)

The curriculum covers Italian literature, history, geography, mathematics, physics, agriculture, economics and rural valuation, agricultural accountancy, stock-breeding, the natural sciences, plant pathology, general organic and inorganic chemistry, agricultural chemistry, agricultural industry, agricultural mechanics, the first principles of rural constructions, designs of constructions, elementary topography and topographical maps, the fundamental principles of agricultural law, religion. Other courses are given according to the specialization required. The agricultural technical institute confers the title of *perito agrario* (agricultural expert), indicating the expert's special subjects.

Maritime institutes have different courses for master mariners, engineers and shipbuilders.

In addition to the above-mentioned courses, others have been and can still be instituted according to local industrial and economic needs.

Industrial technical institutes offer courses in mechanical and electrical engineering, mining, textiles, dyeing, building, radiotechnics. The curriculum comprises Italian, history, a foreign language, mathematics, mechanics, machinery engineering, chemistry, the natural sciences, geography, physics, the fundamental principles of industrial law, draughtsmanship, technology, religion and the technical subjects relating to the various fields of specialization. The industrial technical institute confers the title of *perito industriale* (industrial expert), indicating the expert's special subjects.

Commercial technical institutes teach Italian, history, mathematics, physics, the natural sciences, chemistry, the science of commercial products, general and economic geography, accountancy, book-keeping, law institutions, a knowledge of commercial banking, customs and transport, a first foreign language and a second foreign language, political economy, the elements of finance, statistics, handwriting, shorthand, typewriting, religion. Other subjects are taught if the institute provides specialized training, e.g., special courses in foreign trade. The commercial technical institute confers the title of *ragioniere* (accountant).

The surveyors' technical institutes prepare pupils for land surveying, providing them with technical, theoretical and practical knowledge of agriculture, building and topography. The curriculum includes Italian, history, mathematics, physics, chemistry, the natural sciences, geography, elementary agronomy, economics, and rural technology, cadastral surveying, accountancy relating to rural work, constructions and designs for constructions, topography, topographical maps, architectural and ornamental draughtsmanship, the fundamental principles of civil law, religion. This institute confers the title of *geometra* (surveyor); the latter finds wide opportunities for employment in regions where farm properties are divided into small lots; his services are required for various operations relating to landed property, the parcelling out of lands, the planning of farmhouses, etc.

Nautical technical institutes train pupils for the master's certificate in the merchant marine or as marine engineers or as shipbuilders. There is a basic 2-year course common to all three sections, followed by a 3-year specialized course for each section. Instruction is provided in Italian, history, geography, physics, elementary chemistry, mathematics, mechanics, machinery engineering, a first foreign language, a second foreign language, drawing, the various kinds of rigging, as well as all the relevant technical subjects for each section, and religion. This institute confers, in respect of each of its sections—the merchant marine, marine engineering and shipbuilding—the diploma of *aspirante* (candidate) for the post of master mariner in the merchant marine, the post of chief engineer in the merchant marine or a professional post in shipbuilding.

Technical training for girls is given at the girls' vocational teacher training schools and at the girls' technical institutes. These institutes differ not only with respect to the length of their courses (2 years for the former, 5 years for the technical institutes), but also with respect to their aims. While the main purpose of the technical institutes is to prepare pupils for the technical and practical trades, and only indirectly to give the training necessary for those wishing to become *insegnanti tecnico-pratici* (teachers of technical and practical work), the task of the girls' teacher training school, as provided in Article 8 of Act No. 889 of 15 June 1931, is simply to train students who wish to become specialized teachers of women's trade and domestic science in the schools where they were educated.

Teachers of technical and vocational schools. All the various types of technical and vocational schools provide not only theoretical and cultural instruction but also practical training. The staff engaged in this practical training constitutes the category of teachers called the *insegnanti tecnico-pratici.* The career and legal status of these teachers, appointed on a competitive basis among persons holding a technical teacher's diploma, are different from those of teachers, properly so-called. Annual scholarships for refresher courses in Italy and abroad for *insegnanti tecnico-pratici* were instituted by Legislative Decree No. 690 of 29 May 1947 of the Provisional Head of the State, and the A. Pacinotti Teacher Training School was established in Pisa expressly for the purpose of training teachers of this category.

Teacher training schools

The *istituto magistrale* (teacher training institute) provides training for primary school teachers. Before 1940, i.e., before the establishment of the *scuola media*, the teacher training institute as indicated in the preceding paragraphs, provided a 4-year lower course, which gave pupils access, subject to their passing an entrance examination, to the 3-year upper course. After the lower course had been replaced by the *scuola media*, it was the leaving certificate of the latter school which gave access to the teacher training institute. In order not to reduce the entire study cycle by 1 year, a class was added to the teacher training institute—just as a class was added to the *liceo scientifico*—namely, a connecting class between the *scuola media* and the teacher training institute; the duration of the entire study cycle (7 years) thus remained unchanged. This connecting class, which will be given final shape by the proposed educational reform, still maintains to some extent, although provisionally only, the general features of the class (the last class of the lower course) from which it derives. It is characterized by having one and the same teacher for Italian, Latin, history and geography; one might say that the teaching is of a general nature as compared with the specialized training given in the classes of the teacher training institute proper.

The following is a complete list of the subjects taught in the latter classes: religion (students are exempted on request), pedagogy, philosophy and psychology, Italian and Latin literature, history, civic education, a foreign language in the second class (completing the study begun at the *scuola media* and continued in the connecting class), mathematics and physics, the natural sciences, chemistry, geography, drawing and the history of art, music and singing, physical instruction.

Any student who requests may be taught to play a musical instrument; it is optional. Students must also practise teaching in local primary schools, under the supervision of the teacher of pedagogy and the qualified teachers of the primary school concerned.

A certain number of these institutes also teach agriculture, so that students who intend to teach in rural schools will have some knowledge of the subject.

Every teacher training institute has a kindergarten annexed to it, i.e., a school for infants between 3 and 6 years of age. The institute's students, while studying for teaching in the primary school, which follows on the kindergarten, observe what takes place in the latter and the methods employed.

It must be pointed out that the teacher training institute, established by the 1923 reform, radically modified the curricula and methods of the pre-existing primary teacher training schools, which, owing to the technical nature of the training and practice teaching by students, gave little attention to general education.

The 'study plans' drawn up immediately after the war declare in a rather polemical tone that 'the crisis of the *istituto magistrale* is due mainly to the failure to give an appropriate direction to the future teacher's cultural training, as well as to the failure to assign to the teaching of pedagogy the task of orientating all other branches of learning and indicating the ends to be achieved'; they also state that 'the research carried out by philosophers, pedagogues and psychologists are by no means abstract lucubrations unrelated to historical realities or to moral, social and economic problems'.

A new direction was thus given to the teacher training institute, and this had an impact on all the branches of instruction given in the institute; the study of psychology and apprenticeship in teaching, which were formerly lacking, were added to the curriculum.

Both the 'national inquiry for the reform of school education' and the corresponding bill subsequently drawn up accentuate this orientation. The bill provides that the institute's course shall last 5 instead of 4 years as at present, the last year being reserved exclusively or chiefly for practice teaching; and, in order to facilitate this apprenticeship to teaching, a primary school, providing a complete course of education, must be placed at the disposal of every teacher training institute.

Other specialized schools

The following schools and institutes of art constitute a special sector of secondary education:

Scuole d'arte (schools of art), which train their pupils in artistic work and artistic production, according to the traditions, industries and raw materials of the region concerned. The course, which lasts 5 years, is followed by a leaving examination qualifying for the corresponding diploma. Those holding the diploma of the schools of art have access to innumerable craftsman's posts in various branches of the artistic handicrafts.

Istituti d'arte (institutes of art) providing two 3-year courses: a lower course corresponding to that of the *scuola d'arte*, and an upper course for pupils who, having already learnt how to execute designs in the work room, are trained in creative work in applied art and acquire the culture necessary for the training of master artisans. Special 2-year courses are attached to the principal institutes to train art teachers for the institutes and for the schools of art. Every institute or school of art comprises one or more sections given over to the most important artistic handicrafts; they include, in particular, sections for pictorial decoration, plastic decoration, artistic metal work and wood, ceramics, glass, the graphic arts, etc.

New courses were recently established, e.g., that devoted to animated cartoons, at the Urbino Institute for the Decoration and Illustration of Books; an upper course in advertising art at the Florence Institute of Art; and the course at the Trieste Institute of Naval Decorative Art.

A fundamental feature of all these schools is the work-room, where there is complete co-operation between art and working methods. Even the cultural training is directed towards the pupil's vocational and artistic education.

Licei artistici (upper secondary schools of the fine arts). These were established for the purpose of teaching art to all pupils with a genuine vocation.

The *licei artistici* comprise two sections: the first prepares pupils for the study of painting, sculpture, decoration and scenography in the schools of the Academy of Fine Arts; the second prepares pupils for the study of architecture in the higher schools. Each section has a 4-year course, the

first 2 years being common to both sections. Admission to the first class is subject to prescribed artistic and educational tests. For pupils holding the leaving certificate of the *scuola media*, this examination is limited to artistic tests. At the end of the course, pupils sit for the *esame di maturità artistica* (art qualifying examination). The first section gives access to the Academy of Fine Arts, and the second to the Faculty of Architecture.

Other important institutes devoted to the teaching of art are the Silvio d'Amico Institute of Dramatic Art, in Rome, and the National Academy of Dancing, also in Rome. The former trains actors and producers, and the latter trains ensemble and solo dancers, teachers and choreographers.

Lastly as regards instruction in the arts, mention must be made of the *conservatori di musica* (academies of music) which train or complete the training of pupils with a particular aptitude for music.

The *conservatori* provide main courses and complementary courses. The main courses are known as schools and are devoted to studies which qualify for a diploma. The instruction given in the individual schools is divided into two or three stages (lower and upper, or lower, middle and upper); the duration of the course varies from school to school, ranging from a minimum of 5 years (schools of singing) to a maximum of 10 years (for those wishing to obtain the diploma of composer, pianist or violinist).

The musical instruction is completed by complementary courses of cultural instruction.

Mention must be made of the steps taken by the Ministry of Education, in agreement with the Commissariato Nazionale della Gioventù Italiana (National Office for Italian Youth), for the establishment in Rome, of a college of music, which will be as residential institution. The ancient tradition of colleges of music, formerly attached to certain *conservatori*, has thus been revived.

Out-of-class activities

The participation of pupils in the internal organization and social life of the school is not provided for or regulated by any specific provisions, but is left to the initiative of the pupils and the school heads, who give their support and guidance.

Nearly all schools possess football, swimming and atheltic teams which take part in inter-school competititions and tournaments. Educational excursions for teachers and pupils as well as visits to museums and galleries are organized, and concerts and recitals are given for charitable purposes.

Pupils make themselves heard through lively and sometimes caustic articles in the small school magazines, in which, alongside of innocent caricatures of teachers and fellow pupils, questions relating to culture and school government are discussed.

In addition ot these local activities, mention may be made of two national organizations the C.I.V.I.S. and the A.GI.MUS.

The C.I.V.I.S. (Centro Italiano Viaggi Istruzione Studenti) (Italian Centre for Students' Study Tours), established by Act No. 1127 of 25 July 1952, is a body corporate in public law under the supervision of the Minister of Education and assisted by the Ministry of Foreign Affairs and the Ministry of Finance. Its headquarters are in Rome (Michelangelo Caetani, 32). Its task is to organize and promote individual and group exchanges between Italian and foreign students, organize tours abroad by Italian students—such tours being offered as prizes or in return for payment—and receive groups of foreign students visiting Italy for educational purposes.

The A.GI.MUS. (Associazione Giovanile Musicale) (Association of Musical Youth) is an organization devoted to music; it was established in 1949 for the purpose of enabling secondary school pupils to hear suitably adapted programmes of music (symphony, choral, chamber and operatic), usually preceded by illustrated lectures on the compositions and composers concerned. This association enjoys the patronage of the Ministry of Education and carries out its activities in numerous Italian towns.

TRENDS AND PROBLEMS

It may be maintained that, despite the various modifications it has undergone, the structure of the Italian secondary school is still fundamentally the same as it was when established by the Casati Law of 1859.

That is to say, it comprises, on the one hand, classical schools and institutes designed to train the national leaders, and, on the other hand, technical and vocational schools and institutes which are still unable to meet the ever increasing needs of modern techniques; both these sectors of education lack a school providing a uniform basic training.

Thus, the two most urgent problems confronting secondary education are as follows:

1. The establishment of a school for children between 11 and 14 years of age, for the purpose of providing them with a basic training, without involving a premature distinction between pupils who are and those who are not fit to continue their studies.

   This school, intended for all children who are still at an age when they have not yet clearly revealed their aptitudes, must not have strongly marked technical, scientific or literary trends, but must be such as to facilitate the transition from one to another of the various branches of instruction which it will provide. The subjects taught must not be of a specialized nature, and emphasis should be placed on the two groups of subjects which correspond to a school of basic training: the literary and historical group (Italian, history, geography and civic culture) and the scientific, mathematical and technical group.

   Its fundamental structure should take into account the optional subjects, which should not in any case begin until the second or third year of the cycle.
2. The gradual extension, through an increasingly greater network of vocational training institutes and the improvement of the technical institutes, of the range of vocational training and technical specialization. For that purpose, a legislative measure—already approved by the Council of Ministers—was drawn up with a view to the establishment on a permanent basis of the existing vocational training institutes, which have been operating

on an experimental basis for the last 8 years. As regards higher secondary education, the *licei* and technical institutes, the only questions for the time being concern adaptation rather than transformation.

Two bills, Nos. 377 and 378, deal with this question; they fix the duration of the institute's complete course—divided into a lower 2-year course of general training and an upper 3-year course of specialized training—as well as the conditions which must be satisfied to enable pupils to accede from the lower to the higher course. Lastly, mention must be made of the bill for a 10-year plan for educational development during the years 1959–69. Its aim is not a general reform of education, but the adaptation of the school to modern needs, due partly to the increase of the school population and partly to continued technical and scientific progress.

The 10-year plan proposes: (a) the adaptation of school buildings to the needs of schools of all kinds and at all levels; (b) the development of the lower secondary school for pupils between 11 and 14 years of age, so that compulsory schooling until the child reaches 14—as prescribed by the Constitution—shall become a reality for all children; (c) the adaptation of teaching and scientific materials to the needs of each type of school; (d) the increase of the budget appropriations for scholarships and school welfare services.

For that purpose, a financial plan has been drawn up, providing that the annual budgets for the period extending from the financial year 1959–60 to the financial year 1968–69 should include, in addition to the present funds for education, further appropriations for the same purpose, increasing from 57,905 million lire for the first financial year to 219,990 million lire for the last financial year, i.e., a total sum of 1,385,609 thousand million lire for the 10-year period.

[*Text prepared by the Ministry of Education, Rome, in December 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 48,735,000.
Area: 116,304 square miles; 301,226 square kilometres.
Population density: 419 per square mile; 162 per square kilometre.

Summary of school statistics, 1953–56. Total enrolment at all levels of education was 7½ million students in 1956 representing about 16 per cent of the total population. There were in addition some 300,000 people attending adult education courses. Of the total enrolment, 14 per cent were pupils in pre-primary schools, 63 per cent in primary, 10 per cent each in general and technical secondary schools respectively, about 1.5 per cent in secondary teacher training courses and just under two per cent in universities and colleges. Girls made up just under half the enrolment in pre-primary and primary schools, 41 per cent in general secondary schools, 86 per cent in secondary teacher training courses and 28 per cent in universities.

The teaching staff in all schools at primary and secondary levels numbered 348,493 in 1956, of whom over 68 per cent were women. The average pupil-teacher ratios in 1956 were 36 in pre-primary, 26 in primary, 12 in general secondary, 12 in technical and 10 in secondary teacher training colleges. Compared with 1953, enrolment increased at all levels of education and in particular by 5 per cent in primary schools, 14 per cent in general secondary schools, 17 per cent in vocational institutions, 8 per cent in secondary teacher training schools and by 5 per cent in universities. (See Table 3.)

Enrolment trends in secondary education, 1930–56. From 1930 to 1941 average secondary enrolment more than doubled whilst the school age population showed some decline. The proportion of girls to total enrolment increased from 31 per cent in 1930 to 39 per cent in 1941. Since 1945, average enrolment in all secondary schools has steadily

increased, especially in vocational education. The ratio of secondary enrolment to the age group 15–19 years rose from 24 to 39 between 1945 and 1956. (See Table 4.)

Examination results in secondary education, 1953–56. In 1956/57 some 315,000 diplomas were awarded by general technical and teacher training institutions at the secondary level, representing an increase of about 15 per cent on the numbers passing the same examinations in 1953/54. Girls made up about 40 per cent of total successful candidates. Students passing the final examination of upper general secondary schools (*Esame di maturità*) increased by 44 per cent during this period and the number of teaching certificates granted increased by 27 per cent. All types of vocational diplomas awarded increased steadily, reflecting the rise in enrolment in institutions for vocational education. (See Table 2.)

Educational finance, 1957. Total receipts for education in 1957 amounted to 461,875 million lire representing about 9,527 lire per inhabitant. Of total receipts, 82 per cent were derived from the Central Government, 2 per cent from provincial governments and 16 per cent from local authorities (see Table 4). A partial breakdown of expenditure by the Central Government only is given in Table 1B.

Sources. Italy: Central Statistics Institute, reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1957 (in million lire)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**461 875**
Central Government	380 700
Provincial governments	8 482
Local authorities	72 693

B. TOTAL EXPENDITURE OF THE CENTRAL GOVERNMENT BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total expenditure[3]	**380 700**	**100.0**
Central administration	53 400	14.0
Pre-primary, primary and special education	192 100	50.5
Secondary education[4]	115 900	30.4
Higher education	19 300	5.1

1. Official exchange rate: 100 lire = 0.16 U.S. dollar.
2. Budget estimate.
3. Expenditure by Central Government only.
4. Includes general and vocational education and teacher training.

2. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year							
	1953/54		1954/55		1955/56		1956/57	
	Total	Female	Total	Female	Total	Female	Total	Female
Lower general secondary certificate	117 128	49 220	121 452	52 134	127 156	53 905	128 274	55 359
Upper general secondary certificate	25 028	7 664	22 813	6 871	24 116	7 085	25 670	7 367
Technical and industrial certificate	14 580	3 606	17 164	4 307	19 010	5 196	20 276	5 688
Apprenticeship certificate	81 020	30 622	88 306	33 007	91 494	34 581	92 269	35 548
Trade and craft training diploma	1 219	408	2 142	516	3 335	813	3 637	849
Commerce and surveying diploma	14 373	3 312	15 178	3 199	16 196	3 346	17 988	3 691
Agricultural or nautical diploma	1 712	1	1 865	—	1 993	—	2 126	—
Art or music certificate	2 010	721	2 146	825	2 489	991	2 812	1 255
Teaching certificate	17 436	14 108	18 031	14 403	20 374	16 439	22 220	18 209

3. SUMMARY OF SCHOOL STATISTICS, 1953–56

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public and private						
	Total	**1956/57**	**16 101**	**29 333**	**29 333**	**1 072 233**	**539 156**
	,,	1955/56	15 545	28 982	28 982	1 068 114	538 969
	,,	1954/55	14 875	27 828	27 828	1 052 050	526 038
	,,	1953/54	14 344	26 939	26 939	1 045 128	527 889
Primary	Primary schools, public	1956/57	36 659	168 397	120 859	4 456 106	2 111 212
	Primary schools, private	1956/57	7 102	15 231	13 703	371 528	207 484
	Total	**1956/57**	**43 761**	**183 628**	**134 562**	**4 827 634**	**2 318 696**
	,,	1955/56	42 690	179 784	131 388	4 740 738	2 270 089
	,,	1954/55	41 943	178 586	129 551	4 655 992	2 225 654
	,,	1953/54	41 277	176 845	128 276	4 616 483	2 168 834
Secondary							
General	Post-primary courses, public	1956/57	...	...	...	40 299	19 268
	Lower secondary schools, public	1956/57	1 135	29 491	18 891	368 977	160 637
	Scientific lyceums, public	1956/57	139	3 243	1 488	37 773	7 207
	Classical lyceums, public	1957/57	361	9 245	4 275	114 297	42 870
	Lower secondary schools, private	1956/57	1 209	13 018	8 055	112 595	53 126
	Scientific lyceums, private	1956/57	106	1 360	465	9 939	1 185
	Classical lyceums, private	1956/57	356	3 962	1 586	30 386	8 251
	Total	**1956/57**	**3 306**	**60 319**	**34 760**	**714 266**	**292 544**
	,,	1955/56	3 299	57 574	32 862	697 493	284 010
	,,	1954/55	3 348	56 701	32 037	667 359	270 206
	,,	1953/54	3 275	53 806	30 424	628 680	253 265
Vocational	Technical and industrial schools and institutes, public	1956/57	476	8 663	3 383	104 625	18 966
	Commercial institutes, public	1956/57	186	8 998	4 246	137 652	33 827
	Agricultural institutes, public	1956/57	35	687	200	7 868	12
	Midwives' schools, public	1956/57	...	...	...	2 498	2 498
	Art and music schools, public	1956/57	105	2 357	505	18 426	5 926
	Girls' technical institutes, public	1956/57	51	763	596	9 528	9 528
	Nautical institutes, public	1956/57	21	685	231	7 704	11
	Preparatory schools, public	1957/57	1 723	32 740	19 301	413 969	151 607
	Agricultural institutes, private	1956/57	15	196	42	1 606	2
	Technical and industrial schools and institutes, private	1956/57	113	1 611	621	12 784	1 901
	Commercial institutes, private	1956/57	156	2 644	1 059	23 464	4 319
	Art and music schools, private	1956/57	47	475	178	4 507	2 393
	Girls' technical institutes, private	1956/57	63	731	642	5 245	5 245
	Nautical institutes, private	1956/57	3	44	15	285	—
	Preparatory schools, private	1956/57	313	3 673	2 049	34 296	15 235
	Total	**1956/57**	**[1]3 307**	**[1]64 267**	**[1]33 068**	**784 457**	**251 470**
	,, [1]	1955/56	3 253	61 534	31 319	743 063	232 729
	,, [1]	1954/55	3 176	59 376	30 072	704 367	217 244
	,, [1]	1953/54	3 122	56 434	28 331	668 799	203 501
Teacher training	Teacher training schools, public	1956/57	33	358	295	2 650	2 650
	Teacher training institutes, public	1956/57	176	6 316	3 438	74 044	61 083
	Teacher training institutes, private	1956/57	347	4 272	3 482	35 060	32 939
	Total	**1956/57**	**556**	**10 946**	**7 215**	**111 754**	**96 672**
	,,	1955/56	550	10 638	6 829	110 658	94 539
	,,	1954/55	560	10 642	6 951	109 897	92 799
	,,	1953/54	542	10 084	6 667	103 052	85 743
Higher							
Teacher training	Teacher training colleges						
	Total	**1956/57**	**5**	[2] ...	[2] ...	[3]**3 156**	...
	,,	1955/56	5	[2] ...	[2] ...	[3]2 830	[3]1 783
	,,	1954/55	5	[2] ...	[2] ...	[3]2 466	[3]1 560
	,,	1953/54	5	[2] ...	[2] ...	[3]2 576	[3]1 570
General and technical	Universities and colleges	1956/57	32	[2]5 080	[2]330	[3]142 214	[3 4]39 728
	Colleges of fine arts	1956/57	9	170	75	[3]1 376	629
	Total	**1956/57**	**41**	**[2]5 250**	**[2]405**	**[3]143 590**	**[3 4]40 357**
	,,	1955/56	40	[2]4 992	[2]389	[3]137 390	[3]37 106
	,,	1954/55	40	[2]4 895	[2]344	[3]135 127	[3]36 262
	,,	1953/54	40	[2]4 781	[2]317	[3]136 229	[3]37 077

1. Not including midwives' schools.
2. Teachers in teacher training colleges are included with those in universities and other colleges.
3. Regular students only.
4. Including girls enrolled in teacher training colleges.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Special	Schools for abnormal children						
	Total	**1956/57**	**210**	**1 986**	**1 563**	**20 889**	**8 265**
	,,	1955/56	201	1 904	1 468	19 628	7 527
	,,	1954/55	205	1 839	1 414	18 694	7 461
	,,	1953/54	200	1 830	1 422	18 870	7 505
Adult	Courses in people's schools						
	Total	**1956/57**	**13 304**	**14 382**	**11 332**	**299 347**	**103 617**
	,,	1955/56	12 484	13 165	10 060	274 318	79 363
	,,	1954/55	13 585	14 178	10 499	303 013	79 998
	,,	1953/54	23 983	28 721	24 659	563 057	157 436

4. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930			[1]312 025	31					
1931			379 003	32					
1932			441 399	33			435	4 011	*11*
1933			498 849	34					
1934			543 308	35					
1935			592 818	37					
1936			674 546	38					
1937			743 873	38			734	3 081	*24*
1938			809 391	37					
1939			849 628	38					
1940			907 544	38			940	3 346	*28*
1941			972 127	39					
1945	486 034	42	391 991	42	63 383	87			
1946	490 310	41	405 765	40	58 349	87			
1947	483 788	41	412 138	39	54 333	89	975	4 108	*24*
1948	489 037	41	443 018	37	56 603	89			
1949	500 522	40	480 676	37	59 561	88			
1950	534 354	41	541 715	36	70 463	85			
1951	572 272	41	604 621	36	79 467	83			
1952	576 099	37	667 378	36	91 352	82	1 334	4 019	*33*
1953	631 212	41	704 112	36	100 362	83			
1954	651 031	40	738 541	36	107 244	84			
1955	[2]697 493	41	743 063	31	110 658	85	1 581	4 103	*39*
1956	[2]714 266	41	784 457	32	111 754	87			

1. For year 1930–41 separate figures for general, vocational and teacher training are not available.

2. Figures for 1955 and 1956 differ slightly in coverage from those for earlier years.

The most urgent educational and social problem in Somaliland, with the exception of the literacy campaign, has been and still is that of training the specialists required for the future social and economic development of the country. For this purpose the various schools and institutions shown in the diagram on page 733 have been established. All the schools at secondary level are at Mogadiscio, except the Agricultural School, which is at Genale.

Plans for the next few years include the opening of two further branches of the lower secondary school, at Calcaio (Mudugh) and at Baidoa (Alto Giuba), and of a higher commercial institute, and the extension of the courses of the Technical Training School, the Teacher Training Institute and the Agricultural School from 3 to 4 years.

The constitutional or statutory basis of the educational system as a whole has been established entirely by the Ministry of Social Affairs, which has full legislative powers with regard to the organization of education. The decrees providing for the various schools were promulgated after approval by the Council of Ministers and consultation with the Central Council for Education, which acts as an advisory body.

The most serious obstacle to the development of education lies in the fact that there is no written Somali language. All textbooks are in Italian or Arabic. A further difficulty in specifically scientific or geographical subjects is that certain local beliefs, deriving from the religious convictions of the people, have tended to slow down education and have sometime led to clashes, though these have all, in fact, been easily overcome. In the social field, however, educational organization has gained the upper hand, and has succeeded in improving the way of life, customs and general cultural background of the population.

There is no legislation or regulation concerning compulsory education.

THE DEVELOPMENT OF SECONDARY EDUCATION

The inception of secondary education dates to all intents and purposes from 1950, when Italy became the Administering Authority. The present schools were all founded in the period 1950–54. In subsequent years their position has been consolidated; they have shown themselves from the very first to be of vital importance to Somaliland.

Administration

All schools, whether primary or secondary, are established by the Ministry of Social Affairs, which submits its proposals to the Council of Ministers for approval, after consulting the Central Council for Education. The plans for the organization of a school and its curriculum are occasionally discussed and drawn up by a special committee, with the Minister as its chairman. Here again the Central Council for Education is consulted and the final provisions are submitted to the Council of Ministers.

In addition to the Ministry, which has general jurisdiction, regulations affecting secondary education are issued by the Department of Public Education and the Inspectorate of Secondary Education.

There are no regional or provincial organizations, as all secondary educational institutions except the Agricultural School are at Mogadiscio. Apart from the education authorities, the only office concerned with schools is the Department of Labour, which is also responsible to the Ministry of Social Affairs in respect of the aid provided by the International Labour Office for the Technical School. Relations with the International Labour Office are maintained through the Cabinet and the Secretariat of the Italian Trusteeship Administration.

The Inspector of Secondary Education is appointed by the Ministry of Social Affairs from among members of the education service with a university degree and a rank not lower than Class 5. The duty of the Inspector is to supervise the running and operation of all secondary schools and vocational schools in the Territory.

There are no other supervisory bodies, but plans are being drawn up for the establishment of a vocational training centre for industry and handicrafts, to assist the Inspector and head teachers in supervising the development of vocational and industrial schools.

Finance. The state budget constitutes the only source of funds. Funds for schools are allocated by the Ministry of Social Affairs, on the basis of annual expenditure, to the various educational services, which administer them through the appropriate offices. The cost of equipping schools is borne by the Ministry of Social Affairs and the cost of building them by the Ministry of Public Works.

Italian teachers, either established or on local contracts, are paid by the Italian Trusteeship Administration of Somaliland. Other Italian personnel recruited are paid from the budget of the Somali Government. All Somali personnel, whether established or not, are paid from the budget of the Somali Government.

Pupils pay no enrolment or tuition fees. Moreover, the Government frequently helps them with scholarships, grants for the purchase of stationery and books, provision of free boarding accommodation, etc.

Buildings and equipment. The existing standards for school buildings are similar to those prevailing in Italy, with a few slight variations required by the climate, and are to be found in *Istruzioni Tecniche del Ministero della Pubblica Istruzione* (Rome, 1925). This sets forth standards concerning choice of site, lighting, ventilation and exposure to sunlight, dimensions of classrooms, washrooms and lavatories, premises and open-air facilities for gymnastics and recreation. The regulations lay down that the maximum

number of pupils per classroom shall be 30 pupils, that the minimum area allowed per person must be 1.25 square metres, and the minimum cubic space per person 4 to 5 cubic metres. A room must not be more than 8 to 10 metres in length; the height must be 4 metres.

School welfare services. A medical and welfare service is organized in co-operation with the Health Department for the medical side, and with the Cassa Scolastica and the special school welfare institution for assistance to the needy. Vitamin tablets and milk are provided by Unicef. Teaching staff also benefit from the free health services provided by infirmaries and clinics.

TYPES OF SECONDARY EDUCATION

The school year begins on 1 July and ends on 28 February: first term, 1 July to 30 September; second term, 1 October to 31 December; third term, 1 January to 28 February. Holidays during the school year are as follows: weekly holiday on Sundays; shorter school day on Fridays; annual vacation from 1 March to 30 June; holidays for various religious festivals, Christian and Muslim. The length of the school day varies according to the type of school, the average being 5½ hours, with the exception of Fridays, when the hours are reduced to enable Muslim pupils to observe their day of prayer. The technical, marine and agricultural vocational training schools have longer hours to allow time for practical work.

General secondary schools

Other than the Italian lower secondary school and *liceo scientifico*, which are modelled on the corresponding types of institution in Italy, the schools or courses whose essential purpose is to provide general education rather than technical training include the lower and upper secondary schools, the School of Islamic Studies, the Domestic Science School for Girls, and evening courses for adults.

Lower and upper secondary schools. Admission to the 3-year Lower Secondary School (*Scuola media inferiore della Somalia*) is by an examination reserved for holders of the fifth-year primary school certificate. The course, which is the same for all pupils, concludes with a certificate examination, success in which admits to the 4-year Upper Secondary School (*Scuola media superiore della Somalia*), the School of Political and Administrative Training or the Teacher Training Institute. The time-table is given on p. 734.

School of Islamic Studies. This school provides a 4-year course divided into two 2-year stages, in the first of which general education—the same for all pupils—is given, while the second is sub-divided into two sections: (a) legal, for those who wish to become Shari'a (Muslim) lawyers; (b) religious, for theologians.

Admission to the school is on the basis of an examination taken by holders of the fifth-year primary school certificate. At the end of the fourth year pupils take a certificate examination. The time-table is given on p. 734.

GLOSSARY

NOTE. The 'Italian' schools (*liceo scientifico italiano*, etc.) are so called because they are exactly equivalent to schools of the same name in Italy. They are, however, open to all children on equal conditions, i.e. without distinction of race, sex or religion. The 'Somali' schools (*istituto magistrale della Somalia*, etc.) and all other schools in the diagram have been organized so as to provide an education specially adapted to the requirements of the territory and people. These schools, too, are open to all children on equal terms.

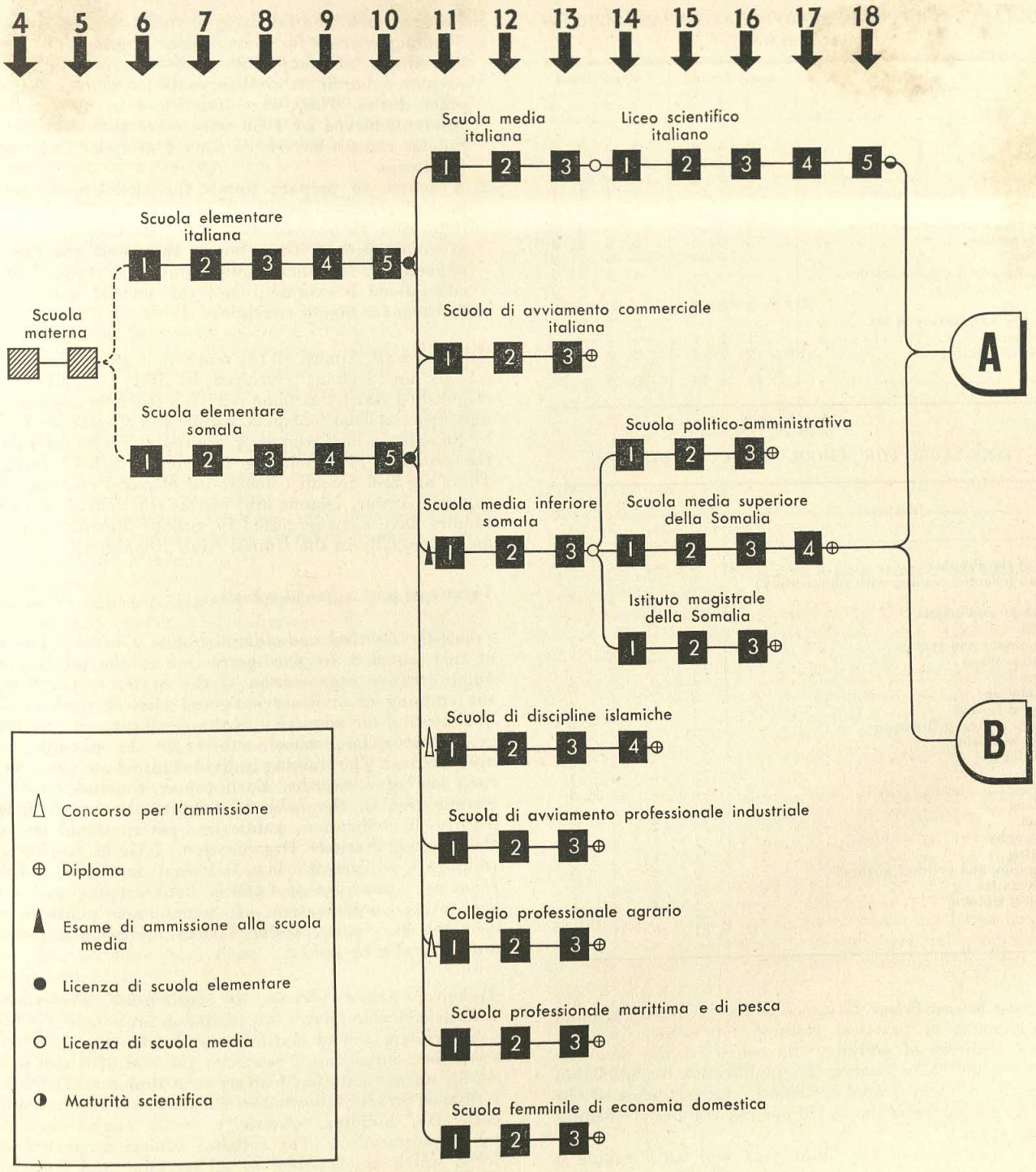
collegio professionale agrario: vocational training school of agriculture.
istituto magistrale della Somalia: Somali teacher training school.
liceo scientifico italiano: upper general secondary school of Italian type, with curriculum emphasizing mathematics and sciences, and including a modern language.
scuola di avviamento commerciale italiana: lower secondary school of Italian type, with curriculum emphasizing commercial subjects.
scuola di avviamento professionale industriale: vocational training school preparing for entry into trade and industry.
scuola di discipline islamiche: specialized lower secondary school of Islamic studies.
scuola elementare: primary school of Italian type (*italiana*) or Somali (*somala*).
scuola femminile di economia domestica: vocational training school of home economics.
scuola materna: pre-primary school.
scuola media inferiore somala: lower general secondary school of Somali type.
scuola media italiana: lower general secondary school of Italian type.
scuola media superiore della Somalia: upper general secondary school of Somali type.
scuola politico-amministrativa: upper vocational secondary school with curriculum preparing for careers in the administrative services of the territory.
scuola professionale marittima e di pesca: vocational training school for seamen and fishermen.

HIGHER EDUCATION

A. Universities education abroad.
B. *Istituto Superiore di Discipline Giuridiche, Economiche e Sociale:* Higher Institute of Legal, Economic and Social Studies.

EXAMINATIONS

Concorso per l'ammissione: competitive entrance examination.
Diploma: diploma.
Esame di ammissione alla scuola media: lower secondary school entrance examination.
Licenza di scuola elementare: primary leaving certificate.
Licenza di scuola media: lower secondary leaving certificate.
Maturità scientifica: 'maturity' examination completing upper secondary studies and leading to higher education.


4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
Scuola media italiana
Liceo scientifico italiano
Scuola elementare italiana
Scuola materna
Scuola di avviamento commerciale italiana
Scuola elementare somala
Scuola politico-amministrativa
Scuola media inferiore somala
Scuola media superiore della Somalia
Istituto magistrale della Somalia
A
B
Scuola di discipline islamiche
Scuola di avviamento professionale industriale
Collegio professionale agrario
Scuola professionale marittima e di pesca
Scuola femminile di economia domestica
Concorso per l'ammissione
Diploma
Esame di ammissione alla scuola media
Licenza di scuola elementare
Licenza di scuola media
Maturità scientifica

TIME-TABLE FOR LOWER AND UPPER SECONDARY SCHOOLS
(in hours per week)

Subject	Lower School			Upper School			
	1	2	3	1	2	3	4
Italian	4	4	4	3	3	3	3
Arabic	5	5	4	3	3	3	3
Religion	2	2	2	—	—	—	—
Religion and Islamic subjects	—	—	—	1	1	1	1
English	—	—	—	3	3	3	3
History, geography and civics	3	3	4	3	3	4	3
Mathematics	4	5	5	6	5	4	3
Physics	—	—	—	—	3	2	2
Chemistry and natural science	—	—	—	4	4	4	3
History of science	—	—	—	—	—	2	3
Drawing	3	2	2	—	—	—	—
Drawing and history of art	—	—	—	2	2	2	3
Hygiene	1	1	1	—	—	—	—
Physical training	2	2	2	2	2	2	2
Total	24	24	24	27	29	30	29

TIME-TABLE FOR SCHOOL OF ISLAMIC STUDIES

Subject	Year			
	1	2	3	4
Life of the Prophet	1	—	—	—
Koran (chanted reading with commentary)	2	1	3	3
Law	5	5	5	5
Theology and dogma	1	1	—	—
Arabic				
Grammar and syntax	5	5	5	—
Composition	2	2	2	—
Reading	1	1	1	1
Dictation	2	2	1	1
Memorization	1	1	1	1
History of Arabic literature	—	—	—	2
Religious history	—	—	1	1
Traditions	—	—	2	2
Ethics	—	—	1	1
Rhetoric	—	—	—	4
Hygiene	1	1	—	—
Italian	2	2	2	2
Calligraphy	1	1	1	1
Drawing	1	1	—	—
Geography and political history	2	2	2	2
Mathematics	3	3	3	3
Physical training	1	1	1	1
Total	31	29	31	30

Domestic Science School. Designed to provide for the gradual improvement of practical training for women in their various spheres of activity, the course at the domestic science school lasts 3 years, the qualification for admission being the primary school certificate, the certificate of the primary school for adults, or the passing of a special entrance examination.

On completion of the third year and after taking a special examination, pupils receive a diploma equivalent to that of the lower general secondary school. The principal subjects taught are Italian, general culture, Arabic, mathematics, drawing, hygiene and child care, housework, domestic economy and practical activities, and physical education.

Evening courses. The following should be mentioned:

1. Training courses for Government employees, whether established or temporary. These were instituted to prepare subordinate civil servants for more responsible office duties. They were introduced in 1956 and the results achieved by 1958 were more than satisfactory. Similar courses have been started at Belet Uen and at Chisimaio.
2. A course to prepare pupils for the Upper General Secondary School Certificate examination. This has made it possible to provide secondary schooling for a group of young people who, though they had not had the opportunity to follow regular courses of study, had the educational background and the mental maturity to fit them for higher education.

Teaching staff. Almost all the teachers in general secondary schools are Italians recruited in Italy (especially the established staff), but some relieving teachers are recruited under special local contracts. Arabic and religion are taught by Somali teachers who are recruited and organized under the ordinary rules relating to primary school teachers. There are also Somali teachers for physical training. Staff to teach Arabic, Islamic law, etc. at the School of Islamic Studies have been recruited in various Muslim countries, more especially in the United Arab Republic.

Vocational and technical schools

School for Political and Administrative Training. The aim of this school is to give instruction in the political and administrative organization of the State, specifically for the training of civil servants and clerical workers. The qualification for admission is the certificate of the lower general secondary school, subject to the passing of an aptitude test. The training is divided into 3 annual courses, each lasting 7 months. Each course concludes with an examination in the subjects taught; the latter include history of civilization, public law, international law and the United Nations Organization, Islamic institutions, rudiments of private law, criminal law and political economy, principles of finance, book-keeping and state accounting, organization of Somaliland, political and economic geography, Arabic, Italian, mathematics, science and general geography.

Technical School (*Scuola di Avviamento Professionale Industriale*). Candidates for admission must hold the fifth-year primary school certificate and take a psychological test. The course lasts 3 years, at the end of which pupils sit for an examination leading to a diploma. The school is divided into the following sections: automobile mechanics, carpentry, building, electricity, radio engineering, and telecommunications. The syllabus comprises general subjects, which are common to all sections, and vocational subjects.

This school is assisted by the International Labour Office and maintains close working relations with various industrial firms in the country through the Mogadiscio Chamber of Commerce. New curricula are now being tried out.

Commercial School. Candidates for admission must hold the primary school certificate. The course lasts 3 years, the subjects being religion, Italian, history and civics, geography, English, Arabic, mathematics, science and hygiene, commercial products, shorthand and typing, drawing and calligraphy, book-keeping and accountancy, physical training. At the end of the course students take an examination for a diploma.

Marine and Fishery School. The school is divided into an apprentice masters' section and an apprentice ship's carpenters' section, each of which offers a 3-year course open to boys not less than 12 years old holding the fifth-year primary school certificate. There is also a 1-year fisheries course for those who have passed the final examinations of the apprentice masters' section.

The curriculum for the 3-year courses includes general subjects (Italian and civics, English, Arabic, history, geography, mathematics, physics and drawing) as well as technical and vocational subjects. The subjects taught in the fisheries course, with the number of hours per week in brackets, are marine biology (2), technology of fishing (5), ships' engines (2), legal, economic and social aspects of fisheries (3), practical fishing (16).

This school maintains relations with private fishing firms, the majority of which are established on the coast of Nijertini (Gulf of Aden).

Agricultural School (*Collegio professionale agrario*). Like the school for seamen and fishermen, the agricultural training school is of particular importance to Somaliland, in view of the preponderantly agricultural character of the country's economy. The activity of this school has increased enormously since its transfer to Genale and consequent closer contact with the Agricultural Centre there.

The school provides three 1-year courses, promotion from one course to the next depending on the year's class marks. At the conclusion of the third year's study, pupils take an examination for the award of the Agricultural Expert's Diploma. Pupils are not left to their own resources during the holiday period, but spend part of the time at the experimental centres established by the Inspectorate of Agriculture and Zootechnics. Graduates can take refresher courses at the same school or at the various specialized centres or institutes in the Territory. In recent years two special courses have also been held for students from Arab countries.

A scheme for the revision of the school's curriculum and the establishment of a fourth year's course is at present under study. The present time-table is given opposite.

Teaching staff, whether Italian or Somali, are recruited for all the above vocational training schools in the same manner as for the secondary schools already described.

TIME-TABLE OF AGRICULTURAL SCHOOL
(in hours per week)

Subject	Year		
	1	2	3
Italian	4	4	3
Arabic	1	1	1
Geography	2	1	1
History	1	1	1
Mathematics	4	4	3
Freehand and geometrical drawing	2	2	—
Biology	4	3	—
Chemistry and mineralogy	2	1	1
Physics	2	—	—
Human hygiene	1	—	—
Zootechnics—diet and hygiene of cattle	—	2	3
Agriculture	—	3	3
Agricultural mechanics	—	1	1
Agricultural pathology and entomology	—	2	2
Land surveying and rural building	—	—	3
Draughtsmanship	—	—	1
Agricultural industries	—	—	1
Political and rural economy and principles of agricultural accountancy and valuation	—	1	3
Practical work	10	9	9
Physical training	1	1	1
Total	34	36	37

Teacher training school

The fundamental problem of primary and secondary schooling in Somaliland has been that of teacher training. For the first few years teachers had to be trained by means of intensive courses of short duration. But by 1957 the Teacher Training Institute was getting into its stride, and it now provides a 3-year course, at the conclusion of which students are required to take a regular examination to obtain their diplomas.

The requirement for admission to the institute is the Lower Secondary School Certificate, and students live in a residential college where they are given an allowance, board, lodging and clothing. Promotion from one class to another depends on marks at the end of the first year but on an examination at the end of the second year.

Although, as already stated, the institute is now operating normally, plans are being made to extend the length of the course to 4 years.

The teachers at the institute are all thoroughly qualified, with varying but adequate experience of teaching.

The subjects taught and the number of periods per week in each year of the 3-year course are as follows: Italian, 3; Arabic, 3; religion and Islamic law, 1; history, geography and civics, 3; education, psychology and practice teaching, 6 (7 in the third year); mathematics, 3; sciences (physics, chemistry, biology, general geography, agriculture), 4 (3 in the third year); drawing, 3; hygiene, 2; physical training, 2; total, 30.

Out-of-class activities

Pupils take a keen interest in school organization, and co-operate in a spirit of friendly understanding with the teachers. Although they have no official channel for putting forward their views, these are frequently taken into account in the measures adopted by the teachers and the higher authorities. In addition to physical training, students go in for a number of sports and games, such as volley-ball, basketball, athletics, etc., and annual matches are arranged between schools.

Students are now covered by a special Somali Student Organization, which has welfare, cultural and educational

functions. It has arranged a number of events which have all been highly successful and have helped to draw the attention of the general public to schools and student life.

TRENDS AND PROBLEMS

The progress of the secondary schools was delayed and sometimes frustrated because of inadequate basic education. But once the first formative period was over the schools settled down and have continued to develop on the characteristic lines of secondary schools.

Evidence of the range and soundness of the studies is provided, for instance, by the fact that diplomas issued by the Somali Upper General Secondary School are recognized as equivalent to those of the Italian *liceo*, so that young people holding diplomas from that school can enrol in the various faculties of the Italian universities without further formality. Scores of young Somalis are, indeed, attending different faculties, from law to engineering and from economics and commerce to medicine, nearly always with satisfactory results. The same may be said of the great number of pupils who have graduated from the various Italian vocational schools. They constitute a large and growing body of specialists who have taken over a number of responsible posts from Italian staff.

The chief problem with which the secondary schools now have to contend, however, is that of ensuring an adequate supply of teachers. In the primary schools the problem has been to some extent solved, first by providing intensive courses for teachers, and then by means of the ordinary courses given at the Teacher Training Institute; but in the secondary schools the problem is still almost as serious as ever. Hopes for the near future are based on the students now in Italy.

Certain reforms are contemplated with regard to the length of courses and the curricula of some of the schools. These relate essentially to the extension of the courses provided by the Teacher Training Institute and the technical and agricultural training schools.

Another serious problem is the shortage of textbooks; the solution of this problem is closely related to the question of a written Somali language.

It is safe to say, however, that from 1950 until the present day considerable progress has been made on reliable and well-organized lines, which will lead on satisfactorily to the end of the Trusteeship in 1960.

[*Text prepared by the Italian National Commission for Unesco in September 1959.*]

STATISTICS

Population (mid-year 1958 estimate): 1,320,000.
Area: 178,201 square miles; 461,541 square kilometres.
Population density: 7 per square mile; 3 per square kilometre.

Summary of school statistics, 1953–57. Total enrolment in all Somali educational institutions was nearly 34,000 in 1957/58, including 17,741 adults attending elementary schools. Approximately 2.6 per cent of the indigenous population were therefore receiving some form of education. Of the school-going population, excluding adult pupils, nearly 4 per cent were in kindergartens, 90 per cent in primary schools, over 2 per cent in general secondary schools, 0.3 per cent in teacher training and 1.5 per cent at the Higher Institute of Legal, Economic and Social Studies. In 1957/58, girls made up 23 per cent of enrolment at primary schools, against 17 per cent in 1953/54; there were 12 girls in general secondary schools compared with only 2 at the beginning of the period under review, and 62 girls were attending a domestic science course against 22 four years previously. There were, however, no girls training to be teachers in 1957/58 and none attending a higher educational institution. In adult education, women formed 10 per cent of enrolment in 1957/58 compared with only 4 per cent in 1953/54. The teaching staff at all full-time educational institutions numbered 864 in 1957/58, of whom 22 per cent were women. Compared with 1953/54, the teaching staff increased by over 160 per cent and the number of women teachers nearly doubled. The pupil-teacher ratio at primary schools was 20 in 1957/58 against 26 in 1953/54, and in general secondary schools 14 compared with 8 at the beginning of the period. With the notable exception of teacher training, enrolment made rapid progress at all levels of education. Compared with 1953/54, enrolment increased by 98 per cent in primary schools, by 159 per cent in general secondary schools, by 108 per cent in technical schools and by 67 per cent in adult education classes. Since its foundation in 1954, enrolment at the Institute of Higher Studies increased from 11 to 246 students. The teacher training school rapidly grew from 14 students in 1953/54 to 196 in 1955/56, but owing perhaps to re-organization of the courses on which information is not available, the enrolment declined to 33 students only in 1957/58. (See Table 1.)

Examination results in secondary education 1953–57. The figures on examination results shown in Table 2 reflect the rapid progress made in secondary education over the period under review.

Educational finance 1957. For the year 1957, total recurring expenditure for education amounted to 9,357,000 somalos, representing approximately 7 somalos per inhabitant. Details of expenditure by level and type of education are not available. (Official exchange rate: 1 somalo = 0.14 U.S. dollar.)

Sources. Somaliland: Ministry of Public Education, reply to Unesco questionnaire. Italy: *Rapport à l'Assemblée Générale des Nations Unies sur l'administration de la tutelle de la Somalie 1957.*

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools, public						
	Total	**1957/58**	**9**	**20**	**20**	**624**	**282**
	,,	1956/57	7	20	20	521	260
	,,	1955/56	8	18	18	495	227
	,,	1954/55	8	16	16	406	173
	,,	1953/54	4	4	4	223	106
Primary	Primary schools, public	1957/58	143	735	149	14 365	3 328
	Primary schools, private	1957/58	1	4	...	74	29
	Total	**1957/58**	**144**	**739**	[1]**149**	**14 438**	**3 357**
	,,	1956/57	134	528	[1]127	12 193	2 604
	,,	1955/56	131	475	[1]141	10 674	2 070
	,,	1954/55	129	362	[1]113	9 711	1 849
	,,	1953/54	103	278	[1]86	7 298	1 219
Secondary *General*[2]	Lower and upper secondary schools, public	1957/58	2	16	8	246	12
	Islamic Secondary School, public	1957/58	1	12	—	147	—
	Total	**1957/58**	**3**	**28**	**8**	**393**	**12**
	,,	1956/57	3	26	8	388	3
	,,	1955/56	3	25	3	330	2
	,,	1954/55	3	16	3	273	2
	,,	1953/54	3	18	4	152	2
Vocational[3]	Industrial School, public	1957/58	1	25	2	194	—
	Marine and Fishery School, public	1957/58	1	18	3	93	—
	Agricultural School, public	1957/58	1	5	1	60	—
	Domestic Sciences School, public	1957/58	1	6	6	62	62
	Political and Administrative School, public	1957/58	1	10	—	89	—
	Total	**1957/58**	**5**	**64**	**12**	**498**	**62**
	,,	1956/57	5	46	10	491	55
	,,	1955/56	5	37	8	436	70
	,,	1954/55	5	31	8	287	42
	,,	1953/54	5	25	6	239	22
Teacher training	Teacher Training School, public						
	Total	**1957/58**	**1**	**5**	**2**	**33**	—
	,,	1956/57	1	5	2	98	1
	,,	1955/56	1	4	1	196	2
	,,	1954/55	1	3	—	37	—
	,,	1953/54	1	3	—	14	—
Higher *General and technical*	Higher Institute of Legal, Economic and Social Studies, public						
	Total	**1957/58**	**1**	**8**	—	**246**	—
	,,	1956/57	1	7	—	182	—
	,,	1955/56	1	5	—	42	2
	,,	1954/55	1	5	—	11	—
	,,	1953/54	—	—	—	—	—
Adult	Elementary schools						
	Total	**1957/58**	**139**	[4]**30**	[4]**6**	**17 741**	**1 809**
	,,	1956/57	114	[4]48	[4]19	14 925	1 233
	,,	1955/56	111	[4]41	[4]14	13 620	887
	,,	1954/55	105	[4]63	[4]29	13 332	595
	,,	1953/54	98	[4]78	[4]22	10 615	397

1. Public schools only.
2. Data not available for Italian-type secondary schools.
3. Data not available for Italian Commercial School and for Somali Health Service schools.
4. In addition, teachers of primary day schools taught in adult primary schools.

2. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Lower general secondary diploma	10	—	24	—	29	2	26	—	32	1
Upper general secondary diploma	—	—	—	—	6	6	5	5	12	12
Diploma from school of Islamic studies	—	—	—	—	—	—	—	—	28	—
Diploma in public administration	15	—	9	—	28	—	27	—	15	—
Diploma from vocational training schools	—	—	5	—	18	—	24	—	43	—
Domestic science diploma	—	—	—	—	—	—	7	7	6	6
Teaching diploma	—	—	19	—	62	2	93	1	71	—

THE EDUCATIONAL SYSTEM

Education in Japan is governed by constitutional and statutory laws, which are implemented by Cabinet orders. The Constitution lays down basic educational policies and guarantees the right of all to receive an education corresponding to their ability. The Fundamental Law of Education, enacted in 1947, sets forth aims and principles in more detail, dealing specifically with equality of opportunity, compulsory education, school education, social (i.e. adult and youth) education, the prohibition of partisan political or sectarian religious education in the public schools, the proper control of education, etc. It forbids any discrimination on account of race, creed, sex, social status, economic position or family origin. This Fundamental Law was followed by a series of statutes, including the School Education Law, dealing with the organization and management of the school system.

Schools are recognized as providing a public service so that apart from the national government and local authorities only such bodies, having juridical personality, as are authorized by law are entitled to establish them.

The structure of the school system is shown in the diagram on page 741.

THE DEVELOPMENT OF SECONDARY EDUCATION

From the beginnings of the modern system to World War II. The history of modern education in Japan begins in 1872. In the field of secondary schooling the Education Order of that year prescribed the establishment of: (a) 6-year middle schools (*chūgakkō*) providing general education; (b) secondary vocational schools (*jitsugyō-gakkō*) providing agricultural, commercial, technical or other vocational training; and (c) part-time people's schools (*shomin-gakkō*) providing general and vocational education for young people in employment; all three types of school were for pupils who had completed 8 years of primary education. However, few vocational schools were established at that time, and the Order of 1872 was subsequently amended so as to establish agricultural, commercial, technical or other vocational courses in middle schools as well as the general education course. Thus middle schools provided both preparatory courses for higher education and vocational training at secondary level.

The development of secondary education from 1872 to 1900 was not so rapid as that of primary education, but by the end of the nineteenth century industrial and economic development created a great demand for technicians with secondary level training, and this stimulated the organization of a vocational secondary school system. In 1899, the aim of the middle school was clarified in the Middle School Order as being 'to provide advanced general education for boys', and the Vocational School Order laid down the requirements for agricultural, commercial, technical, mercantile marine and other vocational schools. At the same time, the Girls' High School Order set up high schools in which girls received general secondary education of the same level as that provided in the middle school for boys.

By the Orders of 1899, all secondary schools, both general and vocational, were single-sex institutions. Pupils who completed a 6-year course in primary schools were qualified to enter general secondary schools, which offered a course of 5 years for boys and 4 years (5 years rarely) for girls. Vocational secondary schools offered 3-year courses for those who had finished an 8-year course (6-year course rarely) in primary schools. The curricula for middle schools and girls' high schools (*kōtōjogakkō*) were prescribed in detail by the Ministry of Education. Vocational secondary schools, however, were permitted to arrange their own vocational programmes to fit in with local trades and industries. In vocational schools, ethics and some other general subjects were required.

This dual-track system of secondary education continued until the educational reform after World War II. Besides secondary schools, there was an upper elementary school which was attended by the majority of those who did not transfer to secondary schools. The Order of 1900 had provided that public primary education should be free, but for all secondary education tuition fees were payable. In 1947, the first 3 years of secondary education were to be made compulsory, and in public schools free. In the decade from 1900 to 1910 secondary education, both general and vocational, showed a marked development, the number of schools and pupils increasing by about 150 per cent. Especially noteworthy was the progress of girls' high schools and vocational schools. This expansion was partly caused by the prolongation of the compulsory education period from 4 to 6 years. The expansion of industry and the improvement of living standards after the Russo-Japanese War (1904–5) also had a great influence.

Between World War I and World War II there was another period of great progress in secondary education. In 1919, a revision of the Middle School Order stressed moral training, introduced experimental work in physics and chemistry, and gave more emphasis to practice in vocational subjects. Secondary education became more widespread. In 1931 the fifth (final) grade of middle school was divided into two courses, one giving general preparatory training for students entering upon a business career after their graduation, the other preparing for study at higher educational institutions. The former course emphasized natural science and vocational subjects, and the latter mathematics and foreign languages. This reorganization took into account the fact that two-thirds of middle school graduates proceeded to higher educational institutions and that one-third went directly into employment.

Girls' high school education was also modified: the

cultivation of a moral sense was stressed; more elective subjects were provided; the ordinary course was prolonged by 1 year (5-year course); to provide women students with an opportunity for higher education a 2-year advanced course was added.

In the vocational secondary school also a partial reform was carried out. The range of elective subjects was broadened so as to meet local needs and the number of classroom hours was reduced with a view to permitting more practical and experimental activity.

These reforms in the secondary school system after World War I were caused by the increasing demand for higher education. With the resulting expansion of secondary school enrolment, the social origins of the secondary school pupils were much more diversified and this brought about a change in the aims, organization and content of secondary education.

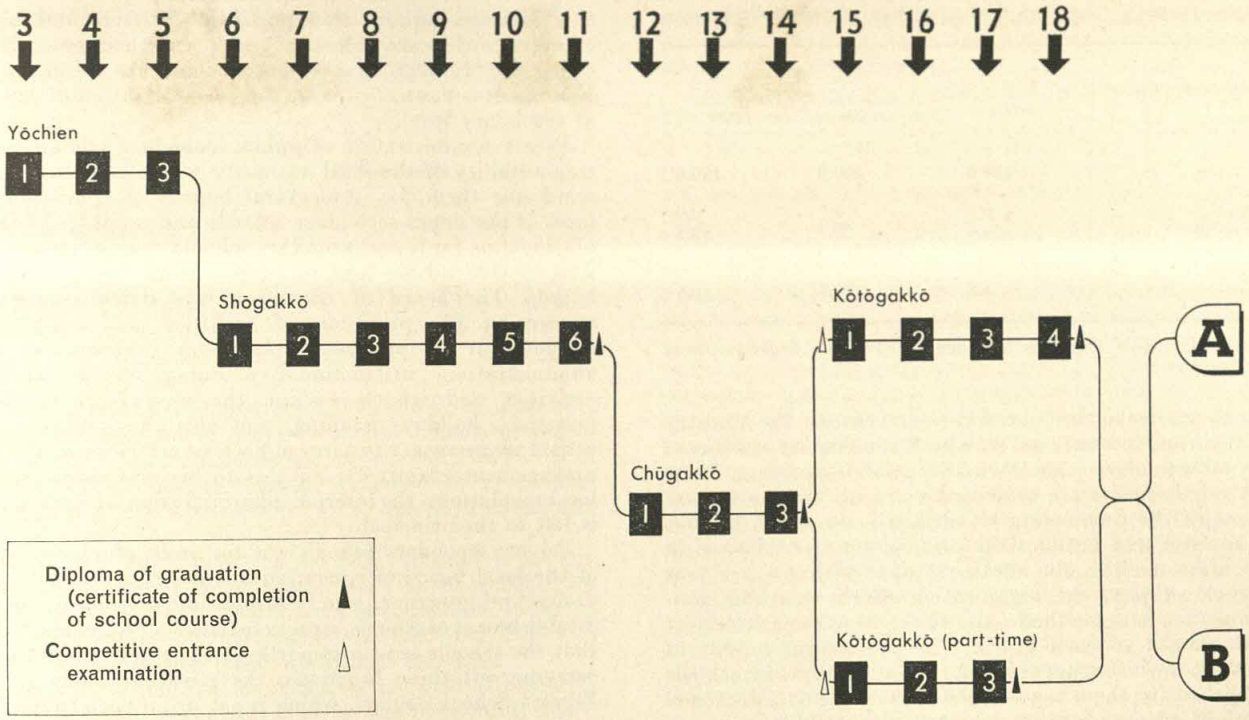
From 1941 to 1943 there was a revision of the entire educational system, on the basis of a proposal made by the Central Council for Education. This provided for the extension of the compulsory education period from 6 to 8 years. The three kinds of secondary school were brought into one system; the new secondary schools were still divided into middle schools, girls' middle schools (formerly girls' high schools) and vocational schools, but in order to simplify the system the division of the final year of middle school into two courses and the system of practical courses in girls' middle schools were abolished. There was provision for rearrangement and simplification of subject syllabuses in secondary education and for the establishment of evening courses in middle schools. However, owing to the war the prolongation of the period of compulsory education was not enforced, and as an emergency measure the middle school course was shortened to 4 years.

Educational reforms since World War II. Reforms beginning in 1947 introduced great changes in Japanese education, in particular a single-track in place of the traditional multi-track system. Those affecting secondary education, embodied in the School Education Law 1947 and the Course of Study 1949, revised in 1951, 1956 and 1958, included the following:

1. Secondary education was divided into two school levels: *chūgakkō* (lower secondary school) for the first 3 years, and *kōtōgakkō* (upper secondary school) for the second 3 years. The 3 years of lower secondary schooling became part of the 9-year period of free compulsory education.
2. Nine years' schooling was made compulsory not only for normal children but also for the blind or deaf and dumb.
3. Under the old school system, general and vocational education were conducted in different types of middle school. The reform provided that the first 3 years of secondary education should be in one kind of school, and that the second 3 years should offer various kinds of courses, general and technical, some institutions offering one course, others two or more.
4. Opportunities for upper secondary education were increased by the creation of part-time (4-year) schools in addition to full-time (3-year) institutions, and of correspondence schools. Students who attained the prescribed credits in part-time or correspondence schools could now obtain the same qualifications as graduates of full-time schools. In pre-war days, only 20 per cent of those who finished compulsory education went on to schools at secondary level, but over 50 per cent of the lower secondary graduates now receive upper secondary education.
5. In pre-war days, all secondary schools were single-sex institutions except for a very few vocational schools. Higher schools (*kōtōgakkō*), which were preparatory schools for universities under the old system, admitted only the graduates of middle schools (boys). Girls who wanted to receive higher education had to enter women's colleges, from which only a very small number of graduates were admitted to universities. In the new educational system, the principle of co-education in public lower secondary and upper secondary schools has been established, thus providing more opportunities for women to have access to higher education and to take up administrative or professional careers.
6. New curricula and courses of study. In lower secondary schools the main changes from pre-war days were the integration of history, geography and civics as one subject (social studies), the dropping of the separate subject of morals, and the inclusion of 'individual study', an elective subject, in the regular time-table.
7. The former normal schools (whose status had been raised in 1941 from secondary to higher education level) and the higher normal schools were abolished. Since 1947 all teacher training has been conducted exclusively in universities.

Although there have been minor amendments, the fundamental characteristics of the new system as described above have not much changed since 1947. Among measures taken to improve lower secondary education under the new 6–3–3 school system is the considerable increase in the national subsidies for the construction expenses of compulsory schools; formerly, these expenses had been borne by the municipalities. Increased national subsidies have also been made available for research in science and technical education, and the training of science teachers. There has been a small practical change affecting upper secondary schools which have general and vocational courses; to meet the demands of particular communities, the number of upper secondary schools with one specialized course is increasing in some cities.

To meet changing needs and demands the Course of Study has been revised several times since the 1947 reforms, the latest revision of the lower secondary school curriculum having taken place in 1958. The special features of this revision include increased emphasis on two basic subjects, Japanese and mathematics, and on scientific and technical education. The elective subject, vocational training and home-making, has been divided into special subjects such as agriculture, industry, commerce, etc., and in general the scope of elective subjects has been widened in order to give students more effective preparatory training for their future careers or occupations. Moral education, which was previously given through the teaching of social studies and some other subjects, has been made a separate subject and allotted 1 hour per week in all grades of the compulsory school course.



GLOSSARY

NOTE. In addition to the schools shown in the diagrams there are 'miscellaneous schools' which belong to the upper secondary or higher education level. These are mostly private vocational and trade schools, preparatory coaching schools, etc. Miscellaneous schools are not yet included in the regular school system.

chūgakkō: lower general secondary school, completing period of compulsory education. Private schools of this type are often combined with upper secondary schools and require pupils to take an entrance examination.

kōtōgakkō: upper secondary school; full-time school has 3-year course, and part-time, 4-year. Both provide general and vocational curriculum. Vocational courses include agriculture, commerce, fishery, home-making, industry, etc.

shōgakkō: primary school.

yōchien (kindergarten): pre-primary school.

HIGHER EDUCATION

A. *Daigaku:* university. All faculties award bachelor's, master's and doctor's degrees and are organized as follows: medical and dental—6-year course for bachelor's degree followed by 1 year as intern; teacher training—4-year course for bachelor's degree or in some cases 2-year course for second-class teacher's certificate; other faculties—4-year course for bachelor's degree.

B. *Tanki-daigaku:* junior college; provides 2- or 3-year course, mainly vocational in nature, leading to diploma.

Legal basis

The basic principle governing secondary education is set forth in the School Education Law enacted in 1947. Other laws and regulations which have some bearing on secondary education include those which deal with the organization and functions of local educational administration, the employment and certification of teachers, the responsibility of local authorities for salaries of staff in municipal schools, the national Treasury's share of the cost of constructing public schools, the enforcement of the School Education Law, standards for the establishment of upper secondary schools, the publication of textbooks, vocational education, science education, upper secondary part-time and correspondence education, private schools, etc.

Administration

The country is divided into prefectures and the prefectures into cities, towns and villages. Lower secondary schools are part of the compulsory education system and their establishment and maintenance are the responsibility of the municipality (city, town or village). In exceptional cases, private bodies may establish and maintain lower secondary schools. Upper secondary schools are usually established and maintained by the prefectural authorities, but there are also a considerable number of private upper secondary schools and a few run by municipalities.

The table on the next page shows the percentage distribution of secondary schools maintained by the various public authorities and by private agencies, as at 1 May 1959.

ADMINISTRATIVE STATUS OF SECONDARY SCHOOLS, 1959

Administrative status	Secondary schools		
	Lower	Full-time upper	Part-time upper
	%	%	%
Total	**100.0**	**100.0**	**100.0**
National[1]	0.6	0.7	0.0
Local public	94.8	70.2	93.4
Prefectural	0.0	64.5	76.2
Municipal	94.8	5.7	17.2
Private	4.6	29.1	6.6

1. National schools are those attached to education departments of universities.

As to curricula, the Central Government, i.e. the Ministry of Education, sets national standards which must be adhered to by all secondary schools whether public or private. These basic requirements are in accordance with the recommendations of the Curriculum Council, a body which advises the Minister and outlines the principles to be followed in curriculum making, the allotment of total hours per year for each subject, the organization of the teaching programme, teaching methods, and the content of each subject to be taught in each grade. The prefectural boards of education must see that the curriculum in individual schools established by them meets these requirements. Municipal boards of education have the same responsibility towards schools established by municipalities which include almost all of the lower secondary schools, being advised in these matters by the prefectural boards of education. Each school organizes its own curriculum with the guidance of the board of education or educational research institutes attached to the board, within the basic framework outlined by the Ministry of Education in its official curricula and courses of study. The daily schedule of school work is drawn up by the principal.

The authorization of textbooks is the responsibility of the Minister. To obtain this authorization, either the author or publisher applies to the Minister, who consults the Textbook Authorization and Research Council and bases his decision on the council's recommendation. Lists of authorized textbooks are published and sent to each school through the prefectural boards of education, which also hold 'textbook exhibitions' for the convenience of teachers in selecting books for local adoption. On the basis of proposals made by teachers, the prefectural boards decide which textbooks should be adopted for upper secondary schools; municipal boards perform the same function for the lower secondary schools. In the case of national and private secondary schools, principals make the final decision.

As an exception to this procedure, textbooks for some fields of vocational education in upper secondary schools are compiled and published by the Ministry of Education itself, commercial publishers being unwilling to make the necessary investment in view of the small market.

Control. The Ministry of Education supervises, advises, and allocates financial aid to local boards of education, and requires from them reports upon the secondary education activities under their jurisdiction. As occasion demands, the Ministry inquires into particular matters and issues whatever orders are necessary to improve them or set them right. No central agency other than the Ministry of Education is concerned with the administration of schools at secondary level.

Direct administration of public secondary schools is the responsibility of the local authority which establishes and maintains them, i.e. prefectural boards of education for most of the upper secondary schools and municipal boards of education for lower secondary schools; municipal authorities receive advice and assistance from the prefectural boards. The board of education lays down regulations concerning the provision of facilities and equipment, employment of personnel, classroom organization and administration, instructional planning, extra-curricular activities and schools events, the use of instructional materials, holidays, staffing, and also the guidance and assistance necessary to carry out school activities and school management effectively. Subject to his observance of the local regulations, the internal administration of each school is left to the principal.

Private secondary schools are not under the jurisdiction of the local board of education but are supervised by the prefectural governor, who is responsible for approving the establishment of schools, issuing teachers' certificates, seeing that the schools send in reports on their activities, etc. In carrying out these functions, the governor refers to the Private School Council, which is set up in each prefecture as an advisory organ.

Supervision. In order to give proper and sufficient guidance to secondary schools, the Ministry of Education has supervisors, and prefectural and municipal boards of education have teachers' consultants. Ministry supervisors are mostly appointed from among university professors and prefectural superintendents, and teachers' consultants from among experienced teachers. There were over 2,200 teachers' consultants in 1958, including those for primary education.

Finance. Expenditure on public lower secondary schools is met from municipal funds, prefectural subsidies and national subsidies. In addition to public funds, private donations, e.g. from parent-teacher associations, also contribute to the support of lower secondary education. Money spent on public upper secondary schools comes mostly from prefectural funds, but partly also from national subsidies or private donations, except in those cases where upper secondary schools have been established by municipalities, when the expenditure is borne mainly by municipal funds.

The table on the following page shows the percentage distribution of expenditure by source of revenue on lower and upper secondary schools in 1957–58.

The principal source of income of the local authorities is taxation. In addition, revenues from miscellaneous sources such as rents, fees, etc., contribute to the support of educational activities. These revenues are credited to the general funds of government. There are no education taxes in Japan.

The construction of secondary schools is normally paid for by the local bodies responsible for their establishment and operation. However, since the war national subsidies have been provided to assist in school building. The rates

FINANCING OF PUBLIC SECONDARY SCHOOLS, 1957/58

Source of revenue	Secondary schools		
	Lower	Full-time upper	Part-time upper
	%	%	%
Total	**100.0**	**100.0**	**100.0**
National subsidies	32.9	2.3	1.4
Revenue receipts from prefectural sources	35.9	78.5	80.0
Revenue receipts from municipal sources	24.1	8.5	12.7
Long-term loans	2.5	1.1	0.5
Donations	4.6	9.6	5.4

of national subsidies offered are half to one-third of the cost of new construction of lower secondary schools or reconstruction of war-damaged secondary schools, two-thirds of the cost of rebuilding schools damaged in a national calamity (e.g. earthquake), and up to one-third of the cost in other cases.

The cost of equipment for secondary schools is usually borne by whatever local public body is responsible for the establishment and maintenance of the school. In recent years, national subsidies for these have been increased with a view to encouraging local educational activities.

Secondary school teachers' salaries are paid as a rule by their appointing authority, that is, the prefectural board of education except in the case of municipal upper secondary schools. But half the salaries of lower secondary school teachers are met by the Government, and the salaries of teachers in municipal part-time upper secondary schools are paid by the prefecture.

In public lower secondary schools no fees are charged, in accordance with the principle of free compulsory education. Moreover, to secure universal attendance at lower secondary schools, various measures are taken to assist pupils from needy families, such as free distribution of textbooks and free school lunches. In public upper secondary schools, pupils pay tuition fees amounting on an average to about 600 yen per month; the amount varies among the prefectures. Able pupils are helped by a system of scholarships which has been expanded in recent years.

Buildings. The Central Government has established the following standards for school buildings: a minimum of 3.6 square metres space per pupil and 0.7 square metres for gymnasiums and halls in lower secondary schools, and 4.8 square metres and 0.8 square metres respectively for pupils of upper secondary schools. Standards for heating, lighting and sanitation are not fixed by law.

School welfare services. The school health and medical service includes health consultation, physical examination, tuberculin test, BCG vaccine, chest X-ray, dental examinations, etc. Almost all secondary schools are served by one or more school doctors and dentists, and about 50 per cent of the lower secondary schools and 90 per cent of the upper secondary schools have rooms for this service.

School lunches are provided in many lower and upper secondary schools in urban areas. There is also a special law under which national subsidies are paid to part-time upper secondary schools operating school lunch programmes, so as to encourage the attendance of young people in employment.

Assistance to needy families has been mentioned under the section Finance above.

TYPES OF SECONDARY EDUCATION

There are two levels of secondary education, lower and upper. All children who complete elementary school (6 years' primary schooling) enter the 3-year lower secondary schools which come within the 9-year period of compulsory education and are the only type of school provided for children in the corresponding age group (ages 12, 13 and 14). Upper secondary schools cater for pupils who wish to continue their general studies or intend to enter institutions of higher education and also for those desiring vocational or technical training. Students who have completed either a general or a vocational course are able to advance to higher education. Actually, however, most of those who do so have taken the general course; those who graduate from a vocational course usually seek employment. There are also a number of 'miscellaneous schools' at upper secondary or post-secondary level, most of which provide specialized trade training. Institutions of higher education which absorb upper secondary school graduates are of two kinds: universities and junior colleges.

The school year begins on 1 April and ends on 31 March. Lower secondary schools divide the year into three terms, while upper secondary schools adopt either a two-semester or three-term year. Prefectural boards of education fix the dates of terms and holidays. Schools in agricultural areas may be granted special holidays when the children are required to work in the fields, the number of such holidays and the times at which they are given varying in different parts of the country. All schools must, however, keep open for the minimum number of school hours per year prescribed by the Central Government in the standard courses of study or curricula.

Lower secondary schools

The School Education Law states that the aim of the lower secondary school is to provide general education appropriate to the stage of physical and mental development of the pupils and based on the education given at the primary school. To realize this aim the lower secondary school endeavours to cultivate in the pupils the qualities they will need in order to play their part as members of society and the State; provide them with the fundamental knowledge and basic vocational skills required in society; encourage respect for labour; help pupils to select the future course that is best suited to their individual talents and aptitudes; promote their social activities in and out of school; guide their emotional development along healthy lines and foster sound judgement. Any pupil who has completed primary education can enter a lower secondary school established by the municipality in which he or she lives, without any examination.

Pupils in lower secondary schools are divided into groups according to grades and classes. But there is no educational

discrimination, i.e. streaming by course or ability; all pupils are on an equal footing and receive a uniform type of general education which must achieve the same standard throughout the country.

The curriculum in lower secondary schools consists of required subjects, elective subjects, moral education and extra-curricular activities. Details are shown in the following table. (Figures show the required total of class periods per year and, in parenthesis, the number of periods per week. A class period is of 50 minutes' duration and is referred to as a 'school hour'.)

CURRICULUM IN LOWER SECONDARY SCHOOLS

	Grade		
	1	2	3
Required subjects			
Japanese	175 (5)	140 (4)	175 (5)
Social studies	140 (4)	175 (5)	140 (4)
Mathematics	140 (4)	140 (4)	105 (3)
Science	140 (4)	140 (4)	140 (4)
Music	70 (2)	70 (2)	35 (1)
Fine arts	70 (2)	35 (1)	35 (1)
Physical training and health	105 (3)	105 (3)	105 (3)
Industrial arts or home-making	105 (3)	105 (3)	105 (3)
Total	945 (27)	910 (26)	840 (24)
Elective subjects			
Foreign language	105 (3)	105 (3)	105 (3)
Agriculture	70 (2)	70 (2)	70 (2)
Trade and industry	70 (2)	70 (2)	70 (2)
Commerce	70 (2)	70 (2)	70 (2)
Fishery	70 (2)	70 (2)	70 (2)
Home-making	70 (2)	70 (2)	70 (2)
Mathematics	–	–	70 (2)
Music	35 (1)	35 (1)	35 (1)
Fine arts	35 (1)	35 (1)	35 (1)
Morals	35 (1)	35 (1)	35 (1)
Extra-curricular activities	35 (1)	35 (1)	35 (1)
Grand total	1 120 (32)	1 120 (32)	1 120 (32)

In addition to laying down the amount of time to be devoted to the various subjects, the course of study describes the aims and content of each subject in detail and gives general directions concerning the lines along which the teaching should be conducted.

Individual pupil records are kept. The Ministry of Education requires that these should cover scholastic achievement, health, daily attendance and behaviour. Scholastic achievement is expressed by grades of from 1 to 5. Various kinds of educational tests are used, the choice being left to each school authority or to the class teacher. As to examinations, the law lays down no special standards, nor does the Ministry of Education make any particular indication.

Teachers in lower secondary schools hold a certificate in their respective subjects. These certificates are conferred, as a rule, on students who have attended college or university for at least 2 years and who have acquired a prescribed number of credits. They must also have had professional teacher training or training in education faculties of universities. Although public lower secondary schools are established by towns and villages, the appointment of teachers in these schools and the payment of their salaries are the responsibility of the prefectural authorities.

Upper secondary schools

The courses offered in upper secondary schools fall into two main types: general, and vocational or technical. The latter group covers agriculture (including general agriculture, forestry, sericulture, gardening, stock raising, horticulture, agricultural civil engineering), commerce, domestic arts, fishery, science, technology (including mechanical, electrical and civil engineering, communication, shipbuilding, chemical industry, construction, metallurgy, mining, textiles, ceramics), etc. Upper secondary schools are of three types: (a) those which provide only the general course; (b) those which offer vocational courses in one or more areas (as will be explained below, all vocational courses include a required minimum of general education); (c) composite schools providing both general and vocational courses. Upper secondary education is available in full-time schools with a 3-year course, or in part-time schools where the lessons are so organized that they can be given in the evening or at other stated times and the course extends to 4 years. There are also correspondence courses at this level, although for some subjects which require practical work, pupils are required to attend schools for certain days. The same qualification is given to graduates of all three types of school: full-time, part-time or correspondence.

Graduates of lower secondary schools are permitted to enrol in the general or vocational course of their own choice, subject to enrolment limitations and to their passing the required entrance examinations.

The principal of an upper secondary school is responsible for the admission of students to the school. As the number of applicants always exceeds the fixed number of pupils to be admitted, selection is necessary. In public upper secondary schools, which make up more than 70 per cent of all upper secondary schools in Japan, the selection is made on the basis of reports submitted by the lower secondary school, and the results of an examination conducted by the board of education which maintains the upper secondary school. This is a common examination held simultaneously for all candidates within a prefecture.

The upper secondary school course is organized on the system of awarding credits for work accomplished. Thirty-five school hours per year in a subject is the minimum required for one credit. A school hour is defined as a 50-minute class period, and a school year consists of at least 35 weeks of 6 days per week. The minimum number of credits required for graduation is 85, i.e. the total number of school hours is at least 2,975. Since the number of credits obtainable may differ from one subject to another and sometimes within the same subject, and since the various courses permit numerous combinations of elective subjects, the number of school hours required ranges from 2,975 to 3,885, these being spread as evenly as possible over the 3-year (full-time) or 4-year (part-time) period of study.

The following table, which takes account of the latest revision (1956) of the upper secondary curricula, shows the

areas of study, the subjects in each area, and the number of credits which the student can obtain in each subject. Thus the subject Japanese language 'A' is either a 9-credit or a 10-credit course, while credits obtainable for Japanese language 'B' range from a minimum of 2 to a maximum of 6. Credits are taken in varying patterns, e.g., students taking Japanese language 'B' take not less than 2 or more than 3 credits per year in this subject.

AREAS, SUBJECTS AND CREDITS IN UPPER SECONDARY SCHOOLS

Area	Subject	Number of credits
Japanese language	Japanese language 'A'	9, 10
	Japanese language 'B'	[1] 2–6
	Chinese classics	[1] 2–6
Social studies	Civics	3–5
	Japanese history	3–5
	World history	3–5
	Cultural geography	3–5
Mathematics	Mathematics I	6, 9
	Mathematics II	[2] 3
	Mathematics III	[3] 3, 5
	Applied mathematics	[4] 3, 5
Science	Physics	3, 5
	Chemistry	3, 5
	Biology	3, 5
	Geology	3, 5
Physical training and health	Physical training, Health	[5] 9–11
Arts and music	Music	[6] 2–6
	Fine arts	[6] 2–6
	Handicrafts	[6] 2–6
	Calligraphy	[6] 2–6
Foreign language	Foreign language I	3–15
	Foreign language II	2–4
Domestic arts	General home-making and 23 other subjects	For 1 subject, 2–4 (min.) 6–8 (max.)
Agriculture	General agriculture and 39 other subjects	For 1 subject, 2–4 (min.) 12–36 (max.)
Technology	Machine practice and 136 other subjects	For 1 subject, 2–4 (min.) 8–25 (max.)
Commerce	General commerce and 19 other subjects	For 1 subject, 2–4 (min.) 2–8 (max.)
Fishery science	General fishery and 28 other subjects	For 1 subject, 2–5 (min.) 2–20 (max.)

1. The number of credits taken in a year is 2 or 3.
2. Studied after taking at least 6 credits of Mathematics I.
3. Studied after taking 3 credits of Mathematics II.
4. Studied after Mathematics I or II.
5. Two credits are given to Health.
6. The number of credits taken in a year is 2.

A certain number of subjects are compulsory for all students in all courses: Japanese language 'A', three subjects in the science area, mathematics I, physical training and health. Students are also required to complete over the 3- or 4-year period a minimum of 6 credits in the combined areas of arts and music, home-making and vocational training. In vocational courses, students must complete over 30 credits in vocational areas. They must also participate in extra-curricular activities for 1 to 3 hours per week, although no credits are given for this.

Below are given two examples of courses, one showing the requirements for a general course in a particular school and the other a typical vocational course in mechanical engineering.

AN EXAMPLE OF LOCAL CREDIT REQUIREMENTS IN THE GENERAL COURSE (by grade)

Area	Full-time			Part-time			
	1	2	3	1	2	3	4
Japanese language	4	5	5	3	3	4	2
Social studies	5	4	4	4	4	2	2
Mathematics	6	3	0	3	3	3	0
Science	5	3	3	3	3	3	0
Physical training and health	3	4	4	2	3	2	2
Foreign language	5	3	3	3	3	3	3
Arts and music, Domestic arts, Vocational subjects	4	6	6	4	4	4	4
Total	32	28	25	22	23	21	13
Credits elected by pupils according to individual preference	0	4	7	0	0	2	9

AN EXAMPLE OF COURSE AND CREDIT REQUIREMENTS IN A VOCATIONAL COURSE (MECHANICAL ENGINEERING)

Area	Subject	Number of credits	
		Full-time	Part-time
Japanese language	Japanese language 'A'	9	9
Social studies	Civics	3	3
	Japanese history	3	3
	World history	3	3
	Cultural geography	3	3
Mathematics	Mathematics I	6	6
	Mathematics II	–	3
	Applied mathematics	5	3
Science	Physics	5	5
	Chemistry	3	3
Physical training and health	Physical training, Health	9	9
Foreign language	Foreign language I	9	6
Total		58	56
Technology	Machine practice	13	15
	Machine technology	–	4
	Machine technology and materials	8	–
	Technical drawing	12	11
	Applied dynamics	5	2
	Motors	2	2
	Factory management	2	2
	General electrotechnics	2	2
Total		44	38
Credits elected by pupils according to individual preference		6	2
Grand total		108	96

Achievement testing, reporting on pupils, promotions and examinations in upper secondary schools are organized as for lower secondary schools (see above).

Teacher certificates for upper secondary schools are for specified subject areas and are granted by the prefectural board of education. The provisions of the Educational Personnel Certification Law require those studying for certificates to obtain university credits in courses prescribed by the Ministry of Education. In order to obtain upper

secondary teacher certificates, the students must acquire the prescribed number of credits in general education subjects, pedagogical subjects and professional subjects. The necessary number of credits in professional subjects varies with the subject area.

Other specialized schools

Some upper secondary schools have independent courses in music or fine arts together with courses for general education, agriculture, technology, commerce, etc.

Other educational institutions of secondary level include miscellaneous schools (*kakushugakkō*). As the first 3 years of secondary education are compulsory, most schools of this type admit students who have successfully completed lower (or upper) secondary schools. Conditions of admission are similar to those for upper secondary schools or higher educational institutions. However, the duration of the course is not uniform and there are a number of 1-year or ½-year courses. Most of the miscellaneous schools are highly specialized vocational schools (such as typewriting schools, trade schools, etc.) or schools offering courses in home-making. They also include coaching schools (generally nicknamed *ronins*) for students who are obliged to re-sit the entrance examinations to universities and other higher institutions; miscellaneous schools of this type are becoming more and more numerous in large cities where famous universities are located. The total number of miscellaneous schools of all kinds is about 7,000, more than the number of upper secondary schools, but as they are usually quite small the total enrolment is less than in upper secondary schools.

For the convenience of young employees who have graduated from lower secondary schools, some factories or firms conducting large-scale enterprises have their own training institutions for technicians and provide general as well as technical education.

Out-of-class activities

Each lower or upper secondary school has a students' association through which students discuss how to improve their school life; some matters they settle by themselves, in other cases they present their opinions to the school authorities. Since the war, there has been an increase of social service activities through the Junior Red Cross or other associations. The greater part of the students join sports clubs at their schools; inter-school matches or athletic meetings are popular, and every year more than 10,000 students participate in the local preliminary matches for the all-Japan upper secondary school baseball meeting. Cultural societies in the fields of music, fine arts, drama, and literature, etc., are also active. A considerable number of schools issue a school newspaper or periodical.

TRENDS AND PROBLEMS

With the development of the national economy, the shortage of technicians and of engineers and scientists is becoming an increasingly serious problem. Measures for the expansion of technical education are therefore being taken by the Ministry of Education and local authorities. A considerable number of secondary technical schools have been established and a long-range programme for the expansion of secondary technical education drawn up.

After the war, general education was more emphasized in lower secondary schools, and in upper secondary schools a universal comprehensive system was introduced. However, to meet the increasing demand for secondary school graduates with practical training, and also to produce a sufficient number of graduates with basic academic knowledge, a more effective differentiation of courses is under discussion.

The problem of how to give more opportunities for young people in employment to obtain upper secondary education is a matter of some concern to the educational authorities. As a first step, the curriculum of the vocational correspondence course has been broadened.

With the progress of science and the development of industry, a higher level of scientific knowledge is required from school graduates. Nation-wide tests conducted by the Ministry of Education in 1956–58 showed a lack of thorough grounding in mathematics, science and some other subjects. On the recommendation of the Curriculum Council, the Ministry of Education has therefore revised the curriculum for lower secondary schools, and is now compiling a new curriculum for upper secondary schools. The Ministry suggests that much more emphasis should be put on basic and systematic instruction. Moral and physical education also need to be reinforced.

[*Text prepared by the Research Bureau of the Ministry of Education, Tokyo, in June 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 91,760,000.
Area: 142,726 square miles; 369,661 square kilometres.
Population density: 643 per square mile; 248 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58 total enrolment was over 23 millions not including persons attending youth classes who numbered almost 1 million. This represents a school-going population equal to one-fourth of the total population, the same proportion as in 1954/55. It may be noted that primary education accounts for only 56 per cent of the total enrolment.

The proportion of girls was 49 per cent in elementary schools and 50 per cent in lower and upper secondary schools, but less in vocational schools and in institutions of higher education. Nevertheless a slight increase may be seen between 1953 and 1957: in vocational schools, 37 per cent in 1957/58 as against 33 per cent in 1953/54; in higher education, 18 per cent in 1957/58 as against 16 per cent in 1953/54. The proportion of women on the teaching staff was 46 per cent in primary education and 20 per cent in general secondary education. As compared with 1953/54, these proportions had decreased very slightly.

Enrolment in vocational schools was 16 per cent of the enrolment in secondary schools of general education but enrolment in the former increased more rapidly than in the latter.

The pupil-teacher ratio in primary schools was almost the same in 1957/58 (37 pupils per teacher) as in 1953/54 (35 pupils per teacher). (See Table 2.)

Enrolment trends in secondary education, 1930–57. The average total enrolment shows a large increase from 1930–34 to 1955–57 with a high rate of increase since 1945–49. This reflects the reform of the school system. The average total enrolment for 1955–57 was eight times that of 1930–34.

The ratio obtained by relating the average total enrolment to the estimated population 15–19 years old reached almost 100 per cent for the period 1955–57. (See Table 3.)

Examination results in secondary education, 1953–57. From 1953 to 1957 the number of lower secondary school certificates increased by 24 per cent, and that of upper secondary school certificates by 14 per cent. The number of certificates granted to girls was relatively higher in 1957 than in 1953, nevertheless the proportion of girls has remained less than 50 per cent. (See Table 1.)

Educational finance, 1957/58. During the fiscal year beginning in April 1957, a total of 526,000 million yen was spent on education. (See Table 4.) Expenditure on private education represented 13 per cent of this total. Of the amount spent on public schools 32 per cent came from the Central Government, 40 per cent from provincial governments (including tuition fees), 22 per cent from local authorities (including tuition fees). Recurring expenditure was 81 per cent of the total expenditure on public schools, capital expenditure was 18 per cent and the remainder was spent on debt service.

In 1957/58, tuition fees in private schools constituted 58 per cent of the total receipts of these schools. The sum contributed by the Central Government, provincial governments and local authorities to private schools was about 10 per cent of the expenditure on education made by these schools. Total expenditure for private schools was distributed as follows: recurring expenditure, 72 per cent; capital expenditure, 20 per cent; debt service, 8 per cent.

Sources. Japan: Ministry of Education, replies to Unesco questionnaires.

1. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57[1]

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Certificate of lower secondary schools	1 531 488	753 681	1 663 184	817 882	1 871 684	920 955	1 997 931	982 428	1 895 967	933 958
Certificate of upper secondary schools	680 191	282 833	715 916	300 325	755 847	324 363	731 036	315 690	776 753	344 599

1. Figures show the number of regular pupils only.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1957/58	2 312	9 906	7 817	230 097	112 235
	Day nurseries, public	1957/58	4 981	...	...	345 176	...
	Kindergartens, private	1957/58	4 308	22 626	18 906	432 274	209 580
	Day nurseries, private	1957/58	4 208	...	...	253 872	...
	Total	**1957/58**	**15 809**	[1]**32 532**	[1]**26 723**	**1 261 419**	...
	,,	1956/57	14 981	[1]30 820	[1]25 554	1 251 120	...
	,,	1955/56	13 825	[1]28 279	[1]23 573	1 240 413	...
	,,	1954/55	12 027	[1]24 222	[1]20 366	1 131 922	...
	,,	1953/54	11 305	[1]18 913	[1]15 970	997 908	...
Primary	Elementary schools, public	1957/58	26 831	[2]349 828	[2]159 904	12 912 310	6 321 152
	Elementary schools, private	1957/58	157	[2]1 704	[2]989	43 975	25 782
	Total	**1957/58**	**26 988**	[3]**351 532**	[3]**160 893**	**12 956 285**	**6 346 934**
	,,	1956/57	26 957	[3]345 327	[3]159 435	12 616 311	6 187 526
	,,	1955/56	26 880	[3]340 572	[3]158 239	12 266 952	6 025 615
	,,	1954/55	26 804	[3]331 007	[3]154 760	11 750 925	5 779 834
	,,	1953/54	26 555	[3]323 362	[3]152 782	11 225 469	5 530 288
Secondary							
General	Lower secondary schools, public	1957/58	12 994	[4]189 045	[4]40 428	5 538 938	2 701 347
	General course of upper secondary schools, public	1957/58	3 260	[4]95 075	[4]13 660	[6]1 032 079	[6]495 579
	Lower secondary schools, private	1957/58	628	[4]6 570	[4]2 939	179 244	120 595
	General course of upper secondary schools, private	1957/58	812	[4]23 156	[4]7 088	[6]395 066	[6]244 874
	Total	**1957/58**	**17 694**	[5]**313 846**	[5]**64 115**	[7]**7 145 327**	[7]**3 562 395**
	,,	1956/57	17 792	[5]314 647	[5]65 528	[7]7 274 551	[7]3 615 029
	,,	1955/56	17 871	[5]310 679	[5]65 330	[7]7 139 399	[7]3 542 798
	,,	1954/55	17 872	[5]301 839	[5]63 985	[7]6 894 112	[7]3 416 419
	,,	1953/54	17 752	[5]290 505	[5]61 890	[7]6 408 146	[7]3 173 851
Vocational	Industrial courses, public	1957/58	469	[8]...	[8]...	[9]213 454	[9]1 889
	Commercial courses, public	1957/58	783	[8]...	[8]...	[9]288 018	[9]91 182
	Agricultural courses, public	1957/58	1 322	[8]...	[8]...	[9]208 941	[9]32 911
	Fishery courses, public	1957/58	66	[8]...	[8]...	[9]13 709	[9]412
	Home-making courses, public	1957/58	1 446	[8]...	[8]...	[9]164 328	[9]164 328
	Other courses, public	1957/58	21	[8]...	[8]...	3 467	1 527
	Industrial courses, private	1957/58	111	[8]...	[8]...	[9]49 356	[9]42
	Commercial courses, private	1957/58	381	[8]...	[8]...	[9]158 193	[9]71 864
	Agricultural courses, private	1957/58	11	[8]...	[8]...	[9]1 406	—
	Home-making courses, private	1957/58	229	[8]...	[8]...	[9]73 585	[9]73 585
	Other courses, private	1957/58	22	[8]...	[8]...	[9]2 875	[9]1 162
	Total	**1957/58**	**4 861**	[8]...	[8]...	[10]**1 177 332**	[10]**438 902**
	,,	1956/57	4 874	[8]...	[8]...	[10]1 089 974	[10]394 003
	,,	1955/56	5 006	[8]...	[8]...	[10]1 033 522	[10]361 678
	,,	1954/55	5 030	[8]...	[8]...	[10]1 004 701	[10]341 013
	,,	1953/54	5 005	[8]...	[8]...	[10]977 749	[10]318 203
Higher							
Teacher training	Teacher training colleges, public	1957/58	39	1 459	...}	57 838	17 419
	Teacher training faculties in national universities	1957/58	7	3 311	...}		
	Total	**1957/58**	**46**	**4 770**	...	**57 838**	**17 419**
	,,	1956/57	46	4 762	...	60 335	17 970
	,,	1955/56	46	...	...	60 914	17 881
	,,	1954/55	46	...	...	[11]...	[11]...
	,,	1953/54	46	4 632	...	[11]...	[11]...

1. Kindergartens only.
2. Not including 1,879 (F. 845) part-time teachers, as follows: public elementary schools—1,418 (F. 562); private elementary schools—461 (F. 283).
3. Not including part-time teachers, as follows: 1957/58—1,879 (F. 845); 1956/57—1,478 (F. 426); 1955/56—2,176 (F. 1,042); 1954/55—2,211 (F. 1,068); 1953/54—2,046 (F. 928).
4. Including teachers of the vocational schools, but not including part-time teachers, as follows: public lower secondary schools—3,257 (F. 1,002); public general courses of upper secondary schools—11,214 (F. 2,868); private lower secondary schools—6,559 (F. 2,536); private general courses of upper secondary schools—8,803 (F. 2,408).
5. Including teachers of the vocational schools, but not including part-time teachers, as follows: 1957/58—29,833 (F. 8,814); 1956/57—29,126 (F. 8,151); 1955/56—28,700 (F. 8,177); 1954/55—30,094 (F. 8,028); 1953/54—30,176 (F. 7,678).
6. Not including part-time pupils, as follows: public general courses of upper secondary schools—263,816 (F. 81,455); private general courses of upper secondary schools—13,457 (F. 2,920).
7. Not including part-time pupils, as follows: 1957/58—277,273 (F. 84,375); 1956/57—282,691 (F. 81,615); 1955/56—282,386 (F. 76,550); 1954/55—291,061 (F. 73,684); 1953/54—304,265 (F. 72,445).
8. Included in secondary general education.
9. Including part-time pupils, as follows: public agriculture courses—63,186 (F. 12,851); public fishery courses—1,405 (F. 274); public industry courses—61,071 (F. 120); public commercial courses—62,003 (F. 14,659); public home-making courses—48,422 (F. 48,422); private agriculture course—103 (F. nil); private industry course—14,010 (F. 13); private commercial courses—8,821 (F. 1,314); private home-making course—221 (F. 221); other private courses—145 (F. nil).
10. Including part-time pupils as follows: 1957/58—259,387 (F. 77,874); 1956/57—258,263 (F. 77,122); 1955/56—252,262 (F. 71,457); 1954/55—258,173 (F. 71,978); 1953/54—262,683 (F. 69,770).
11. Enrolment in higher teacher training institutions is included with that in higher general and technical education.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Higher [cont.] *General and technical*	Universities and colleges, public	1957/58	99	32 578	1 174	157 894	13 294
	Universities and colleges of old system, public	1957/58				3 738	149
	Junior colleges, public	1957/58	58	2 518	256	15 268	5 300
	Universities and colleges, private	1957/58	124	22 767	1 560	348 722	40 439
	Universities and colleges of old system, private	1957/58				777	45
	Junior colleges, private	1957/58	211	10 521	2 444	57 869	39 148
	Total	**1957/58**	**492**	**68 384**	**5 434**	**584 268**	**98 375**
	,,	1956/57	490	67 024	5 040	569 504	95 573
	,,	1955/56	487	64 005	4 737	548 871	89 824
	,,	1954/55	475	60 598	4 358	[11]581 056	[11]97 658
	,,	1953/54	454	57 899	3 995	[11]536 087	[11]83 751
Special	Schools for the blind	1957/58	76	2 103	648	9 864	3 917
	Schools for the deaf	1957/58	101	3 326	1 555	20 044	9 255
	Schools for physically and mentally handicapped	1957/58	19	194	80	1 701	768
	Special classes in ordinary schools	1957/58	(1 434)	...	...	23 069	10 419
	Total	**1957/58**	**[12]196**	**[13]5 623**	**[13]2 283**	**54 678**	**24 359**
	,,	1956/57	[12]186	[13]5 296	[13]2 177	53 899	23 915
	,,	1955/56	[12]181	[13]5 106	[13]2 132	52 597	23 739
	,,	1954/55	[12]178	[13]4 796	[13]2 019	47 313	21 336
	,,	1953/54	[12]175	[13]4 493	[13]1 895	44 935	20 387

12. Not including special classes in ordinary schools.

13. Not including teachers in special classes; they are included with those of the regular schools to which these classes are attached.

3. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	714 690	52	288 681	18	45 084	31			
1931	698 811	52	292 015	18	39 990	31			
1932	691 198	52	300 119	18	37 906	32	1 051	6 553	*16*
1933	699 068	53	316 845	19	33 831	32			
1934	719 927	54	342 914	20	31 526	33			
1935	752 783	55	397 687	23	30 942	34			
1936	784 873	55	434 346	24	31 571	34			
1937	818 909	55	470 088	24	32 379	34	1 332	6 861	*19*
1938	859 923	56	507 629	25	35 131	33			
1939	910 580	56	554 457	25	39 642	34			
1940	987 877	56	624 699	25	44 765	35			
1941	1 093 032	56	631 565	28	47 572	35			
1942	1 205 320	56	680 054	26	51 741	34	1 959	7 532	*26*
1943	1 364 069	55	794 217	22	6 268	25			
1944	1 439 518	57	826 309	26	—	—			
1945	1 515 570	58	845 497	29	—	—	2 397	8 013	*30*
1946	1 655 955	57	776 409	25	—	—			
1947	4 952 600	49	312 724	22	—	—			
1948	[1]6 005 568	[1]46	...	..	—	—	6 019	8 423	*71*
1949	6 219 755	48	565 155	22	—	—			
1950	6 578 641	48	664 909	24	—	—			
1951	6 520 452	48	780 663	27	—	—			
1952	6 531 865	48	863 380	30	—	—	7 564	8 667	*87*
1953	6 712 411	48	977 749	33	—	—			
1954	7 185 173	49	1 004 701	34	—	—			
1955	7 421 785	49	1 033 522	35	—	—			
1956	7 557 242	49	1 089 974	36	—	—	8 567	8 750	*98*
1957	7 422 600	49	1 177 332	37	—	—			

Note. Since 1943, teacher training courses have been at higher education level. An overall reform of the school system took place in 1947.

1. Enrolment in general and vocational education together.

4. EDUCATIONAL FINANCE, 1957/58 (in thousand yen)[1]

A. RECEIPTS BY SOURCE (PUBLIC SCHOOLS)

	Amount
Total receipts[2]	**458 723 904**
Central Government	146 587 073
Provincial governments[3]	184 351 404
Local authorities[3]	100 200 641
Other receipts from parents	13 995 524
Gifts, endowments, etc.	4 674 031
Other sources not specified	8 915 231

B. EXPENDITURE BY PURPOSE (PUBLIC SCHOOLS)

	Amount	
Total expenditure[2]		**458 723 904**
Recurring expenditure		370 899 043
For administration or general control	25 382 660	
For instruction[4]		
Salaries to teachers, etc.	211 473 526	
Other instructional expenditure	23 089 982	
Other recurring expenditure[4]	67 181 747	
Higher education[5]	43 771 128	
Capital expenditure		81 138 298
Debt service		6 686 563

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION (PUBLIC SCHOOLS)

	Amount		Per cent
Total recurring expenditure		**370 899 043**	**100.0**
Administration		25 382 660	6.9
Central administration	11 082 216		3.0
Local administration	14 300 444		3.9
Instruction[6]		284 935 817	76.8
Pre-primary education	1 596 013		0.4
Primary education	117 088 195		31.6
Secondary education[7]	113 512 511		30.6
Higher education[6]	43 771 128		11.8
Special education	2 366 789		0.6
Adult education[6]	6 164 467		1.7
Other education not specified[6]	436 714		0.1
Other recurring expenditure[8]		60 580 566	16.3
Operation and maintenance of plants	27 359 930		7.38
Auxiliary services	7 313 916		1.98
Fixed charges	25 903 075		6.98
Transfer to non-public schools	3 645		0.0

D. RECEIPTS BY SOURCE (PRIVATE SCHOOLS)

	Amount	
Total receipts[2 9]		**68 758 794**
Central and provincial governments and local authorities		691 741
Tuition fees		39 623 832
Gifts, endowments, etc.		7 970 792
Other sources		20 472 429
Income from hospitals and farms	4 418 173	
Income from commercial operations	353 517	
Bonds	9 796 141	
Other, not specified	5 904 598	

E. EXPENDITURE BY PURPOSE (PRIVATE SCHOOLS)

	Amount
Total expenditure[2 10]	**67 382 381**
Recurring expenditure	48 262 182
Capital expenditure	13 328 113
Debt service	5 792 086

F. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION (PRIVATE SCHOOLS)

	Amount		Per cent
Total recurring expenditure		**48 262 182**	**100.0**
Central administration		10 339 393	21.4
Instruction		37 922 789	78.6
Pre-primary education	3 650 738		7.6
Primary education	434 868		0.9
Secondary education	7 979 564		16.5
Higher education	16 296 441		33.8
Special education	35 174		0.1
Adult education	9 526 004		19.7

1. Official exchange rate: 100 yen = 0.28 U.S. dollar.
2. Closed account.
3. Includes tuition fees.
4. Not including higher education.
5. Includes 'instructional' and 'other recurring expenditure'.
6. Includes 'other recurring expenditure'.
7. Includes general, vocational and teacher training education.
8. Not including expenditure for higher, adult and other education.
9. Not including a balance of 2,626 million yen carried over from the previous year.
10. Not including a balance of 4,003 million yen carried over into the following year.

JORDAN

THE EDUCATIONAL SYSTEM

'Jordan is a part of the Arab homeland, and the Jordanian people are a part of the Arab nation. Jordanians are equal before the law and there is no discrimination among them as regards rights or duties, despite their racial or religious differences. Within the limits of its powers, the State ensures employment and education and provides security and equal opportunities for all.' This general philosophy, laid down in Articles 1 and 6 of the Constitution, is the basis of Jordan's educational system, which aims at 'providing educational opportunities for the people, developing the individual's personality and civic responsibility and bringing up a generation which is sound in body, religious belief, thought and character, fully conscious of its duty towards God and the homeland and actively contributing to the advancement of the country'. (Article 3 of the General Law of Education, No. 20, of 1955.)

The educational system comprises the following stages: (a) primary—6 classes, ages 7 to 13. Under Article 20 of the Constitution, primary education is compulsory for Jordanians and free in government schools; (b) intermediate (lower secondary)—3 classes, ages 14 to 16; (c) upper secondary—2 classes at present, but 3 as from 1961, ages 17 to 19.

At the end of each stage, a public examination is held by the Ministry of Education as a basis for selecting entrants to the succeeding stage. Successful candidates in the upper secondary examination are awarded the Secondary Education Certificate, which qualifies for entrance to university.

Most Jordanian pupils study in government schools run by the Ministry of Education. There are also schools operated by the Ministries of Defence, Social Affairs and Agriculture, or the Waqfs (Religious Foundations) Department, and a number of private schools some of which are Jordanian (Muslim or Christian) and some foreign. Jordan is host country to a large number of Palestine Arab refugee children, the majority of whom attend schools run jointly by the United Nations Relief and Works Agency (UNRWA) and Unesco (see special chapter at the end of the book).

The General Law of Education of 1955 lays down that all schools in Jordan are subject to the supervision of the Ministry of Education (Article 34). Private schools, whether national or foreign, must teach Arabic, history, geography and civics, in accordance with the syllabuses and aims of the Ministry of Education. Teaching and examinations in these subjects must be conducted in Arabic and under the supervision of the Ministry (Article 33). The Ministry of Education is responsible for laying down general policy for the various stages of the educational system; it does so after due consultation with the Supreme Educational Council, a purely advisory body composed of a number of eminent Jordanian educationists, and with the various educational organizations (Article 26).

THE DEVELOPMENT OF SECONDARY EDUCATION

In recent years secondary education in Jordan has expanded greatly and undergone many changes. Whereas in 1945 there were only 5 schools at this level there are at present (1959–60) more than 230, with over 50,000 pupils, boys and girls.

The greatest development occurred in 1949–50, when Jordan was called upon to provide education for Palestine refugee children, a responsibility taken over by UNRWA on 1 May 1950. As a result of the incorporation of part of Arab Palestine with Jordan and the increase in population, in addition to the increase caused by the influx of refugees, there has been an expansion in private secondary schools; the number of these schools and of their pupils has increased more than tenfold since the period prior to 1945.

In 1952 secondary education was still purely academic and paid no regard to the individual aptitudes and abilities of the pupils. The Ministry of Education recognized the necessity of providing diversified secondary schooling but for financial reasons could not bring this about, and had to be content with establishing commercial, agricultural or industrial classes, according to local requirements, in the already existing schools. At the same time, the Ministry expanded the Industrial School at Amman and the Khuduri Agricultural School at Tulkarm, both government schools, enabling them to accommodate 150 new boarders every school year, a figure which is still only a very small proportion of the number of applicants.

As a step towards the solution of this problem, the Ministry proposes, as part of its 6-year plan (which is now under the joint consideration of the Ministry, the Supreme Educational Council and the Cabinet), to establish 6 upper secondary agricultural schools and another 6 upper secondary industrial schools, 1 school of each type for almost every province. The Ministry also proposes to give an agricultural, industrial or commercial bias to the courses in a fairly large number of intermediate schools (the exact number has not yet been agreed upon) so as to make it possible for the more able graduates of these intermediate schools to continue their studies at the corresponding type of school—agricultural, industrial or commercial—at the upper secondary stage.

Until 1959 secondary education was accessible to all who reached that level of schooling, but the number of secondary school leavers increased to such an extent that the Government found itself unable to ensure employment for all of them. To meet this problem the Law of Education of 1955, which fixed the aims and duration of secondary education (Articles 15 and 16), had stipulated in Article 17 that the admission of pupils to the intermediate stage after passing the Primary School Certificate or equivalent examination was to be determined by their relative degree of success and the Ministry's ability to provide places. While Article 17 thus tended to limit the number of

possible entrants, this varied from province to province and in some cases ranged from 85 to 90 and even 95 per cent of the primary leavers.

In 1958–59 the Ministry promulgated a law providing that applicants who had completed the primary stage should also sit for a special entrance examination. This system was applied at the end of that year and the number of pupils admitted to the intermediate stage was reduced to 75 per cent of the total number of applicants.

In the same year (1958–59), the Ministry promulgated another law stipulating a similar examination—the General Intermediate Certificate examination—for pupils wishing to join class 1 of the upper secondary school after completing class 3 of the intermediate stage. This law will come into force as from the end of the 1959/60 school year.

At the end of 1959 the upper secondary course was extended from 2 to 3 years and provision was made for classes 2 and 3 to be divided into two sections, literary and scientific. New curricula have been laid down. The curricula and regulations concerning class 1 of the upper secondary stage were put into effect at the beginning of the school year 1959/60; those concerning classes 2 and 3 (including both the literary and scientific sections) will come into force in 1960/61 and 1961/62 respectively.

These various measures aim at ensuring that secondary school entrants shall be of good quality, and at raising the standard of the Secondary School Certificate examination, thus increasing the likelihood of success later at the university.

Administration

Control of secondary education is exercised by the Ministry of Education, which issues regulations governing the establishment of government schools, the organization of the various types of course, the appointment of teachers, curricula, examinations, choice of textbooks, school holidays, etc. The Ministry sees to the carrying out of regulations through its inspectorate, which comprises administrative and technical inspectors.

In each of the seven provinces into which the country is divided, the Ministry of Education is represented by an administrative inspector, who is the director of education for the province. The administrative inspector provides educational facilities either by establishing new schools or creating new classes in existing schools, informs the schools of all regulations and instructions issued by the Ministry, and reports to the latter on all matters concerning the work of the schools in his area. Headmasters of government schools are directly responsible to the administrative inspector. In carrying out his duties the latter has a staff of assistants who visit primary and intermediate schools in the area. He is also entitled to the co-operation of the officers in charge of the various local units of administration: the governor (*mutaṣarrif*) of the province (*liwā'*), the lieutenant-governor (*qā'im maqām*) of the region (*qaḍā'*), the head of the district (*nāhiyah*), and to the co-operation of the municipal or local council, the provincial engineer, the local medical officer, etc., on matters concerning the schools.

The technical inspectors have their headquarters at the Ministry of Education in Amman. Most of them (there are at present some 20 in all) are subject specialists, and there is at least one specialized inspector for each subject of the curriculum. They visit classes to assess the teaching and the standard of the pupils' work, and to study the suitability of the curricula and textbooks. They give advice to the teachers and report on their work; copies of these reports are sent to the teachers concerned. Technical inspectors also attend meetings called by the Minister of Education or the head inspector to discuss curricula, textbooks, etc., and make recommendations. They also co-operate with the administrative inspectors (provincial directors of education) in arranging in-service training courses, especially for new teachers, and examining the results of these courses.

While the foregoing paragraphs refer particularly to government schools, the Ministry of Education also exercises general control over private education. As regards curricula and examinations, the principal conditions under which private schools are allowed to operate have already been mentioned. On the administrative side, private agencies wishing to establish a school must obtain a licence from the Ministry of Education and furnish information on the sources of their finance. While completely free as regards internal administration, formation of classes and appointment of teachers, private schools are subject to the technical supervision of the Ministry of Education.

UNRWA operates 12 secondary schools in Jordan, with about 5,000 pupils. It has its own administrative system and administrative and technical inspectors, but it works along the same lines as the Ministry of Education and observes all ministry regulations regarding curricula, textbooks, etc.

Other Jordanian ministries running schools at secondary level usually have their own inspectors but use the curricula and textbooks prescribed by the Ministry of Education.

Finance. The State bears over 90 per cent of the expenditure on government-controlled education. In the Ministry of Education budget the most important items of expenditure are salaries of the ministry's administrative and technical staff and of teachers, cost of textbooks and stationery, rent of school buildings, pensions and educational missions abroad. Items which have shown a notable increase in the last 3 years include expenditure on educational missions abroad, on teacher training colleges and on technical education. Thus the increase in 1958/59 over the expenditure for the previous year was of the order of 15 per cent for teacher training colleges (which supply a large number of teachers for intermediate and upper secondary as well as primary schools) and of 17.5 per cent for technical education. The budget of the Ministry of Education as a whole has risen steadily over the last 20 years. Whereas in 1940 it did not exceed 100,000 dinars, it has now reached 2,931,301 dinars. The following table gives each annual budget of the Ministry during the past 7 years and shows what percentage this was of the state budget.

In addition to the allocation from the state budget to the Ministry of Education, there are certain other sources of educational revenue which do not constitute a part of the Ministry's budget.

Municipal Education Tax. Municipal councils in towns (and local councils in villages) collect from the people an

EDUCATION AND STATE BUDGETS 1952–58

School year	Budget of Ministry of Education (in dinars)	Percentage of state budget
1952/53	318 494	4
1953/54	385 566	7
1954/55	1 073 817	7
1955/56	1 270 521	7.1
1956/57	1 715 012	7.4
1957/58	2 114 600	7.2
1958/59	2 931 301	8.3

income tax not exceeding 3 per cent, called the Municipal Education Tax. Proceeds are spent on salaries of additional teachers required to bring the staff of the local school up to strength, the construction of new classes or playgrounds, etc. Expenditure of this sort must be authorized by the Municipal Educational Committee, which is headed by the local administrative officer and includes among its members the educational inspectors in the province and the head of the municipal or local council. Proceeds from the Municipal Education Tax in 1958/59 in all towns and villages throughout the country amounted to 250,000 dinars, i.e., nearly 10 per cent of the ministry's budget.

Village collections. Contributions are collected from the inhabitants of village which have no municipal or local councils. They are collected by the mayor, by permission of the local administrative officer who acts on the recommendation of the provincial director of education.

The 'School Fund'. Education is free in all government schools but token fees have been collected from pupils for the last few years as contributions towards the School Fund. The amount of these fees varies according to the class: in primary classes 1, 2 and 3, the pupil pays 150 milliemes; in primary classes 4, 5 and 6, 250 milliemes; and in intermediate and upper secondary classes, 750 milliemes. The ministry has recommended all school headmasters to take into consideration every pupil's financial ability and to exempt poorer pupils, on condition that the proportion of exempted pupils does not exceed 50 per cent of the total enrolment. The money raised is spent on library books, laboratory equipment, teaching aids, school societies (literary, scientific, social or athletic), etc., or is used to meet some urgent school need. Such expenditure is authorized by a committee of school teachers presided over by the headmaster. The ministry's permission must be sought whenever any single expenditure exceeds 5 dinars.

United Nations Relief and Works Agency. In some districts a number of refugee children, especially those at upper secondary level, are enrolled in schools coming under the control of the Jordanian Ministry of Education. The ministry receives from UNRWA $7 for each refugee child enrolled in a government primary school and $ 40 for each refugee pupil at a government intermediate or upper secondary school; the number of refugees who may attend government intermediate and secondary schools is limited to 5,000. This contribution does not constitute a part of the ministry's budget, but is kept in a special account. It is spent on salaries of temporary teachers, wages of additional caretakers, and free textbooks and exercise books.

Point Four. In 1959 Point Four gave assistance to the Ministry of Education worth $ 544,785 in the form of specialists, educational missions, books and school buildings.

United Nations Educational, Scientific and Cultural Organization. In the same year, Unesco provided assistance to the ministry worth $ 55,500 in the form of specialists, educational missions and equipment.

The Ministry of Defence earmarks about 88,100 dinars, i.e., 0.41 per cent of the Defence Budget, for its schools. Pupils normally pay a fee of 100 milliemes a year, but poorer pupils are exempt.

The Ministry of Social Affairs spends 65,935 dinars on its schools, i.e., 28.5 per cent of its budget. No fees are paid by the pupils, who also receive free textbooks, stationery, and free meals.

Buildings and equipment. At the beginning of 1959/60, there were over 1,500 schools throughout the country. Seventy per cent of these schools are run by the Ministry of Education which, however, does not own more than 70 per cent of the buildings of its own schools, the remaining 30 per cent being rented. Although the ministry's budget includes an item for rent of school buildings, construction and repair of school buildings belonging to the Government are the responsibility of the Ministry of Public Works.

In the past 5 years also, Point Four has built a number of teacher training colleges at Amman and Ramallah as well as a number of new buildings for the Khaduri Agricultural School at Tulkarm. The Ford Foundation gave about $ 250,000 to build the Rural Teacher Training College at Hawarah, Irbid.

Equipment in Ministry of Education schools (including furniture, books, stationery, laboratory apparatus and sports equipment) is supplied by the ministry itself and special allocations are earmarked for this purpose in the ministry's annual budget. Point Four and Unesco, however, have also helped to supply laboratory equipment and facilities for technical education.

School welfare services. The Ministry of Health arranges for all pupils to be medically examined once a year and provides free medical treatment to pupils and teachers alike.

Pupils who cannot afford to buy textbooks are lent them by the Ministry of Education.

TYPES OF SECONDARY EDUCATION

General secondary schools

Intermediate schools. After the successful completion of the 6-year primary school, pupils enter upon the intermediate stage of education which covers a period of 3 years (ages 14 to 16).

Intermediate school subjects are the same as for the primary stage, with the addition of 4 hours a week of technical training for boys and domestic science for girls. The time-table for each of the 3 years is as follows, with the number of periods per week in parentheses: religion (3), Arabic (6), English (7), arithmetic (2), geometry (2),

algebra (2), physics (3), chemistry (1), biology (1), history (2), geography (2), domestic training—girls (4), technical training—boys (4), physical education (2), library period (1); there is an additional period per week in the third year for civics.

The technical training in boys' schools may be either industrial, agricultural or commercial.

Industrial training, which is at present provided in about 30 schools, most of them situated in the principal towns, covers carpentry, blacksmithing, book-binding and straw and bamboo work. Training in weaving is available in one intermediate school only. Two hours a week are devoted to theoretical subjects (technology and drawing—geometrical and technical) and the other 2 hours to practical work.

Agricultural training, provided in 69 schools situated in villages and small towns, is likewise divided into 2 hours for theoretical teaching and another 2 for practical work.

Commercial training takes place in 43 schools; it comprises 2 hours a week for book-keeping, 1 hour for general commercial knowledge, and 1 for commercial correspondence.

Domestic training, which takes place in all girls' schools, is divided into 2 hours for homecraft training and another 2 for drawing and handicraft.

As was previously mentioned, the 6-year plan envisaged developing the industrial bias in a number of town schools so that the majority of leavers would be able to earn their living as semi-skilled workers, and the more able would continue their education at the projected industrial upper secondary schools. Similarly the agricultural bias would be strengthened in a number of village and small town schools in order to train the majority of leavers to earn their living as agricultural workers and enable the better pupils to continue their education at the projected agricultural upper secondary schools. The remaining intermediate schools are to continue their present general course which gives a general preparation for earning a living or qualifies leavers to enter the upper general secondary school. Girls' intermediate schools are to keep their non-technical character as a whole, but more interest is to be given to domestic training and also, in rural areas, to training in simple agricultural industries.

The organization of the school calendar is the same for all schools throughout the country. The school year begins in October and ends in June; it is divided into three terms with one mid-year vacation.

The school day is from 8.15 a.m. to 3.30 p.m., with a luncheon interval of 1½ hours and a break of 15 minutes at 10 a.m. On Thursday, however, the school day is from 8.15 a.m. to mid-day. The school week is from Saturday to Thursday, the weekly holiday being on Friday. The schools of Jerusalem, Bethlehem and Beit-Jālā, and Christian and foreign private schools, observe both Friday and Sunday as weekly holidays, but their working day during the rest of the week, including Thursday, is from 8 a.m. to 3.30 p.m.

Upper secondary schools. At present the upper secondary stage is a 2-year course but it will be extended to 3 years (ages 17 to 19) as from the school year 1961/62.

Curricula in almost all upper secondary schools are of a general character; the full 3-year programme, with differentiation into literary and scientific sections in the second and third year classes, is given below.

TIME-TABLE FOR UPPER SECONDARY SCHOOLS

(in periods per week; where there is a difference between boys' schools and girls' schools the time allotment for girls is given in parentheses)

Subject	1st	Literary section		Scientific section	
		2nd	3rd	2nd	3rd
Religion	3	3	3	3	3
Arabic	7	8	8	5	5
English	7	8	8	5	5
History	2	—	—	—	—
Arab history	—	2	2	—	—
General history	—	3	3	—	—
Civics	1	—	—	—	—
Geography	2	—	—	—	—
Geography of Arab world	—	2	2	—	—
General geography	—	2	2	—	—
Arab homeland	—	—	—	2	2
Sociology and philosophy	—	2	2	—	—
Economics	—	1	1	—	—
Mathematics	4	—	—	7	6
Physics	3	—	—	4	3
Chemistry	2	—	—	3	3
Biology	2	—	—	3	3
General science	—	2 (0)	2 (0)	—	—
Domestic science	— (2)	— (3)	— (2)	— (3)	— (2)
Library period	1 (0)	1	1	1	1
Physical education and military training	2 (1)	2 (1)	2 (1)	2 (1)	2 (1)
Special subject	—	—	—	—	3
Total	36	36	36 (35)	35 (37)	36 (37)

A Secondary School Certificate examination is held at the end of this stage. Pupils are required to pass in 5 subjects but they may choose to be examined in additional subjects, success in which is indicated on the certificate. National and foreign private schools also prepare pupils for the General Certificate of Education (England). Three private schools prepare for the Egyptian Secondary School Special Examination; the papers are set in Cairo and answers are also marked there. Successful candidates may enrol at the various colleges of Egyptian universities, subject to their passing at a sufficiently high level to satisfy entrance requirements. Schools run by the Jordanian Ministry of Defence prepare pupils for entry to the Military College or for upper secondary education leading to the Secondary School Certificate examination.

The Islamic Affairs Council supervises one secondary school which uses the same curricula and textbooks as do the Ministry of Education secondary schools. In addition, courses in Islamic religion and law are given in higher classes. This school is now known as the College of Sharī'a (Islamic Law) and it is intended to transform it into a 4-year university college.

Vocational and technical schools

Commercial schools. Six schools (in Amman, Irbid, Nablus, Ramallah, el-Karak and al-Khalil) provide commercial education at upper secondary level, and there are seven girls'

schools which give training in Arabic and English typing. In the first year of commercial secondary school the subjects taught (with the number of periods per week in parentheses) are: book-keeping (3), business management (1); commercial accounting (1), Arabic and English typing (3). In addition, the subjects of general secondary school are taught, except physics, chemistry and biology, making a total of 36 periods a week. In the second year, commercial subjects are: accounting and book-keeping (4), commercial practice and business management (3), commercial correspondence (2), commercial arithmetic (1), Arabic and English typing (2). The remaining 24 hours are allotted to general subjects.

In 1961 the six secondary schools containing commercial sections will have a 3-year course of general and technical subjects qualifying for university entrance. New curricula are being prepared.

Agricultural schools. All the pupils in these schools are boarders. *The Khaduri Agricultural School at Tulkarm.* The course lasts 3 years and is open to pupils who have completed the intermediate stage. The curriculum is wholly devoted to agriculture and covers both theoretical and practical training. The school extends as much help as it can to farmers in the Tulkarm and other areas by giving technical advice and offering for sale at low prices plants and seed which the farmers cannot produce for themselves. The school was the first organization in the country to succeed in increasing the production of olive tree shoots through the use of improved seed, thus enabling farmers to obtain a sufficient number of shoots at reasonable prices. The school has also established an agricultural research unit.

The el-Rubbah Agricultural School at the el-Rubbah village in the al-Karak province is an agricultural intermediate school controlled by the Ministry of Agriculture, and is open to pupils who have completed their primary education at government schools. The period of study is 3 years, followed by an optional fourth year. Pupils who successfully complete the first 3 years are granted the Intermediate Agricultural Certificate, which is equivalent to the third year certificate in government intermediate schools.

The el-Jubeihah Agricultural College, near Amman, is controlled by the Ministry of Agriculture. It was formerly an intermediate school like the one at el-Rubbah, but the Ministry of Agriculture has transformed it into a semi-university college with 4 years of study, the first 2 at upper secondary level and the following 2 equivalent to university study. The college is open to pupils who have obtained a very good pass in the third intermediate year with a mark of at least 70 per cent in mathematics and physics. The curriculum for the two upper secondary classes of this college resembles to some extent the course for the corresponding 2 years in general secondary schools, with the addition of certain agricultural subjects. In the remaining 2 years (university level) the curriculum is purely agricultural. Graduates are granted a Higher Diploma in Agricultural Sciences. The Ministry of Agriculture plans to expand this college so as to transform it into a full 4-year university college preparing students for the B.Sc. (Agriculture).

Industrial schools. The Amman Industrial School belongs to the Ministry of Education. Its 3-year course is open to pupils who have successfully completed the third intermediate year. All pupils are boarders. Apart from Arabic, English, mathematics, physics and religion (the syllabuses of all of which are similar to corresponding syllabuses in general secondary schools), pupils study drawing (geometrical and technical), industrial accounting and technology. Training is given in carpentry, automobile mechanics, electricity, soldering or plumbing, according to the pupil's choice. Apart from their school work, first-year pupils are given training at local factories during the summer vacation by special arrangement between the school and factory authorities.

There is also an optional fourth year, qualifying pupils to become technical teachers in primary and intermediate schools.

During the past two years the school, in co-operation with a number of local firms and factories, has provided special evening courses at its own workshops for local workers engaged in the crafts mentioned above.

Other vocational schools. These include a number of institutions run by the Ministry of Social Affairs. The Reformatory School for Boys, at Bethlehem, to which young offenders aged 9 to 18 are sent by juvenile courts for periods of from 1 to 4 years, and the Juvenile Welfare Institution, at Ramallah, for homeless boys aged 7 to 15 years who are committed to the care of the institution on the recommendation of social welfare workers, provide general education up to the level of the fourth year in government primary schools and also a certain amount of trade training (tailoring, carpentry, shoemaking, etc.).

The el-'Alā'iyyah School for the Blind at el-Bīrah admits pupils under the age of 18. In addition to a full primary education, from which pupils may enter ordinary secondary schools, the school provides training in a number of light crafts, such as the manufacture of baskets, brushes and chairs of straw or bamboo. They also receive training in typing and in Braille writing and reading. It is intended to create a secondary section for advanced technical training which would qualify the pupils to earn their living after leaving the school.

The Girls' Welfare Institution at Beit-Jālā receives not only girls convicted under the Juvenile Rehabilitation Law of 1954, but also any other girls of 12 to 16 years of age, who may spend a whole year there at the ministry's expense learning sewing, embroidery and needlework, housework and child care. There are also girls' clubs at Amman and Nablus open to impecunious girls who were unable either to join schools at all or to complete their education. Education up to the standard of the fifth year of government primary schools is provided, together with training in sewing, embroidery, needlework and housework. A daily lunch, clothes, textbooks and other school equipment are provided free.

The Islamic Orphans' School at Jerusalem, which is supervised by the Islamic Affairs Council, has a primary section and a post-primary section providing a 5-year course of industrial training in carpentry, upholstery, printing and book-binding, bamboo work or shoemaking, according to the pupil's choice.

The Salesian Fathers' School for Industry and Applied Arts, in Jerusalem, is open to pupils who have completed their sixth primary year. Fees are payable but there is provision for payment of half fees or complete exemption, according to the financial possibilities of the pupils. The period of study is 5 years, during which pupils receive general education together with training in fitting, lathework and blacksmithing, carpentry, tailoring, or shoemaking, according to the pupil's choice. The general subjects taught in all the 5 years are Arabic, English, mathematics, Italian, geography, physics, chemistry, drawing, technology and Christian religion.

The Qalandiya Industrial School, Jerusalem, is supervised by UNRWA. It gives training in building and plumbing; electrical wiring, cables, etc.; carpentry and blacksmithing; fitting and turning and auto mechanics; technical drawing, and radio and electricity; commerce; and land surveying. In each course, general subjects related to the craft concerned are also taught. The school is open to Palestine Arab refugee pupils who fulfil the various requirements specified above. All pupils are boarders and pay no fees.

The Lutheran Industrial School, at Jerusalem, is open to refugee pupils, preference being given to orphans; they must normally have completed the sixth primary year. The period of study is 3 years, during which teaching in a number of general subjects such as Arabic, English, mathematics and Christian religion (for Christian pupils) is coupled with training in either carpentry or blacksmith's work.

Out-of-class activities

These vary from province to province and from school to school, according to the efforts of the administrative inspectors (provincial directors of education) and of school teachers. They take the following form: (a) The election by the pupils, under the supervision of the school authorities, of special school committees, each of which has a member of the teaching staff as a guide and adviser. These committees include the sports committee, which is concerned with football, basket-ball, badminton, tennis, table-tennis, etc., the cultural committee, which arranges speech contests, debates and dramatic performances and publishes the school magazine, and the social committee whose activities include organizing excursions to places of interest. (b) School societies; these are still extremely limited, being confined to co-operative societies and to Friends' Clubs in the villages. (c) Boy Scouts and Girl Guides, in most secondary schools.

It is hoped that the various committees and societies in each school will develop into an independent students' union. The next step on this democratic path would then be a general union of students representing all schools.

TRENDS AND PROBLEMS

Like other underdeveloped countries, Jordan still suffers from the inadequacy of its administrative machinery. The Ministry of Education, although its organization has been greatly improved, still needs in particular a special department responsible for secondary education and a planning department. One result of the lack of these specialized departments is seen in the fact that intermediate and upper secondary education are still predominantly general in character. The 6-year plan to diversify education during these two stages into general, agricultural, industrial, commercial and home economics courses has already been referred to in this report.

Teacher training. Jordan also suffers from a shortage of qualified teachers, especially at the intermediate and upper secondary stages. The present provision for teacher training may be considered under two heads:

1. *Training before employment.* This is carried out by the following training colleges: the Men's Teacher Training College at Amman; the Women's Teacher Training College at Ramallah; the Teacher Training College at el-'Urūb, which trains men and women teachers for urban schools; the Rural Teachers' Training Colleges at Beit Heneina and Hawara, both of which train teachers for rural schools; the Khaduri Agricultural School at Tulkarm, where a special class has been established to train teachers of agricultural subjects; and the Industrial School at Amman, which similarly has a class for teachers of industrial subjects. In 1959/60, the Ministry of Education created a third-year class in each of the first two colleges and will create a fourth-year class in 1960/61; these extended courses will train teachers for secondary schools. The 6-year plan for education envisages the amalgamation of the el-Jubeihah Agricultural School and the Khaduri Agricultural School at Tulkarm into a 4-year agricultural college granting a university degree. Graduates will be qualified to teach in the upper secondary agricultural schools also envisaged by the 6-year plan.
2. *Training during employment.* The Ministry of Education first made use of this method in 1953/54, when nearly 200 men and women teachers were trained. The number has risen each year and nearly 3,500 teachers are estimated to have attended the special training courses in 1959/60.

Apart from teacher training courses inside the country, the Ministry sometimes send teachers for training courses abroad (Egypt, Lebanon, the United States of America, or Europe) for 1 year at least in most cases, at its own expense or with the help of grants from Point Four, Unesco, the United States Information Centre in Amman, the British Council or friendly governments.

Finance. Jordan will continue for some time to be dependent on foreign financial aid in balancing her annual budget. It is therefore not surprising that the budget of the Ministry of Education, though constituting nearly 8.3 per cent of the state budget, cannot meet all demands.

Curricula. Revision of the curricula of general education will be completed this year. When the diversification of intermediate and upper secondary education proposed by the 6-year plan is put into effect, new curricula will have to be drawn up for industrial, agricultural, commercial education and courses for girls.

Textbooks. All textbooks are by Jordanian authors. While the quality of these publications is fairly satisfactory, there is room for improvement both as regards content and literary style and also book production. Three years ago the Ministry tried to take over entire responsibility for the issue of textbooks but was unsuccessful, partly because it was not fully prepared for such a step and partly because of the obstacles raised by authors and publishers alike.

School buildings. A considerable number of present buildings fall short of the health and educational standards required. Libraries, laboratories, workshops and playgrounds are inadequate or almost non-existent in many secondary schools.

[*Text prepared by the Ministry of Education, Amman, in 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 1,580,000.
Area: 37,301 square miles: 96,610 square kilometres.
Population density: 42 per square mile; 16 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58 total enrolment in all schools was about 270,000 or 17 per cent of the population. It was distributed as follows: pre-primary education, 3.6 per cent; primary, 77 per cent; general secondary, 19 per cent; vocational education and teacher training, less than 1 per cent. The proportion of girls was 34 per cent in the primary schools, 20 per cent in secondary schools, and 34 per cent in teacher training colleges. Women teachers were about one-third of all teachers in the primary and secondary schools. Between 1953 and 1957, total enrolment increased by 23 per cent in primary schools, but more than one and a half times in secondary schools. Altogether the number of girls enrolled increased by nearly 50 per cent; this increase was especially notable in the secondary schools, where the number of girls nearly tripled in the 5-year period. (See Table 2.)

Examination results in secondary education, 1953–57. Between 1953 and 1957 there was a fourfold increase in the number of secondary school certificates awarded. The number of girls who received such certificates did not increase at the same rate, since girls received 21 per cent of the certificates in 1953 but only 16 per cent in 1957. The number of matriculation certificates also more than doubled between 1955 and 1957, but again the proportion of girls receiving such certificates showed a slight decline. The number of teacher training certificates awarded showed a slight increase between 1954 and 1957. (See Table 3.)

Educational finance, 1957/58. The budget estimate of the Central Government for 1957/58 (fiscal year beginning in April) showed 2,114,600 dinars for education, of which 95 per cent was for recurring expenditure, and 5 per cent for capital expenditure. The amount for recurring expenditure contains 2 per cent for administrative expenses, 71 per cent for salaries to teachers, etc., 9 per cent for other instructional expenditure, and 17 per cent for other purposes. (See Table 1.)

Source. Jordan: Ministry of Education, reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1957/58 (in dinars)[1]

Expenditure by purpose	Amount	
Total expenditure[2]		**2 114 600**
Recurring expenditure		2 005 100
For administration or general control	49 888	
For instruction		
Salaries to teachers, etc.	1 418 712	
Other instructional expenditure	186 500	
Other recurring expenditure	350 000	
Capital expenditure		109 500
Educational facilities	56 000	
Auxiliary facilities	53 500	

1. Official exchange rate: 1 dinar = 2.80 U.S. dollars.
2. Budget estimate of the Central Government.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergarten, unaided private						
	Total	**1957/58**	**15**	**86**	**19**	**9 480**	**4 300**
	,,	1956/57	14	...	...	9 561	4 276
	,,	1955/56	20	...	...	9 411	4 173
	,,	1954/55	20	...	...	8 176	3 844
	,,	1953/54	...	...	...	9 740	4 739
Primary	Primary schools, public	1957/58	633	3 402	1 051	140 152	43 330
	Primary schools, unaided private	1957/58	292	2 203	1 134	64 967	26 347
	Total	**1957/58**	**925**	**5 605**	**2 185**	**205 119**	**69 677**
	,,	1956/57	825	[1]2 656	[1]788	199 007	64 670
	,,	1955/56	785	[1]1 560	[1]500	195 366	61 249
	,,	1954/55	713	[1]1 306	[1]437	183 452	55 022
	,,	1953/54	695	...	...	166 363	48 303
Secondary *General*	Intermediate schools, public	1957/58	205	1 224	257	30 152	6 661
	Upper secondary schools, public	1957/58	51	392	66	9 016	1 471
	Intermediate schools, unaided private	1957/58	91	518	159	9 152	1 890
	Upper secondary schools, unaided private	1957/58	44	325	42	2 549	401
	Total	**1957/58**	**391**	**2 459**	**524**	**50 869**	**10 423**
	,,	1956/57	[1]230	[1]1 770	[1]356	44 422	8 324
	,,	1955/56	[1]215	[1]2 373	[1]461	35 531	6 226
	,,	1954/55	[1]203	[1]2 061	[1]382	26 536	4 621
	,,	1953/54	...	...	...	19 912	3 620
Vocational	Vocational schools, public	1957/58	7	52	—	520	—
	Vocational schools, unaided private	1957/58	3	38	—	326	—
	Total	**1957/58**	**10**	**90**	—	**846**	—
	,,	1956/57	9	92	—	704	—
	,,	1955/56	7	67	—	605	—
	,, [1]	1954/55	4	32	—	341	—
	,, [1]	1953/54	4	29	—	318	—
Higher *Teacher training*	Teacher training colleges, public						
	Total	**1957/58**	**4**	**32**	**10**	**297**	**102**
	,,	1956/57	4	47	8	195	78
	,,	1955/56	3	34	7	211	71
	,,	1954/55	3	36	6	201	61
	,,	1953/54	3	29	4	163	43
Special	School for blind children						
	Total	**1957/58**	**1**	...	—	**23**	—
	,,	1956/57	1	...	—	27	—
	,,	1955/56	1	...	—	15	—
	,,	1954/55	...	...	—	...	—
	,,	1953/54	...	...	—	...	—

1 Public schools only.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Secondary Leaving Certificate	1 180	247	1 552	292	2 178	429	3 401	534	4 726	774
Matriculation Certificate	...	...	...	...	1 042	172	1 770	260	2 295	320
Vocational School Certificate	54	—	38	—	56	—	58	—	42	—
Teacher Training Certificate	...	...	85	24	109	36	96	35	117	42

THE EDUCATIONAL SYSTEM

The aim of the educational system of the Republic of Korea is to create a democratic and cultured community. The fundamental principles on which the system is based are to be found in the Constitution, which lays down that all citizens shall be equal before the law and have the right to the fullest development of their capacities in all fields of political, economic, social and cultural life. Discrimination based on sex, religion or social position is expressly forbidden. In particular, Article 16 declares: 'All citizens shall be entitled to equal opportunities for education. The attainment of at least an elementary education shall be compulsory and free of cost to the student. All educational institutions shall be administered under the supervision of the State and the organization of the educational system shall be determined by law.'

The Education Law develops these principles:

'The aims of education must be carried out not only in schools or other similar institutions but in all phases of political, economic, social and cultural life, with specific emphasis on civic, science, vocational and teacher training' (Article 3).

'Education, under no circumstances, shall be subjected to political or individual (sectarian) prejudice; no religious education shall be given at a national or local authority school' (Article 5).

'Schools shall be established in accordance with the forms required by law and qualifications obtained by graduates of schools of the same type and level shall be uniform, whether the school be a public or private institution' (Article 7).

In order to guarantee equal educational opportunities for all citizens according to their capacities, both the national and local authorities are required to see that the establishment of schools be carried out with due regard to a suitable geographical distribution of the various types of school; that scholarships or other financial aid be made available to students of superior intelligence who have financial difficulties; and that informal night schools, seasonal schools or schools of a similar nature, be provided for persons who are in employment.

The structure of the school system may be seen in the diagram on page 760.

THE DEVELOPMENT OF SECONDARY EDUCATION

In the modern history of Korea, provisions relating to public secondary education were first set forth in Royal Decree No. 11, promulgated on 4 April 1899. This decree was revised in 1906 when a 4-year course for boys was introduced, to which a preparatory or supplementary course of less than 1 year might be attached. Boys above the age of 12 who had completed the regular primary school or could give proof of an equivalent educational attainment were eligible for admission. The revised decree prescribed the following subjects: morals, Korean language and Chinese classics, history, geography, mathematics, natural history, physics and chemistry, vocational studies, drawing, gymnastics, introductory law and economics, music, Japanese and other foreign languages.

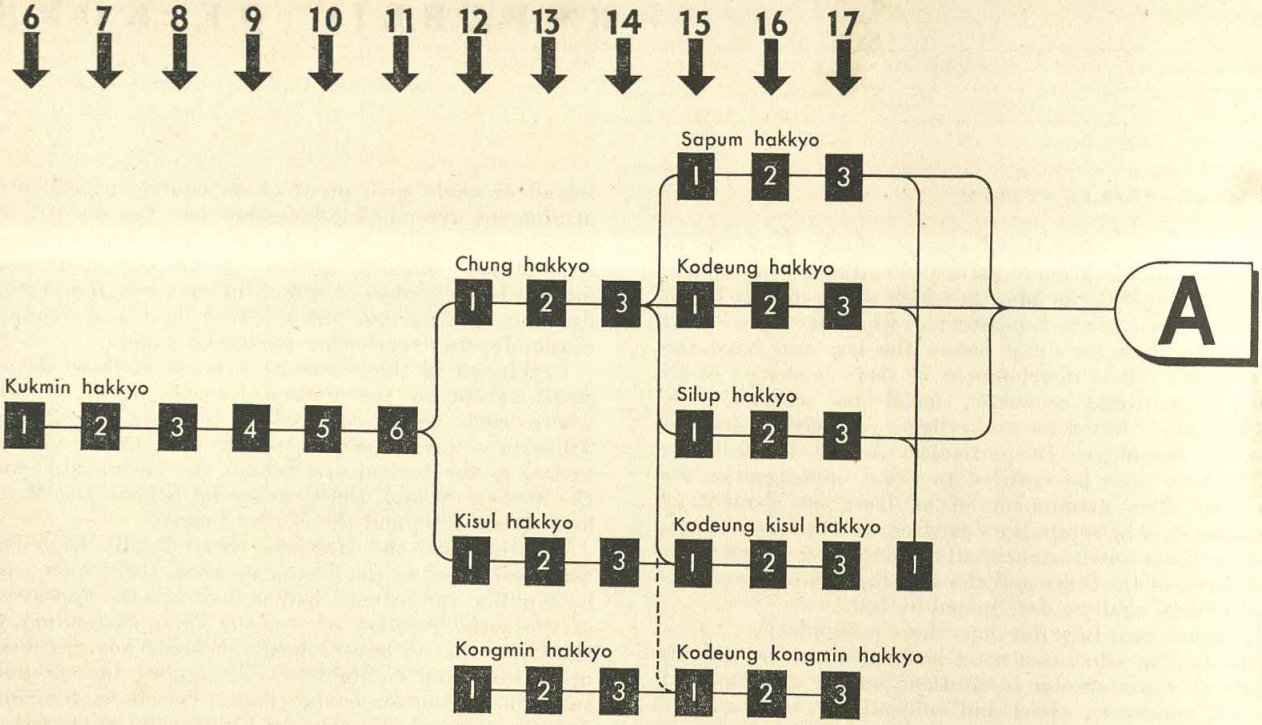
Enrolment in the secondary schools of those days was small except in the normal (teacher training) school, where each pupil received a government allowance. Allowances were later also paid to students in such institutions as the Agricultural School, the Technical Institute, the Medical School, the Commercial School, the Meteorological Institute, and the Mining School.

In May 1908 the Hansong Girls' Public High School was established as the first of its kind. Girls' high schools, both public and private, had as their aim the improvement of the social position of women. Their curriculum, while similar to that in boys' schools, included home economics, needlework and embroidery, etc., among the compulsory subjects, and one foreign language, to be chosen from among English, German, French and Chinese, as an elective.

From 1900, various types of schools were established by religious foundations and by 1910 there were 19 secondary schools among 805 schools run by Christian organizations. These schools were, however, greatly handicapped by the lack of both qualified teaching staff and the necessary teaching aids and equipment.

Though they never accomplished as much as the secondary schools, the *sodang*, the small private teaching institutes located in every village, first set up by the Confucianists, played an important role in their several hundred years of history by bringing enlightenment to the people in remote areas where no secondary schools existed but where the people continued to study the Chinese classics. Until they were suppressed, the *sodang* played a noteworthy role in keeping the people conscious of the importance of learning and in stimulating patriotism when the country was under foreign rule.

For 36 years following the fall of the Yi dynasty, Korea was under Japanese administration. During this period the declared aim of secondary education was to give opportunities for promising Koreans to become leading members of the middle class and, at the same time, loyal citizens of the Japanese Emperor. The main subjects of the secondary school curriculum were morals, the Japanese language, Korean language and Chinese classics, history, geography, mathematics, natural science, drawing, music, gymnastics and English. The subject of vocational studies, covering such activities as agriculture, commerce and handwork, was added in order to put emphasis on respect for physical work, and brush-writing was included to meet the practical requirement of everyday living. In the latter part of the 1930s the teaching of the Korean language was stopped, and after 1941 English and other foreign languages



GLOSSARY

chung hakkyo (middle school): lower general secondary school.

kisul hakkyo (technical school): lower vocational training school preparing for various trades.

kodeung hakkyo (high school): upper general secondary school.

kodeung kisul hakkyo (higher technical school): upper vocational training school for various trades with courses of from 1 to 3 years' duration, and sometimes a 1-year post-high school course in major departments.

kodeung kongmin hakkyo (higher civic school): part-time school providing general education for young people and adults.

kongmin hakkyo (civic school): part-time school providing general education for young people and adults.

kukmin hakkyo (elementary school): primary school.

sapum hakkyo (normal school): teacher training school.

silup hakkyo (vocational school): vocational secondary school of agriculture, commerce, fisheries or home economics or technical high school.

HIGHER EDUCATION

A. University, college, or junior college.

were excluded from the secondary school curriculum. Japanese became the sole medium of teaching, and morals and the Japanese language the chief subjects.

After the Liberation in 1945 it was possible to set about educational reconstruction so as to meet the requirements of the Korean people. In December 1948, following the establishment of the Government of the Republic of Korea in August of that year, the Education Law was promulgated. It provided for 6 years' compulsory education and confirmed the establishment of the 6-3-3-4 system[1] which had already been introduced under the administration of the United States Military Government. However, the new system was not developed fully owing to financial difficulties, and there was also the heavy blow of the Korean war.

Despite all difficulties, secondary education in Korea developed considerably. The curriculum is varied, and adapted to the needs of the community and of the student. The ratio of general to vocational secondary schools, 3 to 7, is well fitted to the nation's present-day requirements.

Legal basis

The aims and nature of the education provided in the various types of secondary school are prescribed in the Education Law (Articles 100–37). The substance of the principal articles is covered by information given in the section on 'Types of secondary education'.

1. Six years of primary school, 3 of middle school, 3 of high school, and 4 of college.

Administration

Administratively, Korea is divided into provinces, and the provinces into districts and cities; Seoul, the capital, is classified as a 'special city' and has the administrative status of a province.

Secondary schools may be established and operated by a local authority (district or city), the special city of Seoul, or by a provincial authority, or they may be established and operated by a body with juridical personality (corporation) or any private person in accordance with provisions set forth in the related laws. Secondary schools are primarily under the control and supervision of the education committee of the special city or of the provincial government and subsequently of the Minister of Education. There are also institutions at secondary level maintained by the central authorities and known as national schools, all of which come under the direct control and supervision of the Minister of Education.

The Central Board of Education advises the Minister of Education or the provincial governors on important matters including the enactment, revision or repeal of orders relative to the administration of education, major aspects of educational policy, financial support of education and budget appropriations, policy concerning the professional staff of schools, international exchanges in the field of education, requests or petitions on matters submitted by educational committees of lower level, etc.

Courses of study and the required textbooks or teaching aids are prescribed by the Ministry of Education, through its Bureau of Textbooks, and the Ministry specifies a maximum and minimum of class periods per week and year. Principals of secondary schools are required to organize the individual study programme of the day, week, season, term and year in accordance with the directives of the Ministry.

In general, Korean language textbooks called 'national textbooks' are prescribed for elementary schools and civic schools. For middle and high schools, normal schools, higher technical schools and higher civic schools, the school administrators may select textbooks from a list issued by the Ministry of Education.

Control. The Minister of Education exercises general control and supervises all phases of administration relating to education, science, technology, art and other cultural fields. Matters relating to secondary education are dealt with by the secondary education section of the Ministry's Bureau of Common Education. As explained above, direct control and supervision of secondary schools are the responsibility of the provincial and special city authorities, the executive agency of each provincial government being its bureau of educational and social affairs. While headmasters of secondary schools are primarily responsible to the provincial governor or the superintendent of schools in Seoul, they are at the same time in close administrative relationship with the Ministry.

Supervision and inspection. The qualifications for appointment as a junior supervisor of secondary education are a college education and at least 3 years of teaching experience, or 5 years' experience in educational administration. The qualifications for senior supervisor are either (a) at least 5 years' experience as junior supervisor, or (b) college education and at least 5 years of teaching experience, or 7 years' experience in educational administration, or (c) a pass in the government examination for senior staff in educational administration, together with 3 years or more of teaching experience. Senior supervisors are appointed by the President on the recommendation of the Minister of Education; junior supervisors are appointed by the Minister of Education.

As a matter of educational policy, all supervisors are required to work in groups. Among their duties are the inspection and supervision of the course of study; the comprehensive planning of educational policies; the study and application of administrative regulations on education; planning the establishment or discontinuance of schools; supervision of government personnel in educational agencies; and supervision of the use of textbooks and other teaching aids.

Parent-teacher association committees are also active in helping to achieve the aims of education by improving the status of students and teachers and the environment in which they work.

Finance. In principle, the special city or the provincial government is responsible for the maintenance of public secondary schools, but when these local authorities have budgetary deficits, the National Treasury is bound by law to make up such deficits by the payment of subsidies. As however the Central Government cannot afford to support all the public secondary schools (owing to financial difficulties such as those caused by the aftermath of war), it is the parents who at present bear the main burden of the cost of secondary education.

In secondary schools run by voluntary educational agencies, fees are charged. Attempts have been made by the Ministry of Education to limit the fees in conformity with the ideals of equality of educational opportunity.

Normal schools—18 in number—are operated by the National Government. Students are exempted from paying fees, and scholarships are available.

Half the total amount of salaries of secondary school teachers is paid by the Government, and the other half by the special city or the provincial government.

Buildings and equipment. Basic standards regarding the building and equipment of the middle and high schools and of the normal schools are set forth in Ministry of Eduction ordinances. School buildings are required to last for at least 30 years. They must have adequate classroom accommodation, including special rooms for science, music, art and extra-curricular activities, a library (space for at least 300 volumes for every 3 classrooms), an auditorium, a dispensary, offices for the principal, the staff and administrative services, and accommodation for caretakers. There must be a water supply, sanitation and fire-fighting equipment. Standards are also prescribed for classroom lighting and special measures must be taken in this respect for night schools. The following are required to be attached to school buildings where possible: school farm, workshop, gymnasium (area of 54,000 square feet in schools with up to 500 pupils, and an additional 72

square feet for each student over 500), meeting room, dormitory, dwelling for teaching staff.

In reality, Korean secondary schools have still far to go to reach the standards set forth in the Ministry's ordinances.

School welfare services. A school doctor conducts an annual physical examination of the pupils, and many secondary schools have set up dispensaries. Among other facilities, many schools have a dining hall, barber's shop, shoe repair shop or stationery shop to provide cheaper services than the students can obtain elsewhere.

TYPES OF SECONDARY EDUCATION

The 6-year period of secondary education enrols pupils at the level of grades 7 to 12. Secondary schools are divided into four types:

1. Middle schools and high schools. The middle school provides a 3-year course based on the 6-year elementary school and leads to the 3-year high school. The latter may be a general or academic high school or a vocational or technical high school.
2. Normal schools. The 3-year course, based on middle school education, trains teachers for primary schools.
3. Technical schools and higher technical schools. These schools, which are to be distinguished from the technical or vocational high schools mentioned under (1), provide trade training courses of from 1 to 3 years' duration. Pupils who have successfully completed the primary or the civic school (a 3-year course for young people who are over the compulsory attendance age but who have not had a primary education), or have an equivalent capacity, are eligible for admission to technical schools; those who have graduated from the 3-year course at a middle school or a technical school or have an equivalent capacity are eligible for the higher technical school.
4. Higher civic schools. These institutions provide a 1 to 3-year course of civic and social education for adults. Normal schools and most other secondary schools are full-time day schools although some of the latter are night schools.

Specialized schools include the Art High School, Health School, and the School for the Deaf and Dumb. The Art High School has departments of music, arts and ballet.

In choosing a type of secondary schooling, parents of prospective candidates for entrance to middle school seek the advice of the elementary school teachers; at the level of selection for high school there may be discussions in which all three parties concerned participate—pupil, parents and teacher.

All types of secondary schools are intended to provide a terminal education, although the full 6-year secondary course is also of an intermediary nature inasmuch as it leads to higher education. Thus junior colleges (2-year post-secondary) including junior teachers' colleges, and colleges and universities with 4 or 6-year courses, including senior teachers' colleges, are open to high school graduates. Graduates of the normal schools may go on to teachers' colleges of junior or senior level, but the possibilities of their continuing their studies in other institutions of higher learning are restricted.

The school year begins on 1 April and ends on 31 March. It is divided into two terms, the first running from 1 April to 30 September, and the second from 1 October to 31 March. Each school year consists of at least 230 days (170 in the case of higher civic schools). School is open for 6 days per week except for national holidays or other holidays of a special nature. Summer and winter vacations are usually from the end of July to the end of August and from the end of December to the end of January respectively. Other special vacations are for short periods, such as a 6-day vacation at the end of the school year, or the holidays taken by schools in rural communities.

General secondary education

Middle schools and academic high schools. Owing to the limited number of places available and the differences in quality between schools, entry is highly selective. There are three methods of selection in practice at the present: (a) using information furnished by the elementary school principals without imposing a written examination; (b) common entrance examination set by a number of secondary schools in the same district; (c) separate examination set by each school. Entrance examinations are advertised by means of public notices, which specify the number of pupils to be admitted, the qualification for admission, the date of the examination, etc.

The aims of the middle school are: to extend the objectives of the primary school and to inculcate the knowledge and habits desirable for a responsible member of the community; to teach the basic knowledge and skills common to all occupations and improve the ability of the student to choose a vocation suited to his individuality; to improve the student's self-discipline both in and out of school and develop sound judgement; and to improve the students' physical well-being. Building upon this foundation, the high school seeks to improve the student's capacity to understand and form judgements about the nation and society, and his ability to plan and manage his own life.

In 1954, the Ministry of Education promulgated an ordinance establishing standard curricula and time-tables (see accompanying table). A class period in secondary schools is of 50 minutes' duration.

There is a research committee whose function is to study the improvement of teaching methods, with a sub-committee for each subject taught in secondary schools. In addition, model or experimental schools are designated by the Ministry of Education and provincial governments, for the purpose of carrying out research and studies.

Testing of school work including evaluation of the pupils' suitability for promotion to a higher grade is prescribed in the school regulations. Examinations of various types, such as by oral questioning, demonstration, or written test, are held as frequently as deemed necessary. Periodic examinations are held at mid-term and at the end of the term. A record of each student's career is kept, and a transcript sent to the parents or guardians. The form the record takes was prescribed by the Ministry of Education in 1956; it is required to cover physical development, behaviour, scholastic achievement, scores of standardized tests, extra-curricular acitivities, etc.

Provisions of the Education Law pertaining to the

STANDARD MIDDLE SCHOOL CURRICULUM

(showing number of hours per year and, in parentheses, average number of class periods per week)

Subject	Year 1	Year 2	Year 3
Required:			
Korean language	140 (4)	140 (4)	140 (4)
Mathematics	140 (4)	105 (3)	105 (3)
Social studies	175 (5)	175 (5)	140 (4)
Sciences	140 (4)	140 (4)	105 (3)
Physical training	70 (2)	70 (2)	70 (2)
Music	70 (2)	35 (1)	35 (1)
Art	70 (2)	35 (1)	35 (1)
Practical arts and home-making	175 (5)	175 (5)	175 (5)
Sub-total	980 (28)	875 (25)	805 (23)
Electives:			
Practical arts and home-making	35–245 (1–7)	35–245 (1–7)	35–245 (1–7)
Foreign languages	105–175 (3–5)	105–175 (3–5)	105–175 (2–5)
Other	0–105 (0–3)	0–210 (0–6)	0–280 (0–8)
Extra-curricular activities	70–105 (2–3)	70–105 (2–3)	70–105 (2–3)
Grand total	1 190–1 330 (34–38)	1 190–1 330 (34–38)	1 190–1 330 (34–38)

STANDARD HIGH SCHOOL CURRICULUM

(showing number of hours per year and, in parentheses, average number of class periods per week)

Subject	Year 1	Year 2	Year 3
Required:			
Korean language (I)	140 (4)	140 (4)	105 (3)
Civics	105 (3)	105 (3)	35 (1)
Morals	35 (1)	35 (1)	35 (1)
National history	–	105 (3)	105 (3)
Mathematics	140 (4)	–	–
Sciences	140 (4)	–	–
Physical training	35 (1)	35 (1)	35 (1)
Music and art	140 (4)	140 (4)	140 (4)
Practical arts and home-making	105 (3)	105 (3)	105 (3)
Sub-total	840 (24)	665 (19)	560 (16)
Electives:			
Korean language (II)	105 (3)	105 (3)	105 (3)
World history	–	105 (3)	105 (3)
Geography	105 (3)	105 (3)	–
Calculus	–	105–210 (3–6)	105–210 (3–6)
Geometry	–	70–140 (2–4)	70–140 (2–4)
Physics	140 (4)	140 (4)	140 (4)
Chemistry	140 (4)	140 (4)	140 (4)
Biology	140 (4)	140 (4)	140 (4)
Soil science	140 (4)	140 (4)	140 (4)
Military training	140 (4)	140 (4)	140 (4)
Philosophy and education	–	0–210 (0–6)	0–210 (0–6)
Physical training, music and art	0–210 (0–6)	0–210 (0–6)	0–210 (0–6)
English, German, French or Chinese	0–175 (0–5)	0–175 (0–5)	0–175 (0–5)
Vocational subjects	0–420 (0–12)	0–700 (0–22)	0–770 (0–22)
Extra-curricular activities	70 (2)	70 (2)	70 (2)
Grand total	1 190–1 365 (34–39)	1 190–1 365 (34–39)	1 190–1 365 (34–39)

qualifications required of secondary school teachers identify four categories:

1. Qualified Teachers Grade I: persons who hold the certificate of Qualified Teacher Grade II (secondary schools), who have had teaching experience of not less than 3 years and undergone the required in-service training conducted by the Ministry of Education.
2. Qualified Teachers, Grade II: (a) graduates of teachers' colleges (junior or senior level) or technical and academic colleges who have finished the course for the teachers' certificate with the required number of credit points; or (b) persons who hold the certificate of Assistant Teacher (secondary schools), who have had teaching experience for a specified number training conducted by the Ministry of Education; or (c) persons who are designated as qualified by the Central Examination Board for Secondary School Teachers.
3. Assistant Teachers: graduates of colleges or persons who are designated as qualified by the Central Examination Board for Secondary School Teachers.
4. Special Teachers: persons with special knowledge of vocational subjects, science, arts and health, who have been designated as qualified by the Central Examination Board for Secondary School Teachers. In addition, a school can hire a qualified health teacher as required.

The number of teachers required in a middle school, not counting the principal and assistant principal, is 3 for the first three classrooms; beyond that, no less than 1.5 teachers per classroom. In addition, vocational staff are required to be appointed in the ratio of 1 per classroom. In high schools, 3 teachers in addition to the principal and assistant principal are required for the first three classrooms; beyond that, the ratio is 2 teachers per classroom. In vocational high schools, for teachers of vocational subjects the ratio of 1 teacher to three classrooms is applicable. In this case the special teacher or health teacher is an exception to the ratio.

Higher civic school. This is an institution providing social education, and the national norms for area of study prescribed for regular secondary schools do not apply; the curriculum is more flexible than in the latter.

Vocational and technical education

Vocational or technical high schools. A high school in which more than 30 per cent of the curriculum is composed of vocational subjects is classified as a technical or vocational high school. Many are of the comprehensive type in which various departments are organized. Applicants for admission to institutions of technical and vocational education are selected in relation to the number of vacancies officially authorized in each department. Other conditions of entry are similar to those for middle school.

The following table shows curriculum requirements as between general and vocational subjects, in hours per year, with, in parentheses, the number of class periods per week.

General requirements include Korean language, social studies, mathematics, science, physical education, music, arts, military drill (for boys only), and extra-curricular activities similar to those of general high schools.

Subject	Grade		
	1	2	3
General requirements	875 (25)	595 (17)	525 (15)
Vocational requirements	315 (9)	385 (11)	385 (11)
Vocational electives	0–175 (0–5)	210–385 (6–11)	280–455 (8–13)
Total	1 190–1 365 (34–39)	1 190–1 365 (34–39)	1 190–1 365 (34–39)

The departments of the various vocational high schools are listed below.

Agricultural high school: agriculture, forestry, livestock breeding, agricultural civil engineering, sericulture, veterinary science, horticulture, farm products manufacturing.

Technical high schools: mechanical engineering, shipbuilding, electricity, applied chemistry, textiles, dyeing, civil engineering, architecture, mining, metallurgy, ceramics, mineral arts, woodcraft arts, mineral engineering, telecommunications, aviation, navigation, engines, printing, transportation management, locomotive operation.

Commercial high school: the commerce department teaches book-keeping, accounting, mathematics, principles of trading, commercial law.

Fishery high school: fishery, marine products manufacturing, propagation.

High schools of home economics: home economics, nursing and midwifery, public health, needlework, house decoration, beauty culture.

Technical and higher technical schools. These are trade schools, at middle and high school level respectively, offering courses of from 1 to 3 years. A 1-year course in a major department may be attached to the higher technical school for the purpose of giving a specific vocational training to high school graduates or persons of equivalent educational attainment. They are mainly private institutions established by factories and industrial concerns. Article 129 of the Education Law requires that the aim of technical schools and higher technical schools shall be to train students in the knowledge and skills needed in the daily life of the nation. Emphasis is placed on the following goals: discovery of the natural talents of the student; improvement of his creative capacities; development of interest in and understanding of national industry and trade; improvement of the student's capacity for economic management and industrial planning.

A specimen time-table for a 1-year course at a barber school, showing the number of 50-minutes class periods per year, is as follows: Korean language 42; music 42; social studies 42; sterilization 25; hygiene 84; public health 90; physiology 90; physics 63; communicable diseases 90; hair styling 180; calisthenics 21; practice 600: Total 1,369.

The Education Law provides that a technician's certificate may be given to the graduates of technical school or higher technical school by a Presidential decree.

Teaching staff in vocational education. Qualification for teachers in vocational and technical high schools is similar to that of general high schools, and higher technical schools to that of middle schools. However, the particular teaching subject is indicated on the certificate, for instance, 'Mechanical Department of Technical High School Teacher, Grade II, Measures similar to those noted in the case of middle and general high schools are taken to improve the methods of teaching and close contact is maintained with factories, farms, etc.

Teacher training schools

Subject requirements in normal schools for the education of elementary school teachers, expressed in class periods per year, are as follows. The number of periods per week is given in parentheses.

Subject	Year		
	1	2	3
Korean language	140–175 (4–5)	105–175 (3–5)	70–175 (2–5)
Social studies	105–175 (3–5)	105–140 (3–4)	70–105 (2–3)
Morals	35 (1)	35 (1)	35 (1)
Education	—	315–420 (9–12)	—
Teaching practice	—	350–420 (10–12)	—
Philosophy	—	35–70 (1–2)	—
Mathematics	105–175 (3–5)	70–175 (2–5)	70–175 (2–5)
Sciences	105–175 (4–5)	105–140 (3–4)	70–175 (2–5)
Physical education	70–140 (2–4)	70–140 (2–4)	70–140 (2–4)
Military drill	70–140 (2–4)	70–140 (2–4)	70–140 (2–4)
Vocational studies	70–140 (2–4)	70–140 (2–4)	35–140 (1–4)
Music	70–140 (2–4)	70–140 (2–4)	70–140 (2–4)
Art	70–140 (2–4)	70–140 (2–4)	70–140 (2–4)
Foreign languages	140–170 (4–5)	105–175 (3–5)	70–175 (2–5)
Extra-curricular	35–105 (1–3)	35–105 (1–3)	35–70 (1–2)
Total	1 190–1 365 (34–39)	1 190–1 365 (34–39)	1 190–1 365 (34–39)

The evaluation of scholastic achievement and keeping of student records are carried out in the same way as at general secondary schools. A teacher's certificate issued by the Minister of Education is given to the graduates together with the school diploma.

Out-of-class activities

All middle and high school students belong to the National Student Defence Corps which was organized by Presidential decree for the purpose of promoting and administering student government and cultural, sporting and social activities. The general aim of the Student Defence Corps is to foster a good national spirit, and to maintain school discipline by developing the students' self-control and their ability to solve their own problems. There is a central organization which controls the provincial branches, under which come the school units. The Student Defence Corps in each school is under the leadership of the principal, with the teaching staff forming an advisory group. The steering committee is the Student Council, whose chairman and vice-chairmen are elected by democratic vote. Organization may vary from school to school; the school branches are supported through fees collected from students.

TRENDS AND PROBLEMS

The number of schools has increased enormously since the Liberation in 1945 and it is now imperative that their quality should be improved. A movement towards reorganizing general and vocational high schools into community-centred comprehensive high schools is in progress. There is an urgent need to raise the present normal school to the level of junior college; it is hoped to achieve this in the near future.

[*Text prepared by the Central Educational Research Institute, Seoul, in September 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 22,505,000.
Area: 37,424 square miles; 96,929 square kilometres.
Population density: 601 per square mile; 232 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment (not including some 677,000 persons in adult education classes) was nearly 4.5 million, being about one-fifth of the total population. Of these pupils, 79 per cent were in kindergartens and primary schools, 16 per cent in middle and high schools, 3 per cent in vocational schools, and 2 per cent in higher education. The proportion of girls was 44 per cent in primary schools, 24 per cent in secondary schools, 5 per cent in vocational schools, 37 per cent in teacher training schools, and 13 per cent in higher education. Women teachers made up 20 per cent of the teaching staff in primary schools, and 8 per cent in general secondary schools. The average pupil-teacher ratio was 62 for the primary schools, 35 for middle schools and 32 for high schools. Between 1953 and 1957, primary school enrolment encreased by 56 per cent, and secondary school enrolment by 50 per cent. (See Table 1.)

Enrolment trends in secondary education, 1945–57. Comparable data are not available before 1945. Since then enrolment has increased rapidly in all categories of secondary education. In general secondary education, total enrolment in 1957 was more than double that of 1949 and more than five times as high as in 1946. Vocational school enrolment increased more than four times between 1945 and 1957, and teacher training schools nearly doubled their enrolment during the same period. The average total enrolment at the secondary level, which was about 287,000 for the 1945–49 period, increased threefold to about 847,000 for the period 1955–57. For the latter period the average total enrolment represented about 38 per cent of the estimated population 15–19 years old. (See Table 2.)

Examination results in secondary education, 1953–57. The number of leaving certificates granted in 1957/58 was about twice as high as in 1953/54, for each type of certificate or diploma except that of the agricultural and fishery schools. Girls received 24 per cent of the middle school graduation certificates in 1957, and 27 per cent of the high school certificates. (See Table 3.)

Educational finance, 1959. For the fiscal year beginning in January 1959, the budget estimate for educational expenditure from the National Treasury amounted to 65,290 million hwan, or an average of 2,855 hwan per inhabitant. This amount was covered by receipts from the Central Government (92 per cent), provincial governments (5 per cent) and local authorities (3 per cent). Recurring expenditure on education accounted for 84 per cent of the total. An amount of 1,135 million hwan (1.7 per cent) was included for cultural activities. (See Table 4.)

Source. Republic of Korea: Ministry of Education, reply to Unesco questionnaire.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergarten, public	1957/58	1	3	3	104	44
	Kindergarten, private	1957/58	226	596	442	11 843	5 832
	Total	**1957/58**	**227**	**599**	**445**	**11 947**	**5 876**
	„	1956/57	153	494	369	8 152	3 487
	„	1955/56	173	523	401	17 083	11 161
	„	1954/55	160	511	394	11 158	4 734
	„	1953/54	166	523	402	11 161	5 034
Primary	Primary schools attached to teacher training schools public	1957/58	18	273	51	12 629	5 684
	Primary schools, public	1957/58	4 350	56 705	11 179	3 503 967	1 534 801
	Primary schools, private	1957/58	18	122	60	6 784	4 060
	Total	**1957/58**	**4 386**	**57 100**	**11 290**	**3 523 380**	**1 544 545**
	„	1956/57	4 369	53 042	8 503	3 234 526	1 375 303
	„	1955/56	4 205	47 378	8 010	2 947 736	1 243 027
	„	1954/55	4 054	42 279	7 381	2 680 178	1 107 378
	„	1953/54	4 035	37 609	6 709	2 260 161	874 287
Secondary *General*	Middle schools, public	1957/58	591	7 355	650	269 228	69 103
	High schools, public	1957/58	349	5 237	229	170 967	33 707
	Middle schools, private	1957/58	424	4 958	530	162 109	43 038
	High schools, private	1957/58	259	3 395	197	105 481	22 947
	Total	**1957/58**	**1 623**	**20 945**	**1 606**	**707 785**	**168 795**
	„	1956/57	1 568	19 405	1 326	718 501	156 791
	„	1955/56	1 484	16 977	1 073	721 051	156 583
	„	1954/55	1 249	14 404	751	618 255	130 645
	„	1953/54	1 000	11 076	...	473 473	94 719
Vocational	Technical high schools, public	1957/58	31	839	2	25 166	97
	Commercial high schools, public	1957/58	39	626	24	20 073	2 023
	Agricultural high schools, public	1957/58	118	1 537	15	41 808	831
	Fishery high schools, public	1957/58	12	110	—	2 715	32
	Technical high schools, private	1957/58	20	288	—	9 240	11
	Commercial high schools, private	1957/58	39	475	23	15 615	3 225
	Agricultural high schools, private	1957/58	13	102	2	1 995	32
	Fishery high schools, private	1957/58	2	30	1	416	6
	Total	**1957/58**	**274**	**4 007**	**67**	**117 028**	**6 257**
	„	1956/57	264	3 647	55	118 881	4 300
	„	1955/56	249	3 017	49	117 586	3 147
	„	1954/55	213	2 569	17	98 281	1 834
	„	1953/54	183	2 128	14	73 093	1 070
Teacher training	Teacher training schools, public						
	Total	**1957/58**	**18**	**399**	...	**12 490**	**4 605**
	„	1956/57	18	386	...	13 967	5 001
	„	1955/56	18	380	...	13 230	4 410
	„	1954/55	18	355	...	13 207	4 035
	„	1953/54	18	338	...	12 153	3 544
Higher	Universities, colleges and junior colleges, public	1957/58	16	1 293	20	30 244	1 853
	Universities, colleges and junior colleges, private	1957/58	40	1 763	201	49 898	8 719
	Total[1]	**1957/58**	**56**	**3 056**	**221**	**80 142**	**10 572**
	„ [1]	1956/57	56	2 626	201	85 026	9 875
	„ [1]	1955/56	56	2 564	189	78 649	8 651
	„ [1]	1954/55	52	2 400	165	62 668	7 536
	„ [1]	1953/54	45	1 900	144	46 446	5 281
Special	Schools for blind children	1957/58	3	46	5	97	49
	Schools for deaf children	1957/58	2	14	2	318	81
	Total	**1957/58**	**5**	**60**	**7**	**415**	**130**
	„	1956/57	5	49	3	374	110
	„	1955/56	3	20	1	402	120
	„	1954/55	2	11	—	376	111
	„	1953/54	2	11	—	350	98

1. Including higher teacher training.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Adult	Civic schools	1957/58	2 439	5 713	...	184 721	106 426
	Higher civic schools	1957/58	422	2 059	...	44 993	12 107
	Adult schools	1957/58	20	201	...	6 996	3 350
	Adult classes of civic schools	1957/58	20 694	24 345	...	419 232	280 363
	Private classes and institute	1957/58	319	1 018	...	20 665	12 996
	Total	**1957/58**	[2]**2 881**	**33 336**	**...**	**676 607**	**415 242**
	„	1956/57	[2]3 257	59 406	...	[3]982 907	[3]630 703
	„	1955/56	[2]3 107	75 761	...	[3]1 357 670	[3]900 070
	„	1954/55	[2]3 380	98 687	...	[3]2 246 376	[3]1 574 824
	„	1953/54	[2]3 735	10 750	...	[3]250 274	[3]104 102

2. Not including adult classes of civic schools, and private classes and institute.

3. Not including enrolment in private classes and institute.

2. TRENDS IN SECONDARY EDUCATION, 1930–57: PUBLIC SCHOOLS ONLY

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1945	...	...	25 567	...	6 912	27			
1946	124 468	27	48 550	...	4 884	21			
1947	197 859	24	39 590	...	5 220	20	287	1 966	*15*
1948	278 512	22	64 206	...	5 441	22			
1949	322 850	25	72 534	...	6 330	26			
1950	380 829	22	98 275	...	7 678	31			
1951	265 759	21	113 009	...	8 237	28			
1952	351 070	23	121 598	...	5 257	49	512	2 156	*24*
1953	425 474	24	117 028	...	12 153	29			
1954	532 418	25	108 642	...	13 207	31			
1955	721 051	22	117 586	3	13 230	33			
1956	718 501	22	118 881	4	13 967	36	847	2 238	*38*
1957	707 785	24	117 028	5	12 490	37			

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Middle School Certificate	74 077	16 297	93 597	19 520	114 259	24 893	116 258	27 302	148 257	35 385
General High School Certificate	19 807	5 561	22 069	6 605	28 444	7 865	35 504	10 057	46 776	12 581
Technical High School Diploma	6 696	...	9 015	...	10 512	...	9 347	...	11 589	...
Commercial High School Diploma	4 381	...	7 281	...	9 724	...	7 910	327	9 310	...
Agricultural and Fishery High School Diploma	13 099	...	16 461	...	17 432	...	15 761	...	17 676	...

4. EDUCATIONAL FINANCE, 1959 (in thousand hwan)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**65 290 335**
Central Government	59 863 869
Provincial governments	3 418 558
Local authorities	2 007 908

B. EXPENDITURE BY PURPOSE

		Amount
Total expenditure[2]		**65 290 335**
Recurring expenditure		55 028 275
For administration or general control	570 386	
For instruction		
Salaries to teachers, etc.	39 791 286	
Other instructional expenditures	13 962 820	
Other recurring expenditure	703 783	
Capital expenditure		9 001 076
Educational facilities	8 242 713	
Auxiliary facilities	758 363	
Debt service		125 904
Cultural activities		1 135 080

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**55 028 275**		**100.0**
Central administration		305 525		0.56
Instruction[3]		54 018 967		98.17
Primary education	43 216 624		78.53	
Secondary education	8 339 809		15.16	
General	6 374 629		11.6	
Vocational	1 158 486		2.1	
Teacher training	806 694		1.5	
Higher education	2 203 663		4.00	
Special education	71 219		0.13	
Adult education	54 895		0.10	
Other education not specified	132 757		0.24	
Other recurring expenditure not specified		703 783		1.28

1. Official exchange rate: 100 hwan = 0.20 U.S. dollar.
2. Budget estimate.
3. Includes expenditure for administration.

NORTH KOREA

THE EDUCATIONAL SYSTEM

During the period of Japanese rule (1910–45) the educational system discriminated against Korean children both as regards access to schooling and the nature and quality of the teaching.

On liberation, steps were taken to abolish this colonial type of education and to introduce a new system meeting the needs of national construction and organized on a genuinely democratic basis. The North Korean Provisional People's Committee promulgated 'Regulations governing the North Korean school education system' which established a unified system covering general, technical and higher education. Active preparation was made for the introduction of a system of universal and compulsory primary education, and on 10 September 1949 the Supreme National Assembly of the Democratic People's Republic of Korea adopted an historic law fixing 1 September 1950 as the date for this step. The implementation of this measure was held up by the outbreak of war on 25 June 1950, but was finally achieved in 1956 on the successful fulfilment of the post-war three year plan.

The condition for the rapid development of social and economic relations was seen to be a rise in the cultural standards of the people and a further improvement in public education. In 1958, a universal 7-year system of education was introduced and the Supreme National Assembly passed a law providing for preliminary measures to be taken to introduce universal technical education.

Shortcomings had come to light in the public education system, especially as regards the complete secondary schools, and in October 1959 the Supreme National Assembly passed a law for the reorganization of the system to meet the demands created by actual local conditions.

All educational institutions are established and controlled by the State (private schools were abolished immediately after the liberation), and instruction in all of them is free, with equal rights for children of both sexes. Instruction is in the mother tongue, and is inseparably linked with socially useful labour.

As regards structure, the North Korean school system is at present in a period of transition. Up till the reorganization decided on in 1959 the pattern was as follows: kindergarten; a 4-year primary school; a 3-year lower general secondary stage, given in the 7-year incomplete secondary schools; and a 3-year upper general secondary stage given in the 10-year complete secondary schools. There were also 4-year *technicums*, admitting pupils from the 7-year school, and 2-year higher *technicums* admitting pupils with a complete general secondary education. *Technicums* as well as 10-year schools led to higher education.

Complete secondary schools, *technicums* and higher *technicums* are still provisionally in operation but they will accept no new pupils as from the beginning of the 1960/61 school year. As existing classes complete the course the schools will be progressively wound up and converted into new types of institutions known as technical schools and higher technical schools.

The new school organization, now being put into operation, comprises six successive stages: kindergarten; a 4-year primary school; a 3-year secondary school; a 2-year technical school; a 2-year higher technical school; universities and institutes, including facilities for post-graduate research. After completing technical school (9 years formal schooling), some pupils enter teacher training colleges (3–4 years) or the physical culture and sport school. There are also specialized schools (foreign languages, music, dancing, and art).

Primary, secondary, technical and higher technical education for workers is provided by part-time, evening and correspondence schools.

Today a total of some 2,500,000 persons are studying at 8,000 schools of various types and levels and 37 institutions of higher education.

THE DEVELOPMENT OF SECONDARY EDUCATION

The plan for the development of general and technical secondary schools is an integral part of the overall plan for the development of the national economy. The object is to carry into effect the law passed by the Supreme National Assembly in 1959 on the reorganization of the public education system, i.e., to ensure that all primary school leavers have access to secondary schools and to introduce universal technical education by 1962–63.

The Ministry of Education and Culture prepares the curriculum, syllabuses and textbooks on a uniform basis and organizes the work of collecting and disseminating information on successful teaching methods and theories. It also directs education and instruction through the agencies of the local authorities, which apply its policy and are immediately responsible for guiding and controlling educational work in the secondary and technical schools under their jurisdiction in accordance with the curriculum and syllabuses.

Each school is administered by a principal, who draws up the school work plan and organizes, checks and directs its application in accordance with the principles of collective leadership. All principals follow the state curriculum and syllabuses and conduct their work in accordance with the state regulations governing schools at all levels and the rules governing internal school arrangements. They also organize out-of-class and out-of-school work.

Each school has a pedagogical council, which acts as a collective consultative body and discusses such important matters as school government, the improvement of instruction and education, etc., and takes appropriate decisions.

There are also parents' councils, whose function is to assist the school in educating the children, and to see that the school, the family and society co-ordinate their efforts to bring up the rising generation.

Supervision and inspection. Attached to the Ministry of Education and Culture and the local people's committees are staffs of school inspectors, who constitute the state machinery for directing and supervising school work. The inspectors' task is to ensure that the policy of the Korean Workers' Party and the Government is duly carried into effect in the sphere of education, and they supervise the administration of schools, their educational work and the way they are run.

The trade unions, the Union of Democratic Youth and the Union of Democratic Women are closely linked with the schools through their subsidiary organs, and help in educational work with schoolchildren.

Finance. All educational establishments are run entirely by the State, which allocates the necessary funds to them from its budget. The allocations are made with due regard to the type of school and number of pupils, and in accordance with state standards. The finances for higher educational establishments and *technicums* are allocated by the Ministry of Education and Culture, and those for kindergartens and schools (from the primary to the complete secondary school inclusive) by the provincial, urban and district people's committees.

Teachers receive a considerably higher basic wage and more leave than employees in other professions. In addition, they receive a long-service increment averaging 20 per cent of the basic wage, as well as appropriate payment for work in excess of the set hours, extra pay for class leaders, etc. They are provided with free suits of clothes and overcoats, given 28 days' paid leave, they

qualify for holidays in rest homes and sanatoria, and group camping holidays and tours are arranged for them during the vacations at state expense.

In addition, village school teachers are provided with a kitchen garden and free fuel.

Teachers who are outstandingly successful in their work qualify for state bonuses, and for special services the State confers the title of 'Distinguished Teacher'.

All education is free, and students studying at higher educational establishments receive substantial grants from state funds. Those who have no guardian receive a special state allowance, and all their living and educational expenses are found. All pupils at every level and all university students are supplied with suits of clothes and overcoats at state expense, and spend their holidays at camps, where they are maintained by the State.

Buildings and services. The construction of school buildings is financed from state capital investments or, in the villages particularly, through the patriotic efforts of the local inhabitants.

The schools have adequate heating and lighting and conform to sanitation and health standards.

Every school has a dispensary. Those which provide hostel accommodation are equipped with baths, showers, washrooms, a hairdressing saloon, a dining-room and a shop selling school requisites and other articles.

The pupils, teachers and domestic staff are entitled to free medical attention by the school doctor.

TYPES OF SECONDARY EDUCATION

Under the new system of public education, secondary educational establishments will include (a) secondary schools, technical schools and higher technical schools, and (b) specialized educational establishments.

The school year begins on 1 September and ends on 31 August; it is divided into three terms in the general secondary schools and into two terms in the technical secondary schools.

Secondary schools

The purpose of the secondary school is to give pupils a general education and basic training in technical production, and to rear them in the spirit of communist morality and love of work.

The course lasts 3 years, and is open to pupils who have completed their 4 years' primary schooling; attendance is compulsory.

The curriculum includes humanistic studies and natural sciences, while physical and aesthetic education also bulk large. In addition, there is practical work in the school workshops and on the school experimental farm plots, where polytechnical instruction is given. In this way the pupils are drawn into socially useful work.

Their knowledge is tested and evaluated daily by the teachers, and there are also promotion and school leaving examinations. School tests, which may be oral or written, are marked according to a four-point system. The final examinations are conducted under the supervision of public education institutions and are uniform throughout the country so as to ensure that the pupils' knowledge is evaluated objectively and that they all fulfil the same requirements.

Technical schools

The pupils at these schools are trained in a particular speciality—mining, metallurgy, mechanical engineering, power production, chemical technology, transport, communications, forestry, printing, the textile industry, food technology, mass consumption foods technology, agriculture and fishing, public health, commerce, economics, art, etc.

Depending on their inclinations and abilities, pupils who have completed the secondary school course are entitled to enter whichever of the technical schools is most appropriate. The latter are controlled by urban and district people's committees, and are run in close conjunction with factories, industrial enterprises, farms, agricultural co-operatives and state institutions. They are distributed throughout the territory of North Korea in accordance with the economic nature of each region and the number of pupils (including the number of those not requiring hostel accommodation).

The curricula include both general and special subjects and practical work, their main object being to ensure that education shall be inseparably linked with productive work, and *vice versa.* Technical school leavers are eligible to work in the appropriate sector of the national economy or enter a higher technical school if they wish. As already mentioned, education at these schools is to be compulsory from 1962–63 onwards.

Higher technical schools

Under the reorganized public education system, higher technical schools will come into operation as from the 1960–61 school year, and will form the next step in the educational ladder after the technical schools. The technical school and higher technical school curricula are planned in such a way that the pupils receive a general education to at least the standard of the former 3-year upper secondary school, and at the same time a specialized technical education to a higher standard than heretofore.

Higher technical schools, which have a 2-year course, come under the direct control of the Ministry of Education and Culture, and train students for technical work in metallurgy, mechanical engineering, industrial chemistry, the chemical industry, light industry, agriculture and other sectors of the national economy. Leavers are eligible either to pursue their studies at one of the higher educational establishments or take up productive work in one of the sectors of the national economy.

Schools for workers

There are a large number of evening and correspondence schools where workers can take courses in their spare time. For example, the provisions for raising the standard of general secondary education and technical knowledge include a 3-year workers' secondary school, a 2-year

technical evening school and a 2-year higher technical evening and correspondence school. Pupils completing the courses at these schools receive the same diplomas as those at the corresponding day schools, and can continue their studies at higher educational establishments operating under the same system.

Specialized educational establishments

Apart from the schools already mentioned, there are specialized schools which provide an 11-year course of general education and specialized training in music, dancing art, or foreign languages. Some of the pupils on completion of the course will be able to continue their studies at an appropriate higher educational establishment.

The physical culture and sports school admits children of outstanding physical ability who have completed 9 years' schooling, and trains them to become specialists in this field. The course lasts 4 years. Some of the pupils who complete the course will be able to continue at a higher educational establishment in their special subject.

There are schools for war orphans, children of disabled ex-servicemen, blind and deaf-mute children, and workers' colleges where young workers and demobilized soldiers who have not had a normal general education are specially prepared for admission to a higher educational establishment.

The factories, farms and agricultural co-operatives offer short courses of vocational training for their workers, e.g., courses in tractor-driving and maintenance, farm machinery, veterinary science, etc.

Teacher training schools

The object of these is to train teachers for primary schools and kindergartens. They are divided into two sections—school and pre-primary and the course lasts 3 years. During their training the students are taught general subjects and are given teaching practice.

They are all trained at state expense, and on completion of the course may take up a teacher's post or enter one of the higher educational establishments. As from 1961–62 the teacher training schools (teacher *technicums*) based on the 7-year school are to be converted into teacher training colleges, with a 3- to 4-year course, for students who have completed the 2-year technical school (9 years' schooling).

The teaching staff in the schools, down to the primary schools and kindergartens, are to be supplemented by highly qualified and fully trained graduates of higher educational establishments. To improve teachers' qualifications, extension courses are organized in pedagogical institutes, teacher training colleges and schools in urban and country districts. Teachers are also encouraged to enrol at educational establishments providing correspondence courses, and examinations are arranged for them.

Out-of-class activities

These include study of the history of the Korean Workers' Party, club and group activities of various kinds, and participation in socially useful work, such as work in factories or co-operatives, promotion of public health and hygiene, etc.

TRENDS AND PROBLEMS

The main tasks of public education at the present juncture are to reorganize the existing public education system on a solid basis during the next 2 or 3 years, to consolidate the work done so far towards bringing the system of 7 years' compulsory education into being, and to lay the groundwork for the introduction of compulsory technical training.

There are also a number of other vital tasks flowing from the demands created by contemporary conditions (the rapid development of productive forces): the mass preparation of skilled technicians, a further rise in educational standards, the forging of closer links between school education and productive labour in schools at all levels, and more intensive training and re-training of teachers.

BASIC SOURCES

Report of the Central Committee of the Korean Workers' Party to the Third Party Congress.

Law adopted at the fourth session of the Supreme National Assembly on 11 January 1950 concerning the introduction of a system of universal and compulsory primary education.

Decree regulating the implementation of the law concerning the introduction of a system of universal and compulsory primary education (Ministerial Council Decree No. 6).

Report discussed at the fourth session of the second convocation of the Supreme National Assembly on the introduction of a system of 7 years' compulsory education and preliminary steps towards the introduction of a system of compulsory technical education, and the law adopted at that session.

Report discussed at the sixth session of the second convocation of the Supreme National Assembly on the reorganization of the public education system, and the law adopted at that session.

Development of public education in the Republic during the 10 years following liberation (published in 1955).

Collection of laws on education.

[*Text prepared by the Unesco Secretariat from official sources in June 1960.*]

STATISTICS

Population (mid-year 1958 estimate): 8,000,000.
Area: 47,862 square miles; 123,962 square kilometres.
Population density: 167 per square mile; 65 per square kilometre.

In 1957 there were 7,230 kindergartens with approximately 300,000 children, 5,000 primary and secondary schools with 2 million pupils, and 221 vocational schools enrolling 65,000 students. There were in addition 16 higher educational institutions but the number of students enrolled is not available.

Source. U.S.S.R.: *Narodnoje Obrazovanje*, No. 6 (Moscow, 1958).

KUWAIT

THE EDUCATIONAL SYSTEM

Education became the responsibility of the State in Kuwait in 1936 when the first Board of Education was formed. Before that date, education was left to individual initiative and such schools as there were concentrated on religious instruction and teaching the rudiments of reading and writing. The first task of the new Board of Education was to modernize the educational system, and teachers were recruited from different parts of the Arab world to carry out the plan. Two primary schools for boys were opened in 1936/37, with a total enrolment of 600 and a staff of 26 teachers, and a girls' primary school was opened in the following year. Subsequent expansion has been spectacular. During the school year 1959/60 there was a total enrolment of 40,302 students (of whom 15,324 were girls) in the 103 schools of different types run by the Department of Education. According to a report prepared by a special committee appointed by Unesco to make a preliminary survey of the state of education in the Arab countries late in 1959, the number of schoolchildren enrolled in the first 6 grades of the Kuwaiti school system was 10,532 per 100,000 of population. This ratio compares favourably with that in some Western European countries where compulsory education has long been established.

The increase in the number of girls enrolled is noteworthy. In the school population taken as a whole, there are now 3 girls for every 8 students. The proportion of girls is higher in the lower grades, and in the first primary class there are almost as many girls as boys. There is good reason to believe that as the age groups move up the educational ladder this proportion will be maintained to the end of the intermediate stage, i.e., to the end of the eighth year of schooling.

As for methods and syllabuses, the original policy of the Department was to follow the system of one of the neighbouring Arab countries, adapting it to the circumstances prevailing in Kuwait. But the need was soon felt for a thorough investigation of the education requirements of the country. This inquiry was carried out in 1955 by Mr. Ismail Qabbani and Dr. Matta Akrawi, and their report has since been the basis for educational reorganization. One of their recommendations was that all children should be given an opportunity of completing the primary and intermediate course (8 years of schooling) as a step towards making this period of attendance compulsory. They also recommended that particular attention should be given to the education of women.

Almost all education in Kuwait is provided by the Government. There are only 4 private schools (with a total enrolment of 600 children) and these cater for the non-Arab communities. Education at all stages is free; no tuition fees are collected, and there are no charges for books and stationery or for the various school services which include the School Health Service and the provision of meals and clothing. The budget of the Department of Education for the financial year 1960 was estimated at about 150 million rupees for recurring expenditure.

Thus far, no financial problems have impeded the development of education. All school buildings are owned by the Government and many of them have been built recently and supplied with modern educational facilities. On the other hand the teaching staff is almost completely made up of non-Kuwaiti Arab teachers; of the 2,011 men and women teachers in 1959/60 only 109 were Kuwaitis.

The Board of Education is responsible for the general policy. The President of the Board is the Head of the Department, but the execution of policy is left to the Director-General, whose professional staff includes a Deputy-Director, 3 assistants, and a number of inspectors and supervisors. The inspectors and supervisors are usually in charge of the teaching of the different subjects in the school syllabuses and of other school activities.

Structure of the school system. There are at present four main types of school in Kuwait: pre-primary, primary, intermediate and secondary (both academic and vocational).

Pre-primary education is given in kindergartens, which accept children of both sexes between the ages of 4 and 6. The aim of education in a kindergarten is to provide young children with a healthy atmosphere where they can grow, acquire good habits and traits of character and observe objects in their surroundings through play and pleasurable activities.

Primary education starts at the age of 6 and lasts for 4 years. The aim of a primary school is to help the child to familiarize himself with his larger environment, teach him to read, write and calculate and provide him with the general knowledge he needs to prepare him for the next stage.

Intermediate education consists of a 4-year course following on from primary education. The aim of an intermediate school is to provide the children with further knowledge which may take them beyond their immediate environment, to explore their interests and aptitudes and guide them, as much as possible, towards the type of secondary education for which they are best fitted.

THE DEVELOPMENT OF SECONDARY EDUCATION

There are three categories of secondary education: general (academic), technical, and teacher training for women.

General secondary schools. Academic secondary education for boys was started in 1942 when some secondary classes were attached to one of the primary schools. In 1950 the two schools were separated and in 1953 the secondary school moved to its present premises, a boarding school on the outskirts of the city. In 1949/50 there were only 4

secondary classes, attended by 58 students; 10 years later, the numbers had risen to 43 classes and 1,280 students.

The girls' secondary school was also attached to a primary school when it first started in 1951; it attained independent status in 1954. The number of students has risen from 12 in 1951 to 393 in 1960.

Academic secondary education comprises a 4-year course open to graduates of the intermediate school. A general course is taken by all students during the first 2 years, after which they choose either the literary or the scientific section. The syllabuses are similar to those followed in the United Arab Republic, but with appropriate modifications particularly in the syllabuses of history and geography.

TIME-TABLE FOR GENERAL SECONDARY SCHOOLS
(in periods per week)

Subject	Year			
	1	2	3 and 4 (Literary section)	3 and 4 (Scientific section)
Religious instruction	2	2	1	1
Arabic	8	8	8	6
English	8	8	7	7
French	–	–	5	–
Social studies	1	1	–	–
History	2	2	3	–
Geography	2	2	2	–
History of philosophy	–	–	2	–
Elements of sociology	–	–	2	–
Mathematics	5	5	–	7
General science	4	–	–	–
Physics	–	2	–	3
Chemistry	–	2	–	3
Biology	–	–	–	3
Drawing	1	1	–	–
Handicraft or hobbies	2	2	2	2
Special studies	–	–	3	3
Physical training	1	1	1	1
Total	36	36	36	36

The 'special studies' in the last 2 years cover a variety of subjects of which the student has to choose one. In the literary section he may select a specialized course in either Arabic literature, English literature, history or geography. In the scientific section the choice is between mathematics, physics, chemistry or biology.

A public examination is held at the end of the secondary academic course. The Kuwaiti General Secondary Education Certificate awarded to the successful students is recognized as equivalent to its counterpart in the United Arab Republic. It qualifies holders for admission to most of the universities of the Middle East and, with certain reservations, to universities in the United Kingdom and the United States of America.

Technical school. The Technical School (known as al-Kuliyya as-Sina'iya in Arabic) was opened in 1954. It accepts students who have completed the third intermediate year and offers them a 4-year course in which they specialize in one of the following trades: fitting, turning, blacksmithing and welding, foundry, wireless and motor car mechanics, electricity, plumbing, carpentry and cabinet-making.

The syllabuses followed are similar to those of the corresponding technical schools in the United Arab Republic. The aim of the school is to create a class of skilled technicians who, if they show ability, may continue their higher studies at a university level.

Women's Training Institute. The Women's Training Institute was started in 1953 and has been attached since then to the Girls' Secondary School. It accepts girls who have completed their intermediate education, offers them a course of 3 years, which covers academic and professional subjects as well as practical training in teaching, and qualifies them to be class teachers in primary schools.

TRENDS AND PROBLEMS

The Department of Education has been at pains to stem the unqualified preference for academic education which is partly the result of deep-rooted social traditions. Success in this respect has been relative: there were only 192 students in the Technical School last year as compared with 1,280 in the Boys' Academic Secondary School. But it should also be borne in mind that when the Technical School was first opened, only 8 students chose to join it. At present, all graduates of the intermediate schools are entitled to enrol in the Academic Secondary School, but it is felt that the time will soon come when some kind of selection will have to be imposed.

Measures have also been taken by the Department to popularize vocational education. Special care has been taken to ensure that the buildings and equipment of the Technical School are not inferior to those of the Academic Secondary School, all Kuwaiti students are accepted as boarders, and they are given monthly allowances which are paid on graduation to help them make a start in business.

Secondary education is not sufficiently diversified. Plans have been made to open a Men's Training Institute, a Commercial Secondary School and a Marine School. It is hoped that these schools will help to solve the first problem discussed above.

There are only 3 Kuwaitis among the staff of 97 teachers in the secondary schools. Attempts have been made to attract greater numbers of Kuwaitis to the profession of teaching by granting special allowances and by making scholarships available for those who show the necessary aptitude.

Various social and economic factors have influenced the work of the students. The relative affluence of many Kuwaitis, and the high demand for qualified and semi-qualified Kuwaitis for business as well as for government service have, in many cases, tended to weaken competition and slacken zeal for serious study.

The very rapid social development which the society of Kuwait is undergoing has also left its impact upon many adolescents who find it difficult to adapt themselves to the demands of the rapidly changing social situation. The boarding section in the secondary school, which is open to all Kuwaitis, was intended as a partial solution to this problem.

[*Text prepared by the Department of Education, Kuwait, in June 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 210,000.
Area: 6,000 square miles; 15,540 square kilometres.
Population density: 35 per square mile; 14 per square kilometre.

Summary of school statistics, 1953–57. Total enrolment in primary and secondary schools in 1957/58 was 28,151 pupils, representing about 14 per cent of the estimated population. There were in addition some 1,660 people attending evening commercial school and literacy classes. Of the school enrolment, 6 per cent were pupils in kindergartens, 89 per cent in primary schools, 4 per cent in general secondary schools and the remaining 1 per cent was divided between teacher training, vocational and special schools. Girls made up 38 per cent of the enrolment in primary schools, 16 per cent in general secondary schools and all the enrolment in the teacher training school. The teaching staff in all schools, excluding adult educational courses, numbered 1,542, of whom 41 per cent were women. In primary schools 40 per cent of all teachers were women, but there were only 25 per cent in general secondary schools. The pupil-teacher ratio in public primary schools was 19 in 1957/58 compared with 16 in 1953/54. In general secondary schools the pupil-teacher ratio was between 10 and 11 in both 1957/58 and 1953/54. Enrolment increased in public primary schools by 87 per cent over 1954/55 and in general secondary schools by 96 per cent over 1953/54. Enrolment in the technical school rose from only 12 pupils in 1954/55 to 154 in 1957/58. Girls training to be teachers trebled over the 3 years 1954–57. (See Table 2.)

Examination results in secondary education, 1953–57. Information available on examination results is incomplete. In 1957/58, 144 candidates, including 22 girls, were awarded the Secondary Education Certificate. In 1956/57, 100 candidates, of whom 17 were girls, passed the second part of the General Education Certificate, compared with 5 students passing the same examination in the year 1953/54.

Educational finance, 1957/58. Total expenditure on education in 1957/58 (fiscal year beginning January) was estimated in the Central Government budget at 145,291,382 Indian rupees representing approximately 699 rupees per inhabitant. Of this sum, 47 per cent was for capital expenditure. (See Table 1.)

Source. Kuwait: Department of Education, Statistics and Finance Section, reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1957/58 (in Indian rupees)[1]

A. EXPENDITURE BY PURPOSE

	Amount
Total expenditure[2]	**145 291 382**
Recurring expenditure	77 223 382
For central administration	11 140 000
For instruction	
Salaries to teachers, etc.	33 393 595
Other instructional expenditure	27 683 431
Other recurring expenditure	5 006 356
Capital expenditure	68 068 000

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**77 223 382**		**100.0**
Central administration		11 140 000		14.4
Instruction		61 077 026		79.1
Pre-primary education	3 375 000		4.4	
Primary education	45 000 000		58.3	
Secondary education	8 125 000		10.5	
General and teacher training	4 750 000		6.1	
Vocational	3 375 000		4.4	
Higher education (students abroad)	3 059 000		4.0	
Special and adult education	1 268 026		1.6	
Other education				
Lectures, student tours, etc.	250 000		0.3	
Other recurring expenditure		5 006 356		6.5
Maintenance and repairs	2 650 000		3.43	
Rent, water supply, electricity, postage	1 570 800		2.03	
Education grants, sports, etc.	785 556		1.02	

1. Official exchange rate: 1 Indian rupee = 0.21 U.S. dollar.
2. Budget estimate of the Central Government.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergarten, public						
	Total	**1957/58**	**6**	**78**	**78**	**1 711**	**774**
	,,	1956/57	4	52	52	1 033	457
	,,	1955/56	4	41	41	833	295
	,,	1954/55	2	17	17	376	177
	,,	1953/54	—	—	—	—	—
Primary	Primary schools, public	1957/58	50	943	389	19 811	8 175
	Intermediate schools, public	1957/58	[1]29	346	129	4 961	1 494
	Primary schools, private	1957/58	1	11	—	397	—
	Total	**1957/58**	**51**	**1 300**	**518**	**25 169**	**9 669**
	,,	1956/57	46	1 080	428	20 637	7 853
	,,	1955/56	44	...	...	16 782	6 155
	,,	1954/55	41	793	276	[2]13 233	[2]4 492
	,,	1953/54	34	638	221	...	...
Secondary *General*	Secondary schools, public						
	Total	**1957/58**	[3]**2**	**97**	**24**	**1 020**	**165**
	,,	1956/57	[3]2	78	20	796	130
	,,	1955/56	[3]2	88	24	839	131
	,,	1954/55	[3]2	79	15	643	86
	,,	1953/54	[3]2	[4]50	—	520	77
Vocational	Technical school, public						
	Total	**1957/58**	**1**	**55**	—	**154**	—
	,,	1956/57	1	45	—	98	—
	,,	1955/56	1	32	—	54	—
	,,	1954/55	1	14	—	12	—
	,,	1953/54	—	—	—	—	—
Teacher training	Women's training school, public						
	Total	**1957/58**	**1**	**5**	**5**	**47**	**47**
	,,	1956/57	1	5	5	36	36
	,,	1955/56	1	5	5	22	22
	,,	1954/55	1	3	3	16	16
	,,	1953/54	—	—	—	—	—
Specia	School for blind						
	Total	**1957/58**	**1**	**7**	—	**50**	—
	,,	1956/57	1	5	—	39	—
	,,	1955/56	1	2	—	36	—
	,,	1954/55	—	—	—	—	—
	,,	1953/54	—	—	—	—	—
Adult	Evening commercial school	1957/58	1	7	—	1 231	—
	Literacy classes	1957/58	4	...	—	430	—
	Total	**1957/58**	**5**	**...**	—	**1 661**	—
	,,	1956/57	8	38	—	1 270	—
	,,	1955/56	8	37	—	762	—
	,,	1954/55	1	4	—	284	—
	,,	1953/54	1	...	—	451	—

1. Intermediate classes probably attached to primary schools.
2. Public schools only.
3. One boys' school and one girls' school.
4. Teachers in boys' secondary schools only.

LAOS

THE EDUCATIONAL SYSTEM

The preamble to the Constitution of 11 May 1947 (paragraph 4) imposes the following duties on Laotian citizens: service to the country, respect for the conscience of others, neighbourly behaviour, discharge of family obligations, diligence in work and in education, uprightness and respect for the law.

Since the entry into force of the Constitution, only one law on free and compulsory education has been promulgated: Law No. 12, of 9 April 1951, promulgated by Royal Decree No. 112 of 26 April 1951 and amended by Law No. 108 of 26 January 1952. The most important articles of this law are as follows:

Article 1. Elementary primary education in Laos shall be compulsory and free for Laotian children of both sexes from the age of 6. It may be provided either in public schools or in properly organized private schools.

Article 2 (*new*) (Law No. 108 of 26 January 1952). Any group of villages in which there are sufficient pupils to justify the establishment of an elementary school, and any *tasseng*, shall within the limits of the credits available be provided with a public elementary primary school. School attendance shall be compulsory for any village within 1 kilometre of a public educational establishment.

Article 3. All citizens within a radius of 5 kilometres shall be liable for the supply of materials and labour for the construction of the school.

Article 4. Any village with an elementary school shall be responsible at its own expense for the upkeep and maintenance of the school, its furniture and the teacher's lodgings.

Communication problems have made it very difficult to set up schools throughout the kingdom. A considerable part of the population is concentrated along the river Mekong and its tributaries and can more easily be reached by water than by land. Another part of the population inhabits the mountains or high plateaux; it is composed mainly of tribes and ethnic groups whose mother tongue is not that of the nation. These groups belong to civilizations whose origins and stage of development vary greatly. Some are still in the phase of nomadic agriculture and pastoral activities. Almost all the mountain and plateau people are fetishists, though the majority of the population—for instance, all the Lao and Lao-Thai groups—are Buddhists. Most of the people (probably over 90 per cent) are country folk. Technological and industrial development has begun to affect urban centres, but there are still very few such centres and their population is not large. As yet there are very few industries and little commercial activity of any importance. The country has an original and highly interesting culture and folklore of Indo-Buddhist type.

The need to use a foreign language as the medium of instruction in secondary schools, owing to the lack of Laotian teachers, has hitherto hampered the development of secondary education. At the stage of higher education, also, students must, for the same reasons, be sent to foreign universities and higher technical institutions.

Role of public authorities. General education (primary, secondary and higher) comes under the Minister of National Education, assisted by a Director-General who is represented in the provinces by regional inspectors.

The General Directorate at the Ministry of National Education comprises four Directorates: (1) Directorate of pre-school, primary, post-school and adult education; (2) Directorate of secondary education; (3) Directorate of higher education; (4) Directorate of teacher training.

Technical education comes directly under the General Directorate.

Each province (*khouèng*) is administered by the head of the province (*chaokhouèng*), and each district (*muong*) by a district head (*chaomuong*). The *chaokhouèng* represents the Government. He is in possession of the general instructions given by it in every field and sees that they are carried out. With this in view, he is responsible for taking all necessary steps to co-ordinate the various departments. The head of the province administers the national budget, at the local level. The *chaomuong* is a subordinate official who receives his instructions from the *chaokhouèng* and sees that they are executed.

Thus, where school administration is concerned, the *chaokhouèng* receives orders from the Ministry of National Education and transmits them to the regional inspector, who carries them out. These directives are obviously general in character, principally concerning the administration of the provincial education budget.

The regional inspector is responsible in the first instance to the head of the province and then to the Director-General of Education. All his correspondence, including the reports which he addresses to the Director-General, is accordingly marked 'Care of the *chaokhouèng*'. In the educational administration of his province, the inspector is in close contact with the *chaokhouèng*. For example, where the construction of public schools is concerned, it is the head of the province who takes the matter up with the Public Works Department; questions of school hygiene he refers to the chief medical officer of the province.

The same system of decentralization of power is followed in the districts administered by *chaomuongs*.

The Buddhist religious schools, where education is mainly of a religious type and covers in all a 10-year period, are placed under the Ministry of Public Worship. These schools had 4,937 pupils in 1958/59. This type of education has its own budget, which is administered by the Ministry of Public Worship.

Finally, there are private schools, most of which are directed by foreign missionaries; all these institutions are supervised by the Ministry of National Education, which has the right to inspect them. The teaching of the Laotian

language is compulsory in these schools. The Chinese school at Vientiane is the only one with secondary classes.

The structure of the school system is shown in the diagram on page 779.

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary education is a somewhat recent development in Laos. The first complementary course was opened at Vientiane in 1921; in 1924 the course was transformed into a *collège* (4-year lower cycle of secondary studies) and later became a *lycée* (full 7-year course). Secondary education really began to develop, however, only after 1946, with the opening of schools at Paksé and Luang-Prabang and at Savannakhet the following year (1947), at Xieng-Khouang in 1955 and quite recently at Saravane. In 1959, the Paksé and Luang-Prabang institutions became 'provincial education centres'.

A vocational school has been in existence at Vientiane since 1923; in 1938, it began to be called a 'workshop-school' (*atelier-école*). Other workshop-schools were founded later at Paksé, Savannakhet, and Luang-Prabang. In 1947, those at Vientiane and Savannakhet became apprenticeship centres. The Vientiane centre was converted into a technical school in 1953, and in 1958 these two institutions were attached to the *lycée* at Vientiane and the *collège* at Savannakhet respectively, becoming the technical sections of those schools. A commercial section was also started at Vientiane in 1958. On 1 January 1955, responsibility for technical education was transferred from the Ministry of Public Works to the Ministry of National Education.

A teacher training course was founded in 1947 and soon became a teacher training school with a 4-year course. In 1959, there was a further change of name; the teacher training school became the National Education Centre, which is intended gradually to train the whole teaching and administrative staff engaged in national education.

In Laos, secondary education comprises ordinary secondary teaching, with its classical and modern sections, teacher training and technical and commercial education.

Legal basis

The principal legislation governing or having some bearing on secondary education includes the following:

Royal Decree No. 164, providing for the creation of the Sisavang Vong University (30 June 1958).

Ministerial Order providing for the creation of the National Education Centre (4 March 1959).

Ministerial Order No. 142/PC, providing for the organization of the Centre for Legal, Political and Administrative Studies (13 March 1959).

Ministerial Order No. 166/PC concerning the founding, organization, functioning and administration of the Medical School (13 March 1959).

Departmental Circular providing for the the organization of studies in the technical sections (30 April 1959).

Ministerial Order No. 157 concerning the founding, organization and functioning of Provincial Education Centres (29 April 1959).

Ministerial Order No. 392/PC providing for the creation of the School of Artistic Craftmanship (26 October 1959).

Ministerial Order No. 391/PC providing for the creation of the School of Dancing and Music.

Franco-Laotian Convention on Education (13 April 1957).

Administration

At the Ministry of National Education, secondary education comes under the Directorate of Secondary Education which is directly responsible to the Director-General of National Education. A measure concerning the establishment of a committee on curricula and of a committee on textbooks for secondary education is now being considered. Apart from these bodies and committees, mention may be made of the Friends of Education, a body whose purpose is to disseminate information and to co-ordinate the assistance received from foreign countries; in principle, it meets every month. Until now, secondary schools have followed French traditions and have adopted the reforms introduced in France in regard to examinations and curricula.

Control. Head masters of secondary institutions have the title of *proviseur* (the *lycée* at Vientiane) or *directeur*. Pedagogically, secondary school heads fulfil the same function as in France. However, the provinces exercise administrative control through the *chaokhouèng* (provincial governor), who convenes all his division heads, including the principal of the *collège* and the regional inspector, at regular meetings. The regional inspector's duties as regards secondary education are still in the process of being defined. Technical education now forms part of the secondary system. The technical departments at Savannakhet come under the head of the secondary school, and those of Vientiane under the headmaster of the *lycée*. These links are administrative in character; technical direction is at present exercised by a Unesco expert.

The bonze schools are under the Ministry of Public Worship; the school at Vat Ong Tu, which is of secondary level, is directed by a monk.

The School of Dancing and Music and the Laotian School of Art are under the direct authority of the Ministry of Fine Arts.

The Chinese private school is inspected on behalf of the Ministry of National Education by an expert placed at the disposal of the General Directorate of National Education by the Asia Foundation. The same expert inspects also the other Chinese schools, which are primary institutions.

The country has no inspectors of secondary schools. French teachers are inspected by the competent French services, in accordance with Article IV, 4, of the Franco-Laotian Convention on Education. Such inspection is fairly frequent.

Committees of parents have been set up at the schools.

Finance. The expense of operating the secondary education system is charged to the national budget. Salaries of French teachers are paid directly by the French national budget. School supplies (books, textbooks, etc.) are provided in large measure through bilateral aid. The national budget meets the cost of maintenance of equipment and of buildings.

Every secondary school has a small operating budget allocated to it by the Ministry of National Education, and

is responsible to the Director of Secondary Education for the use made of these funds.

The technical sections have their own budget and have been equipped with machines and tools under arrangements for bilateral aid and under the Colombo Plan. The National Centre for Legal, Political and Administrative Studies and the Medical School have their own budgets and are responsible for their administration to the directors of secondary and higher education.

School building has hitherto been financed through foreign assistance (France, in the case of the *lycée* at Vientiane, the United States of America, in that of the National Education Centre). Provincial secondary schools are provisionally housed in premises belonging to the primary schools. The upkeep of school buildings is the responsibility not of the Ministry of National Education, but of the Civil Buildings Division of the Ministry of the Plan.

Laotian teachers are remunerated by the Ministry of National Education. Salaries range from 4,000 to 7,000 kips a month.

No school fees are charged, and textbooks are, in principle, supplied free to pupils.

Assistance in the form of scholarships is provided for children of poor families who go on with their secondary studies. The full scholarship is 1,500 kips a month.

School welfare services. Every school has a small dispensary and is regularly visited by doctors or nurses.

Teachers are given annual medical examinations. Pupils must present medical certificates on enrolment. There is regular medical supervision (X-ray examinations, diagnoses) in the course of each school year. Sick pupils receive free treatment at the municipal hospitals.

TYPES OF SECONDARY EDUCATION

Pupils who have completed their 6-year primary course may enter the modern or classical section of the *lycée* at Vientiane or of one of the *collèges* or provincial education centres, or else they may enter a technical or commercial section at Vientiane or Savannakhet, or the National Education Centre.

There is no guidance service to help pupils and their parents in choosing the type of secondary education which will best suit them. However, in order to ensure an even recruitment, sufficiently well-balanced as between secondary education of the classical type, technical education and teacher training, entrance examinations for the three types of institutions are held simultaneously.

At the end of their studies in the academic sections of secondary schools, pupils who have obtained their full *baccalauréat* can go abroad to study the various special subjects that are taught in institutions of higher education. Some go to France, and a smaller number to Thailand, Cambodia, Viet-Nam, the United Kingdom, Canada, the United States of America and Australia. A fairly considerable number of scholarships are generously granted by the Government and by foreign aid. The period of study for pupils in the technical sections was, in 1959, extended from 2 to 3 years. The Ministry of National Education intends gradually to bring these sections up, first to the level of the technical studies diploma and afterwards to that of the technical *baccalauréat.*

At the end of their 4-year course, the most promising graduates of the teacher training schools are often sent on scholarships abroad, especially to the primary and then the secondary teacher training schools of Thailand (Ubol, Udom, Bangkok).

The school year. In all secondary institutions, the school year now begins on 1 October and terminates at the end of June. It is divided into three terms. The pupils are given rather short holidays towards the middle and at the end of the first term, and longer holidays of about a fortnight for the Laotian New Year, at the end of the second term. Classes are held from Monday morning to Saturday noon, usually from 7.30 to 11.30 a.m. and from 3 to 5 p.m. Thursday is usually a holiday. During the hot summer season, there are generally no afternoon classes. As a general rule, each lesson lasts an hour.

General secondary schools

The only institutions of this type are: (a) the *lycée* at Vientiane, which prepares pupils for the French *baccalauréat,* with specialization in mathematics, in experimental sciences, or in philosophy; (b) the *collèges* at Thakhek, Savannakhet and Xieng-Khouang and the provincial education centres at Luang-Prabang and Paksé, where pupils prepare for the French *brevet d'études du premier cycle*

GLOSSARY

Centre national d'éducation (National Education Centre): training school for primary and secondary school teachers and educational administrators.

Centre national des études politiques, administratives et juridiques (National Centre for Legal, Political and Administrative Studies): institution training for careers in various branches of the public service.

centre provincial d'éducation: combined primary and lower secondary school.

collège: lower general secondary school.

École nationale de danse et de musique (National School of Dancing and Music): vocational school covering primary and lower secondary stages.

École des arts Lao (School of Laotian Arts): vocational training school of local arts and crafts.

École de médecine (Medical School): vocational training school of medicine and nursing.

École militaire (Military School): vocational training school for careers in the armed forces.

école primaire élémentaire: lower primary school.

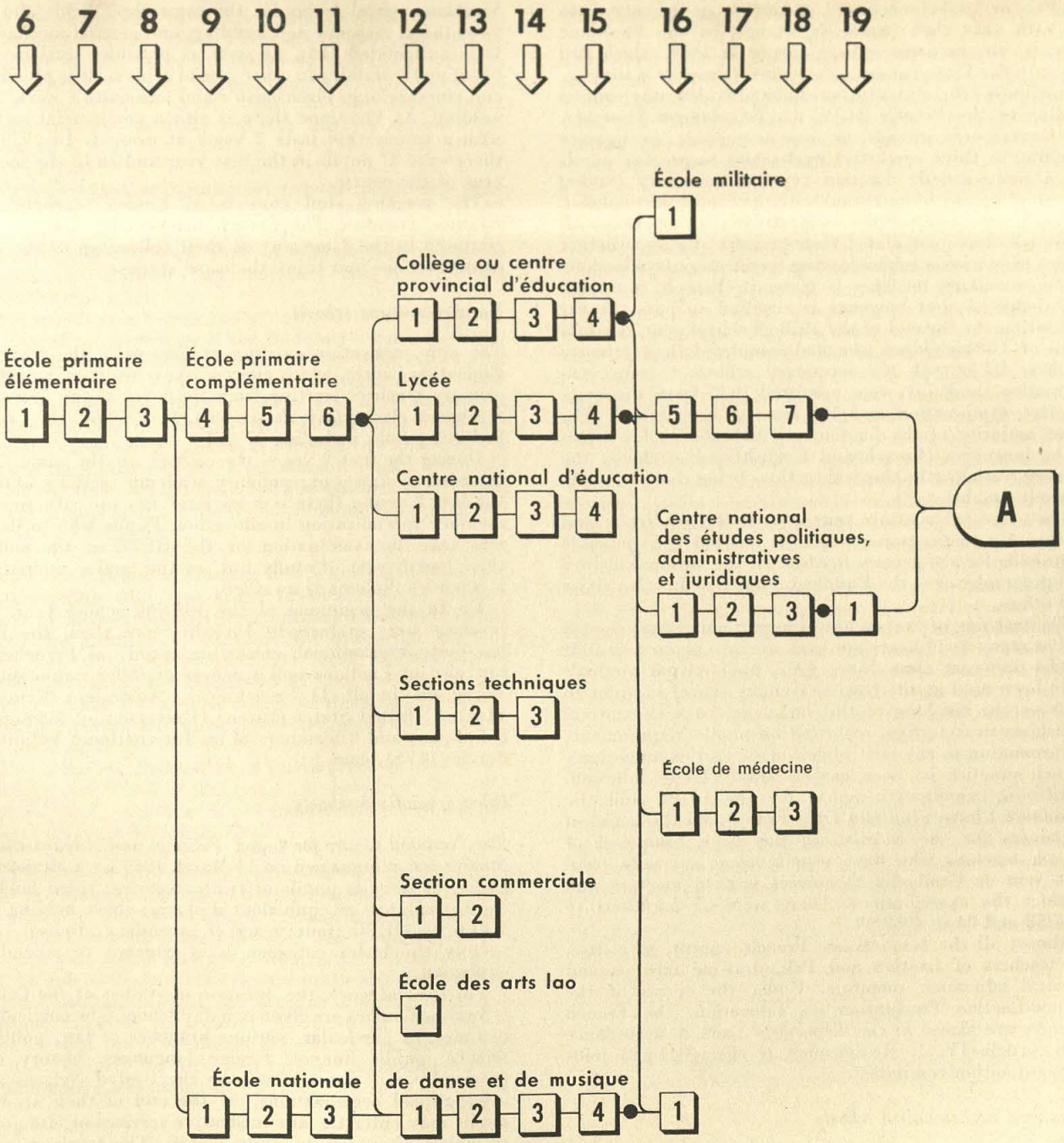
école primaire complémentaire: complete primary school.

lycée: general secondary school.

section commerciale: vocational secondary course of commercial studies.

sections techniques: vocational secondary courses preparing for various trades.

A. Higher education in institutions outside Laos.


6 7 8 9 10 11 12 13 14 15 16 17 18 19
École militaire
1
Collège ou centre provincial d'éducation
1 2 3 4
École primaire élémentaire
1 2 3
École primaire complémentaire
4 5 6
Lycée
1 2 3 4
5 6 7
Centre national d'éducation
1 2 3 4
Centre national des études politiques, administratives et juridiques
1 2 3 1
A
Sections techniques
1 2 3
École de médecine
1 2 3
Section commerciale
1 2
École des arts lao
1
École nationale de danse et de musique
1 2 3
1 2 3 4
1

(BEPC) or lower secondary certificate or for entry into the fifth year class (*classe de seconde*) at the Vientiane *lycée;* (c) the Saravane *collège* opened in 1959, which still has only the first-year secondary class (*classe de sixième*).

Until now, these institutions have provided only courses leading to the French BEPC and *baccalauréat.* However, the Government intends, as soon as possible, to organize teaching in three successive cycles and to prepare pupils for a more strictly Laotian type of secondary leaving examination which would rank with the French *baccalauréat.*

Pupils are selected by competitive examination. All those who have completed their primary studies, whether or not they have a school-leaving certificate, may compete. Since secondary teaching is given in French, a certain knowledge of that language is required to pass the examination. At the end of the 1958/59 school year, out of a total of 3,884 children who had completed their primary studies, 1,778 took the secondary schools entrance examination, and 751 were admitted (628 from the competitive examination and 123 from a special list). The great majority of the Laotian pupils prefer to learn two living languages (French and English) and so choose the modern sections (the classical sections being those in which Latin is taught).

The same subjects are taught as in French *lycées* and *collèges.* Up to the present time, it has not been possible to provide for the general teaching of the national history and geography or of the Buddhist religion or Laotian civics and ethics.

The teaching of French has been particularly developed, and as many as 10 hours per week are now given over to it in the first-year class. Since 1958, audio-visual methods have been used at the teacher training school in order to improve the teaching of this language. In such matters as achievement testing, reporting on pupils' requirements for promotion to the next higher class, and examinations, French practice is, in a general way, closely followed. Until now, examination papers for the BEPC and the *baccalauréat* have been sent from France and the board of examiners for the *baccalauréat* has been composed of French teachers who have usually come specially from Viet-Nam or Cambodia to correct written answers and conduct the examinations. There were 25 *bacheliers* in 1957/58 and 24 in 1958/59.

Almost all the teachers are French, except, of course, for teachers of Laotian and Pali, drawing masters and physical education monitors. Under the terms of the Franco-Laotian Convention on Education, the French teachers are placed at the disposal of Laos, in accordance with Article IV, 1. Recruitment is effected by a joint Franco-Laotian committee.

Vocational and technical schools

The technical sections of the secondary schools at Vientiane and Savannakhet now give 3-year courses. A considerable portion of the pupil's time is passed in the workshop. Contacts have been established between these institutions and the few industrial and commercial undertakings in the country. The Savannakhet school has, up to the present, prepared pupils for three special fields: electricity, cabinet-making and carpentry, and automobile mechanics. The Vientiane school trains for the same three fields and for two others: masonry and building, and general mechanics. It is anticipated that, as soon as possible, sections will be set up for training in other special fields such as plumbing and zinc-working, blacksmith's and locksmith's work, and welding. At Vientiane there is also a commercial section with a course that lasts 2 years at present. In 1959/60, there were 37 pupils in the first year and 36 in the second year of the course.

The teaching staff consists of French teachers and Laotian monitors. The French teachers are trained and recruited in the same way as their colleagues in the academic sections and enjoy the same status.

Teacher-training schools

The only institution existing at present is the National Education Centre, which gives a 4-year training course for primary teachers starting from the level of the first-year secondary class (*classe de sixième*). In 1959/60, the Centre had 362 pupils, including 77 girls.

During the first 2 years, the courses are the same as in the modern classes of secondary academic sections. During the last 2 years, there is a common stream with supplementary specialization in education. Pupils who so desire may take the examination for the BEPC at the end of their fourth year of study but, at the final examination, a teacher's diploma is awarded.

Up to the beginning of the 1959/60 school year, the teachers were exclusively French. Since then, the staff has been international, consisting mainly of Frenchmen, but also of Laotians and teachers of other nationalities. There are, in all, 11 Frenchmen, 1 Australian (Colombo Plan), 3 United States citizens (University of Michigan), 3 Laotians and 8 members of an International Voluntary Service (IVS) team.

Other specialized schools

The National Centre for Legal, Political and Administrative Studies was reorganized on 13 March 1959 by a Ministerial Order. It recruits pupils of two categories: those holding the *baccalauréat* or equivalent diploma; those holding the BEPC or DEPC (four years of secondary studies).

Only the latter category is of concern to secondary education.

For this category, the duration of studies at the Centre is 3 years. Courses are given in a day school. The curriculum includes, in particular, various branches of law, political science, public finance, foreign languages, history and geography and also a course on the United Nations and international organizations. At the end of their studies, pupils may enter the administrative services or else go on to higher education or study abroad. The teaching body consists of foreign advisers attached to various ministries, members of the technical assistance staff (United Nations and Unesco), French and United States teachers and a Laotian director.

The Medical School was officially founded on 13 March 1959. It is a day school whose purpose is to train male and female nurses and midwives, medical aides and doctors of medicine.

At present, it has 10 pupils in the first year, 11 in the second and 10 in the third. There are 10 girls amongst the pupils. It has not yet been possible to open the university-level section, and the present pupils are all from the BEPC and DEPC level. Most of the teachers are French military doctors, and the director is a French doctor.

The Higher School of Bonzes recruits bonze pupils who have completed 6 years of study in one of the bonze schools. This institution is located at Vat Ong Tu. It gives an almost entirely religious type of training and comprises 4 classes, one of which is a preparatory class. In 1959/60, it had 82 pupils in all.

The school year begins at the end of June, and holidays correspond to the periods of the Buddhist religious festivals of the country. Sunday is a day of rest. The school year terminates at the end of March or the beginning of April.

The teachers are mainly bonzes who have studied in foreign religious universities; for the teaching of secular subjects, there are a Laotian teacher and two teachers of English (one Thai and one Englishman). Pupils who have completed their studies may become teachers in religious schools or may continue their education abroad (in Burma, Ceylon or Thailand).

The National School of Dancing and Music (*Matasinh*) now accepts pupils who have either taken the upper primary course or have completed their primary studies in schools under the Ministry of National Education. In 1959/60, there were 20 pupils at secondary level. The traditional dancing, music and dramatic art of Laos are taught. The curriculum also includes certain general education subjects (French, English, arithmetic, geometry, geography, history, science, hygiene).

This school is directed by a Laotian artist, and all the teachers are likewise Laotians. A boarding school is planned and, pending its construction, needy pupils receive government scholarships.

The *Laotian School of Art* is a school of artistic craftsmanship and was founded only recently (26 October 1959). It had 40 pupils in 1959/60. A single Laotian teacher, who provides all the teaching, is its director. The school is intended to train (a) skilled craftsmen who, after full instruction, will be able to assist in the revival of the artistic traditions of the Laotian people; (b) artistic designers who can become talented decorators; (c) drawing masters for primary and lower secondary schools. A boarding school is also planned for this institution; meanwhile, needy pupils receive scholarships.

Out-of-class activities

Secondary school pupils generally like sports and, in particular, football, badminton, tennis and basket-ball. Team sports are specially encouraged by the physical education monitors who take pupils regularly to the playing field. Various efforts have been or are being made to set up school cultural clubs.

TRENDS AND PROBLEMS

The main obstacles slowing up the qualitative and quantitative development of academic and technical secondary education are the rather narrow limits of national income, the lack of means of communication, the way the population is scattered, and the shortage of staff.

However, fairly thoroughly revised curricula of a national character are being considered for all secondary institutions. It is intended to apply them, at least in one pilot school, from the beginning of the school year in September 1960. Examinations will also be modified to suit national conditions. Academic secondary education will be organized in three cycles (complementary, middle and higher). The national language will gradually become the medium of instruction at this level. In the technical sections, the number of subjects for specialization will be increased in order that all the country's needs may be met under its plan for economic development; the level of studies will be gradually raised to that of the technical *baccalauréat*. Two new education centres, with technical sections, will shortly be opened at Luang-Prabang and Paksé. Secondary education of the academic, technical and craft types will be progressively extended to all provincial centres. It is also intended to start training—within the country and as rapidly as possible—Laotian teachers for the various sections and subjects.

With their progress year by year, the Medical School, the Centre for Legal, Political and Administrative Studies and the National Education Centre will, as soon as possible, be raised to the level of faculties associated with the Sisavang Vong National University.

[*Text prepared by the Ministry of National Education in December 1959.*]

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STATISTICS

Total population: 1,690,000.
Area: 91,429 square miles; 236,800 square kilometres.
Population density: 18 per square mile; 7 per square kilometre.

Summary of school statistics, 1953–56. Enrolment in all public educational institutions at primary and secondary levels totalled about 77,000 in 1956/57, representing 5 per cent of the estimated population. Of the total enrolment, nearly 98 per cent was in primary schools and just over 2 per cent in general and technical secondary schools. There were in addition 51 students in the teacher training school. Girls made up 26 per cent of enrolment in public primary schools in 1956/57 against 24 per cent in 1953/54.

Data on enrolment of girls in secondary schools are not available. The teaching staff numbered 2,060 in all public schools in 1956/57, of whom 1,957 were in primary schools. The proportion of women teachers in general secondary schools was 39 per cent; figures for primary schools are not known. The average pupil-teacher ratio in public primary schools was 38 in 1956/57 compared with only 20 in 1953/54; over the same period primary school enrolment had increased by 125 per cent. In general secondary schools, the pupil-teacher ratio stood at about 20 in 1956/57 and enrolment had increased by 41 per cent over 1953/54. The number of students training to be teachers doubled between 1953/54 and 1956/57. (See Table 2.)

Examination results in secondary education, 1953–57. From the incomplete data available it appears that 20 candidates passed the *baccalauréat* in 1956/57, compared with 5 in 1953/54. In the same year 25 students were awarded a teaching diploma, against 14 in 1953/54. The proportion of successful women candidates for these examinations is unknown.

Educational finance, 1957. Total expenditure on education in the financial year 1957 was 144,840,910 kips representing about 88 kips per inhabitant. 24 per cent of this sum was for capital expenditure; the distribution of recurrent expenditure is given in Table 1B.

Source. Laos: Ministry of National Education, Statistics Division, reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1957 (in kips)[1]

A. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure		**144 840 910**
Recurring expenditure		110 753 380
Capital expenditure		34 087 530
Educational facilities	23 785 030	
Auxiliary facilities	10 302 500	

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent
Total recurring expenditure		**110 753 380**	**100.0**
Primary education		98 791 780	89.2
Secondary education[2]		9 928 800	9.0
General[2]	7 633 800		6.9
Vocational	1 338 000		1.2
Teacher training	957 000		0.9
Other education, not specified		2 032 800	1.8

1. Official exchange rate: 100 kips = 2.86 U.S. dollars.
2. Includes some expenditure for higher education.

2. SUMMARY OF SCHOOL STATISTICS, 1953–56

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Elementary primary schools	1956/57	776			46 267	11 901
	Complementary primary schools	1956/57	85			10 026	2 400
	Pagoda schools	1956/57	228	1 957	...	8 013	2 163
	Rural education centres	1956/57	146			10 861	3 396
	Total	**1956/57**	**1 235**	**1 957**	**...**	**75 167**	**19 860**
	"	1955/56	1 021	2 115	...	63 950	16 788
	"	1954/55	928	2 041	...	43 274	10 053
	"	1953/54	852	1 666	...	33 357	8 162
Secondary *General*	*Lycée*	1956/57	1	46	20	711	...
	Collèges	1956/57	5	36	12	955	...
	Total	**1956/57**	**6**	**82**	**32**	**1 666**	**...**
	"	1955/56	6	...	...	1 344	...
	"	1954/55	5	...	...	1 210	...
	"	1953/54	5	...	...	1 185	...
Vocational	Technical schools						
	Total	**1956/57**	**2**	**13**	—	**128**	—
	"	1955/56	2	13	—	168	—
	"	1954/55	1	7	—	28	—
	"	1953/54	1	7	—	64	—
Teacher training	Teacher training school						
	Total	**1956/57**	**1**	**8**	**6**	**51**	**...**
	"	1955/56	1	9	3	42	...
	"	1954/55	1	10	3	20	...
	"	1953/54	1	9	4	25	...

Note. The data refer to public schools only.

THE EDUCATIONAL SYSTEM

The educational system of Lebanon has grown in a most complex manner. Owing to the geographical situation of their small country, and the succession of foreign powers which have governed it through the centuries, the people of Lebanon have come under the influence of widely differing civilizations without, however, losing their individual character. With the increasing number of intellectual currents, the opposition of social and economic pressures has increased, and a distinctively Lebanese context has developed.

Consequently, it is no easy task to characterize Lebanese education, the most striking feature of which is the coexistence of three separate systems, reflecting the different influences mentioned above. These are: (a) the Latin system, as followed by the Catholic University of Saint Joseph, which is a French institution, and a number of associated colleges; (b) the Anglo-Saxon system, that of the American University of Beirut and a group of Protestant colleges founded by English and American missions; (c) the national system of Lebanon, created in 1924, which runs parallel to the other two and is developing rapidly. One should not, however, think that a gulf separates these different systems, or exaggerate the danger to Lebanese pupils from their exposure to divergent educational practices; this very diversity is rather a source of intellectual enrichment. Moreover, the educational institutions themselves have taken action to avert the danger of disunity. The American University of Beirut, for example, has a *Section Secondaire* which applies the French programme but teaches the English language. English is taught in most schools which follow the Franco-Latin system. French and English are equally acceptable as subjects in public schools, alongside Arabic, which is compulsory for examinations.

The second important aspect of Lebanese education—and of secondary education in particular—is that responsibility for its provision is shared between the Lebanese Government and private institutions, both national and foreign. This dualism is approved in the Constitution itself, which states in Article 10: 'Education is free in so far as it is not contrary to public order and good morals and does not affect the dignity of the several faiths. There shall be no violation of the right of the communities to have their schools, subject to the general prescriptions concerning public instruction which are decreed by the State'.

Within the general framework of this law, various factors favour the more or less individual development of schools.

More than a dozen different faiths are represented in Lebanon, each of which wants its own schools, where the appropriate religious instruction can take its place beside the officially established curriculum. In this way, Maronite, Sunnite, Greek Uniate, Greek Orthodox, Shiite, Protestant, Druse and other schools have been established.

Linguistic factors also come into play: some schools insist on the importance of the Arabic language and wage a struggle for its exclusive use in education; others consider that Arabic is not a suitable vehicle for advanced technical training. Again, schools using Armenian as the language of instruction have been opened for the several thousand Armenians who now hold Lebanese nationality.

Finally, there should be some mention of the great efforts made by different countries in the field of education and culture. France subsidizes certain schools, lends teachers to others, and runs study centres; the United Kingdom and the United States of America have their agencies, the Federal Republic of Germany has recently founded a German school in Beirut, in addition to the Goethe Institute which holds German courses for adults. There is also an Italian school and the Dante Alighieri Institute, where Italian is taught.

Although the Constitution provides for freedom of private education, all decisions concerning curricula are the responsibility of the Ministry of National Education and Fine Arts, which supervises their implementation, approves textbooks for use in public and private schools, organizes official examinations at the different levels, and confers the primary certificate (*certificat d'études primaires*), the complementary or lower general secondary certificate (*brevet*), and the baccalaureate (parts 1 and 2). The Ministry authorizes the opening of new schools throughout Lebanon, and may also withdraw its authorization if Lebanese educational law is not respected.

The role of private bodies in regard to the schools they operate is a purely administrative one. They adapt the official curricula to their needs, and may add weekly hours for the teaching of chosen subjects, but not at the expense of the stipulated time-table for other subjects. They are responsible for the selection of teachers, the collection of fees and the organization of entrance and final examinations.

The diagram on page 785 shows the structure of the Lebanese school system.

THE DEVELOPMENT OF SECONDARY EDUCATION

The beginning of the twentieth century saw a complete reform of the educational system of Lebanon, and the introduction of graded schools, where the pupil's age and level of education were taken into account. At this period Western influence was already strong in Lebanon, although the country still belonged to the Ottoman Empire. Impetus was given to this movement for reform and modernization by the University of St. Joseph and the American University in Beirut, which based their higher education on modern scientific methods. Centres of intense cultural activity were to be found in Mount Lebanon—in the district of Kesrawan in particular. The Lazarite mission college of Antoura, the Maronite seminary of Ain-Waraka, the monastery of Mar

Hanna (where Volney spent several months) and the school of Ghazir, to name only the most important establishments of the period, all came under strong Western influences.

The Ottoman authorities could only fall into step with this progressive evolution; unfortunately, the events of 1914 prevented the fruition of reforms introduced by the Turkish Government.

During the French mandate (1919–44) educational organization and curricula were based on French models. Arabic, though recognized as the national language, played only a limited role in education. From 1929, however, Lebanese certificates were conferred, their equivalence with French certificates soon being established.

Following the declaration of independence in 1944, Arabic replaced French as the medium of instruction and became the only compulsory language for official examinations.

Within the framework of this general evolution, secondary education has for the most part retained its autonomy, or has at least been kept apart from primary education.

Legal basis

Laws at present governing complementary (lower secondary) and secondary education are the following: Presidential Decrees Nos. 6999 and 7003 of 1 October 1946, dealing respectively with the programme for *cours complémentaires* ('complementary' i.e. primary continuation classes, at lower secondary level), and with examinations for the certificate (*brevet*); Presidential Decrees Nos. 7001 and 7004 of the same date, dealing with the secondary programme and examinations for the *baccalauréat;* Ministerial Decree No. 3389 of 14 September 1953 on the internal organization of public primary and continuation schools; Legislative Decree No. 26 of 28 January 1955 on the reorganization of the Ministry of Education and Fine Arts; Ministerial Decree No. 592 of 12 October 1955 on the internal organization of public secondary schools.

Administration

Legislative Decree No. 26 established within the Ministry of National Education nine independent services supervised by the Director-General of Education and ultimately by the Minister. Three of these services are of particular interest here: the Secondary Education Service, the Directorate of Vocational Training and the Teacher Training Service. The Secondary Education Service controls the nine public secondary schools existing at present in Lebanon. Primary schools with *cours complémentaires* come under the Directorate of Primary and Complementary Education, and vocational and technical schools—including those at the secondary level—under the Directorate of Vocational Training.

The chief of the Secondary Education Service, assisted by the inspectors of secondary education, is responsible to the Minister of Education for all matters concerning the appointment and transfer of secondary school teachers. He has to ensure the satisfactory operation of the schools and to watch over the quality and tone of their teaching. His control over private secondary schools and their staff is more or less nominal.

Ministerial Decree No. 592 of 12 October 1955 laid down detailed directives for the operation of public secondary schools: the recruiting and admission of pupils, their distribution by class, questions of curriculum, committees of teachers for each subject, discipline and supervision, fees, duties and privileges of school principals and teaching personnel, examinations, holidays, etc.

The Directorate of Vocational Training is responsible for all public technical schools, both primary and secondary. Article 29 of Legislative Decree No. 26 stipulates that the Directorate shall 'assist private institutions in the formation of vocational schools and seek to co-ordinate the efforts of these institutions'.

The Teacher Training Service was also established by the same decree. The Primary Teacher Training School—the only teacher training establishment which exists at present in Lebanon—functions as a secondary institution, but with a special curriculum. Legislative Decree No. 26 also instituted rural teacher training schools, but these are still at the planning stage.

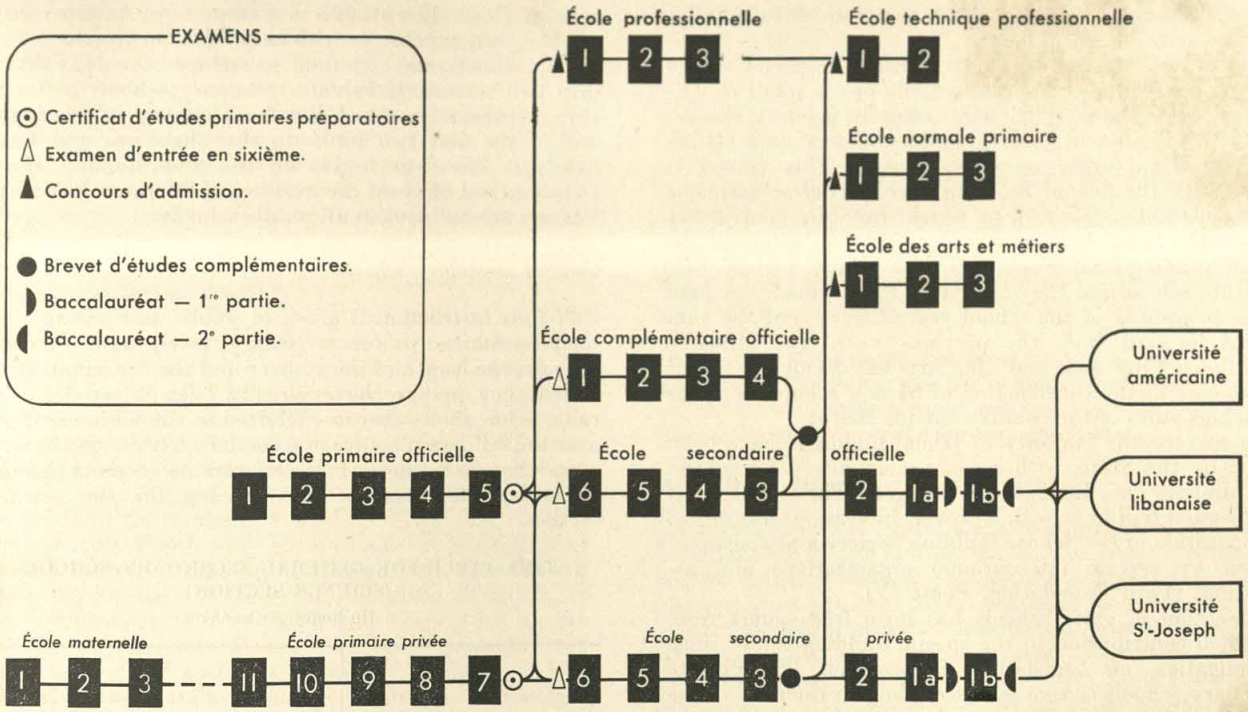
In addition to these three services, and working in close collaboration with them and with the Centre for Pedagogical Research, there is the Curriculum and Textbook Service. It is responsible for the preparation, implementation and revision of school curricula. This service also controls textbooks, authorizing or prohibiting their use, whether they are of Lebanese or foreign origin; its judgement in this matter is strictly objective, and is based solely on their educative and moral value. An authorized work need not, however, be adopted by the Secondary Education Service; and the Textbook Service, far from insisting on the use of certain books, leaves their choice to the principals of the various establishments.

Supervision and inspection. All school inspectors are civil servants, appointed on the results of a competitive examination organized by the Ministry in conformity with existing laws.

The qualifications of candidates are laid down in Legislative Decree No. 26. Inspectors of primary and complementary education must have: (a) a teaching certificate (*licence d'enseignement*), or its equivalent, and at least 3 years' teaching experience; or (b) the diploma of the complementary teacher training school (*brevet d'instituteur*) —or its equivalent—and at least 5 years' teaching experience; or (c) the diploma of the primary teacher training school (*certificat d'instituteur*) and at least 10 years' teaching experience.

Inspection of technical education is ensured by 'shop foremen' (*techniciens chefs d'atelier*) who are recruited by competitive examination; candidates for these posts should be either technical instructors (*moniteurs techniques*) with at least 10 years' service; or hold the assistant-engineer's diploma of the National School of Arts and Crafts.

Inspectors of secondary education are recruited in the same way by public examination, the qualifications for candidature being the teaching certificate (*licence d'enseignement*), plus one of the following: at least 5 years' teaching experience at the upper secondary level; 5 years' service as inspector of primary and complementary education; 3 years' service as principal of a secondary school.



GLOSSARY

école complémentaire officielle (public complementary, i.e. primary continuation school): lower general secondary school.
École des arts et métiers (National School of Arts and Crafts): vocational training school comprising a higher technical school and a school for training hotel and restaurant personnel.
école maternelle: pre-primary school.
école normale primaire: teacher training school.
école primaire: primary school, either public (*officielle*) or private (*privée*).
école secondaire: general secondary school, either public (*officielle*) or private (*privée*).
école technique professionnelle: vocational school of technical training.

HIGHER EDUCATION

Université américaine: American University of Beirut.
Université libanaise: Lebanese University.
Université St. Joseph: St. Joseph's University.

EXAMINATIONS

Baccalauréat: baccalaureate (university entrance) examination taken in two parts, *1re partie* and *2e partie*.
Brevet d'études complémentaires: complementary school (lower secondary) certificate.
Certificat d'études primaires préparatoires: preparatory primary studies certificate.
Concours d'admission: competitive entrance examination.
Examen d'entrée en sixième: secondary school entrance examination.

The jurisdiction of state-appointed inspectors extends, in principle, to all schools in Lebanon, but, as the number of schools is large, and the inspectorate a small one, their activity is for the moment confined to public schools. Inspection of private schools is carried out in different ways: the French Embassy in Beirut sends inspectors from the French Cultural Mission to inspect French schools or those subsidized by the French Government; the Protestant missions, or the heads of the other religious communities, appoint inspectors to supervise application of the curricula and the quality of the teaching given in their respective schools.

Inspectors of education have to ensure the satisfactory progress of studies in establishments within their jurisdiction. They may call meetings of teachers in a given school in order to concert with them about the best methods of teaching different subjects, or to settle a given teacher's difficulties. They may send letters of encouragement, congratulation or censure. They suggest the fines to be imposed by the Education Service or by the appropriate director on slack or repeatedly offending teachers.

Finance. The necessary funds for public schools and teachers' salaries are charged to the budget of the Ministry of National Education and Fine Arts, which is voted in the normal way by Parliament. Details of the 1959 budget are given in Table 1 on page 788.

Private schools are financed by pupils' fees, subventions

from the Lebanese or other governments or by funds allocated by certain associations.

Legislative Decree No. 26 established a special school building fund. Pupils in state schools pay a small contribution to this fund: £(L)3 per annum in primary classes, £(L)15 per annum in lower secondary classes, and £(L)25 per annum in upper secondary classes. This money is lodged with the School Building Society (*Caisse autonome des constructions scolaires*), to which the State contributes an annual sum of £(L)558,000. In 1959 the budget of the special building fund reached £(L)2.4 million, representing the state allocation, the total yield from school fees paid at the beginning of the school year 1958/59 and the sum carried forward from the previous year. The Ministry of National Education and Fine Arts has decided to invest this money in the construction of 64 new school buildings in various parts of the country outside Beirut.

Up to now the majority of school buildings have been rented by the State, with a consequent heavy burden on the Ministry of Education's budget. The number of state-owned buildings will, however, increase as a result of the operation of the School Building Society and assistance offered by certain international organizations and associations (Ford Foundation, Point IV).

Education in state schools has been free—apart from the small contribution to the special building fund—since promulgation of Legislative Decree No. 26. Private secondary schools charge fees according to their size. Fees in the terminal class, for example, vary from £(L)450 to £(L)1,500 per annum. A large part of the annual budget of the Ministry of Education and Fine Arts is reserved for assistance to industrious pupils in all Lebanese schools to schools offering free education, and to Lebanese students receiving specialized education in other countries; each year about fifty scholarships are available for study abroad.

TYPES OF SECONDARY EDUCATION

After completing primary school and receiving the primary certificate, the pupil may choose one of several courses. He may enter a vocational school, where general studies at the lower secondary level will be accompanied by 3 years of preliminary training for the occupation best suited to his capabilities; the pupil leaves this school with the title of skilled worker (*ouvrier qualifié*). He may, however, enter an *école complémentaire*, continue his studies up to the lower secondary certificate (*brevet*), and then apply for admission to the primary teacher training school, to the rural teacher training school, to the National School of Arts and Crafts, to certain vocational schools of technical or commercial training (upper secondary level) or to the Agricultural School of Beirut. A third alternative open to the primary school leaver is to enter the secondary stream proper which, after 7 years and the two-part *baccalauréat* examination, qualifies him for admission to university. All the above-mentioned establishments give classes during the day and have a weekly time-table of 30 hours.

Post-secondary education takes many forms: Beirut alone has three universities, and Lebanese students who wish to specialize in branches of learning not taught in Lebanon may continue their studies in Europe or in America, either at their own expense or with help from the State.

The school year in public secondary schools is divided into two semesters. Private secondary schools prefer the three-term system, which has the advantage of relating the end of the first two terms to the Christmas and Easter holidays. The year begins on the first Monday after 5 October, and ends on the evening of 30 June. Friday and Sunday are holidays in all public schools.

General secondary schools

Full-time instruction is given in public and private *écoles complémentaires* (lower secondary level) and secondary schools; the length of the courses and the examinations for which they prepare have already been referred to. The table below shows the time allotted to the various subjects over the full 7-year course in secondary schools; in the upper stage there is a choice between various sections (literary, scientific), the example given being for the scientific section.

TIME-TABLE FOR GENERAL SECONDARY SCHOOLS
(SCIENCE SECTION)
(in hours per week)

Subject	Year						
	1	2	3	4	5	6	7
Arabic	6	6	7	7	5	5	–
French or English	6	6	6	6	5	5	–
Arab philosophy	–	–	–	–	–	–	3
General philosophy	–	–	–	–	–	–	3
History and geography	2½	2½	3	3	3	3	3
Moral and civic instruction	1½	1½	2	2	–	–	–
Moral and religious instruction	1	1	1	1	2	2	2
Mathematics	4	4	3	3	5	5	8
Physics, chemistry and natural sciences	4	4	3	3	6	6	9
Physical education	2	2	2	2	2	2	2
Music and singing	1	1	1	1	1	1	–
Arts and crafts	2	2	2	2	1	1	–
Total	30	30	30	30	30	30	30

In addition to these full-time schools, there are a large number of secondary education establishments for workers and adults. These give evening classes up to the level of the *baccalauréat* examination for candidates who are unable to attend school during the day or who have passed the age limit for enrolment in secondary schools. Their programmes are condensed; in place of the 30-hour weekly time-table of the ordinary day schools, they have one of 18 hours—3 hours each evening (6 p.m. to 9 p.m.), 6 days a week.

The time-table is divided as follows: 5 hours of Arabic, 4 hours of French or English, 4 hours of mathematics and 3 hours of science, 1 hour of history and 1 hour of geography.

The main aim of these evening schools is to assist people in employment who wish to continue their studies up to the baccalaureate in order to qualify for promotion or for an increase of salary.

In these schools recruitment of pupils is left to the

discretion of the principals, and further selection is made automatically at the end of each year, at the time of the examinations for the *brevet* and the *baccalauréat*. The standard of evening schools is definitely below that of full-time schools, as is indicated by examination results: whilst the percentage of successes for full-time schools is between 55 per cent and 65 per cent, that for the evening schools varies between 5 per cent and 10 per cent—although in the great majority of cases the teaching staff is the same.

Vocational and technical schools

Technical education has only two levels: lower—for vocational schools rather than technical—and secondary. Only those pupils who have obtained the lower general secondary certificate (*brevet*) are admitted to technical secondary schools. The School of Arts and Crafts in Beirut, which is the model for such schools, comprises two distinct branches: the Higher Technical School for Assistant Engineers and the Training School for Hotel and Restaurant Personnel. Pupils may enrol in one of the following sections: building and civil engineering, mechanical engineering, electrical engineering, industrial chemistry or hotel management. The course lasts 3 years, with an examination at the end of each year, and graduates are awarded either an 'assistant engineer' certificate or the certificate of the Training School for Hotel and Restaurant Personnel. The Agricultural School of Beirut is also a secondary establishment.

There are other public vocational secondary schools (full-time instruction) at Tripoli and Zahlé, and there are evening schools concerned primarily with business, bookkeeping, radio and electrical engineering.

Teacher training schools

The primary teacher training school at Bir Hassan, near Beirut, prepares public primary and lower secondary school teachers. Candidates for admission must hold the lower secondary certificate (*brevet*) and pass an entrance examination. The course lasts 3 years. The first year is devoted to general cultural improvement and Arabic and French—the two languages of school instruction. In the second year the general cultural programme is continued, with the addition of child psychology and educational theory. The final year stresses applied pedagogics and teaching practice supervised by the training school staff.

The school has separate sections for men and women. Of the 360 pupil teachers enrolled in 1959, 162 were female.

Increasing importance is being given at the school to handicrafts, gymnastics, music, and to dressmaking and domestic science (for girls). Excellently equipped laboratories for physics, chemistry and natural sciences were opened in 1959. There is a well-stocked library where pupils may find and take out on loan all the books necessary for their studies. Visual aids are also at the pupils' disposal. The various embassies and cultural missions at Beirut lend educational films to be shown in the school cinema, and a film library is being formed.

Plans have been made for the construction of three new primary teacher training schools, including a rural training school, and of a complementary (lower secondary) teacher training school, as soon as funds allow.

The Catholic Episcopate of Lebanon is building a free teacher training school in Beirut.

Article 51 of Decree No. 26 determines the status of the staff of the teacher training school. Some members are employed on a permanent basis, others are recruited according to the needs of the school, and receive individual contracts. All teachers must hold a teaching certificate or its equivalent. Foreign teachers are sometimes employed under contract.

Other specialized schools

Several schools of music and art exist in Lebanon; they are, however, difficult to classify among secondary schools, although the qualifications required for admission are inferior to those required by the universities.

Out-of-class activities

The participation of pupils in school government and social life is greater in private schools than in those maintained by the State. Principals of private schools have more freedom of action than their colleagues in public schools, who are obliged to consult the Ministry of Education through the intermediary of the Secondary Education Service. Nevertheless, Article 61 of Ministerial Decree No. 592 (12 October 1955) authorizes the organization of literary clubs in secondary schools, where pupils find scope for their literary gifts, and where friendly rivalry is encouraged between pupils belonging to the same class.

Sports and games are more widely practised in private than in public schools. In the latter, the sports instructors are too busy with physical education classes to leave them much time for out-of-class activities.

TRENDS AND PROBLEMS

The most important current problem concerns the remoulding of the secondary curricula. The present curricula were drawn up hastily after the declaration of independence in 1944, when it was essential to create a wholly Lebanese programme leading to the award of Lebanese certificates. The matter is at present being examined by the Curriculum and Textbooks Service in collaboration with committees of specialists and education experts and the Centre for Pedagogical Research.

One trend which may have grave consequences for the future of Lebanon is becoming more and more noticeable: the proportion of secondary school leavers enrolling at the universities is becoming so large that in the not too distant future there will be overcrowding in the liberal professions, and a consequent crisis in the labour market. Hence the importance of guidance at the primary school level, whereby young people will be directed towards the manual professions, industry or agriculture. The development of guidance services is one of the functions of the Centre for Pedagogical Research.

[*Text prepared by J. Jelélaty and transmitted by the Lebanese National Commission for Unesco in July 1959.*]

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al-Marsoum al ishtirā'i raqam 25. (Décret No. 25.) Beyrouth, Ministère de l'éducation nationale et des beaux arts, 1953. 55 p.

Marsoum ishtirā'i raqam 26. (Décret No. 26.) Beyrouth, Ministère de l'éducation nationale et des beaux arts, 1955. 24 p.

STATISTICS

Population (mid-year 1957 estimate): 1,525,000.
Area: 4,015 square miles; 10,400 square kilometres.
Population density: 380 per square mile; 147 per square kilometre.

Summary of school statistics, 1954–57. The only data available from the Ministry of Education, for the school years 1954/55 to 1957/58, refer to public and private primary, complementary and secondary schools. (See Table 2.) Some data for 1954/55 relating to other levels and types of education may be found in *World Survey of Education: II—Primary Education.*

Educational finance, 1959. For the year 1959, the budget of the Ministry of Education and Fine Arts amounted to about 31 million Lebanese pounds, representing 15 per cent of the national budget and averaging nearly £ (L) 20 per inhabitant. This amount includes expenditure for the National Library and the Department of Antiquities (4.5 per cent of the total). Central administrative costs amounted to 8.8 per cent of the total budget of the Ministry. (See Table 1.)

Sources. Lebanon: Ministry of Education, Statistical Service, reply to Unesco questionnaire; *Report concerning educational movement in Lebanon for the school year 1958/59.*

1. EDUCATIONAL FINANCE, 1959 (in Lebanese pounds)[1]

Expenditure by purpose	Amount	Per cent
Total expenditure[2]	**30 994 222**	**100**
Central administration	2 743 025	8.8
Primary and complementary education	19 886 290	64.2
Secondary education	2 089 240	6.7
Vocational education	1 603 123	5.2
Teacher training	529 770	1.7
Higher education (Lebanese University)	645 387	2.1
Physical education and sport	1 720 927	5.6
Music	373 540	1.2
National Library	148 500	0.5
Department of Antiquities	1 254 420	4.0

1. Official exchange rate: 1 Lebanese pound = 0.46 U.S. dollar. (approx.)
2. Budget of the Ministry of Education and Fine Arts.

2. SUMMARY OF SCHOOL STATISTICS: PRIMARY AND SECONDARY EDUCATION ONLY, 1954–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary and secondary	Primary, complementary and secondary schools, public	1957/58	2 492	3 833	1 164	99 184	34 077
	Primary, complementary and secondary schools, private	1957/58	2 340	5 545	3 078	152 214	75 505
	Total	**1957/58**	**4 832**	**9 378**	**4 242**	**251 398**	**109 582**
	„	1956/57	4 270	9 017	4 199	253 952	105 604
	„	1955/56	3 724	8 977	4 143	239 925	101 783
	„	1954/55	3 740	8 924	4 172	247 559	99 189

LIBERIA

Liberia was originally founded as a place of asylum for people of colour by the American Colonization Society, a philanthropic organization. The first colonists landed at Cape Mesurado in 1821, and the Republic became an independent State on 26 July 1847.

Liberia lies on the West African Coast, 10 degrees north of the equator, and has as its neighbours Sierra Leone, Guinea and the Ivory Coast. Administratively it is divided into five counties (Sinoe, Grand Bassa, Grand Cape Mount, Montserrado and Maryland), three provinces (Eastern, Central and Western), and four territories (River Cess, Marshall, Sasstown and Kru Coast).

The Government of Liberia is divided into three branches, each responsible to the other. These are the Executive, composed of the President, County Executives and Cabinet; the Legislative, which comprises the House of Representatives and the Senate; and the Judiciary, which is composed of the Supreme Court and the lower courts.

THE EDUCATIONAL SYSTEM

The Constitution places responsibility for the conduct of education on the President of Liberia, and names as his principal adviser on education the Secretary of Public Instruction. This has produced a centralized educational system, the Department of Public Instruction being the only agency of government which formulates laws and regulations regarding education and the conduct of education. The Constitution provides that Church and State shall be separate, and that education shall be the responsibility of the State.

Private agencies such as religious denominations and philanthropic organizations play an important part in the field of education in Liberia, but do not share in the formulation of educational policies or educational rules and regulations and are obliged to conform to those laid down by the Department of Public Instruction.

The structure of the school system is as follows: 3 years of pre-primary school, 6 years of primary school (grades 1 to 6), 3 years of junior high school (grades 7 to 9), 3 years of senior high school (grades 10 to 12) and 4 years of college. There is also a 4-year vocational secondary course (grades 9 to 12) based on 8 years of general schooling. The University of Liberia has faculties in Liberal Arts and Sciences, Teacher Training, and Law.

THE DEVELOPMENT OF SECONDARY EDUCATION

The Education Act of 1900, amended in 1912, 1937 and in 1943, provides the legal basis for education in Liberia. Under the Act the national government is responsible for the operation of the public educational system, and all forms of education—public or private—come under the control and supervision of the Secretary of Public Instruction.

The planning and direction of educational programmes is carried out by the Secretary of Public Instruction (Minister of Education) assisted by two under-secretaries, one assistant secretary and other personnel, including a director of secondary education and a supervisor of schools in each of the political divisions of the country. The task of these last officials is to transmit departmental instructions to heads of schools and to ensure that the educational standards set by the department are maintained.

No department of government other than the Department of Public Instruction administers secondary schools.

Supervision and inspection are normally conducted by the supervisors of schools but other officials of the department may also carry out inspections when necessary. Supervisors are recruited from the teaching profession in the area concerned; usually from among school principals having a university degree.

All public education in Liberia is financed by the Central Government with funds from the general revenue appropriated annually by the legislature in accordance with estimates submitted by the department. The Government also subsidizes annually the various parochial and philanthropic schools in the country.

In the public education system, funds for buildings, equipment, supplies and salaries are administered by the Department of Public Instruction; no money is sent to schools.

No fees are charged in public schools for pre-primary and primary education, but a small fee is charged for secondary education, ranging from 15 dollars annually in public schools to about 50 dollars in private schools. There is a scholarship programme whereby any student who can pass the department's qualifying examination may receive a local scholarship for study in a public secondary school.

TYPES OF SECONDARY EDUCATION

There are at present two main types of secondary education in Liberia: general, which prepares for higher education; and vocational, which gives instruction in a trade for a period of 4 years. There is also a system of adult education offering a 4-year course for those who were not able to complete secondary education earlier; this is provided at such institutions as the People's College of the University of Liberia, the Martha Tubman Academy and the Zion Academy. Other types of education open to pupils leaving elementary schools include specialized vocational training courses—secretarial studies, dressmaking, etc.

The secondary school year begins on 15 February and ends on 30 November. The first semester ends in June and the second semester starts in July. The school week is from Monday to Friday, and the school day is from 7.30 a.m.

to 1 p.m. There are about 4 days' holiday for Easter and about the same between the semesters, about 12 national holidays, with an additional day whenever an African State becomes independent.

The only vocational secondary school in the country is the Booker Washington Institute, at Kakata. It is a secondary school with 4-year courses in agriculture, domestic and commercial science for girls, building trades, textiles, electrical and mechanical trades, plumbing and machine shop.

At present there are two types of training centres for teachers for the elementary schools: these are the Klay Fundamental Education Center, and the Projected ZorZor Teacher Training Institute. For the Klay Center, students are selected from the various administrative divisions of the country after completing the eighth grade. They are then required to pass a placement test as a qualification for entering the course. The curriculum includes 1 year of teacher training and 1 year of fundamental education. The teaching staff is composed of persons who have taken training on Unesco fellowships at other centres of fundamental education. Examinations are held every 6 weeks and at the end of each semester.

TRENDS AND PROBLEMS

Education in Liberia today is designed to provide the trained men and women needed to carry out the country's development programme.

The principal problem of secondary education is the lack of students qualified to enter the available secondary schools. Since the only solution is to expand primary education, the Department of Public Instruction has decided to build 100 school buildings for primary schools throughout the country during the next 4 years. To provide the teachers to man these schools, the department will open 5 new junior colleges offering a course of only 2 years of instruction beyond the secondary school.

The Government also hopes that the recent reorganization of secondary education into senior and junior high schools and the staffing of these schools with qualified instructors in languages, science, mathematics and social sciences will raise the standard of instruction. The problem is, in fact, one of expanding and improving education at the same time.

With regard to vocational education, a school is needed at Monrovia where skilled and semi-skilled workers can attend courses after working hours, and more vocational secondary schools are required to train technicians.

[*Text prepared by the Secretariat of Public Instruction, Monrovia, in June 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 1,250,000.
Area: 43,000 square miles; 111,370 square kilometres.
Population density: 29 per square mile; 11 per square kilometre.

Summary of school statistics, 1953–56. In 1956/57, total enrolment (not including adult education) was 54,000, or about 4 per cent of the total population. Of these pupils, 5 per cent were in kindergartens, 86 per cent in primary schools, 8 per cent in secondary schools, less than 1 per cent in institutions of higher education. The proportion of girls was 26 per cent in primary schools, where there was an average of 31 pupils per teacher. Between 1953 and 1956, primary school enrolment increased by 15 per cent. (See Table 2.)

Educational finance, 1957/58. For the fiscal year beginning in September 1956, total expenditure on education amounted to 1.7 million dollars, averaging about $1.40 per inhabitant. Recurring expenditure represented 87 per cent of the total expenditure. (See Table 1.)

Source. Liberia: Department of Public Instruction, reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1957/58 (in Liberian dollars)[1]

Expenditure by purpose	Amount	
Total expenditure[2]		**1 738 285**
Recurring expenditure		1 517 874
For administration or general control	127 294	
For instruction		
Salaries to teachers, etc.	641 500	
Other instructional expenditure	686 400	
Other recurring expenditure	62 680	
Capital expenditure		220 411
Educational facilities	18 822	
Auxiliary facilities	201 589	

1. Official exchange rate: 1 Liberian dollar = 1 U.S. dollar.
2. Closed account.

2. SUMMARY OF SCHOOL STATISTICS, 1953–56

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1956/57	61	109	109	2 147	1 030
	Kindergartens, private	1956/57	8	19	16	808	289
	Total	**1956/57**	**69**	**128**	**125**	**2 955**	**1 319**
	,,	1955/56	29	75	75	2 331	834
	,,	1954/55	21	58	58	1 705	682
	,, [1]	1953/54	...	...	...	1 334	...
Primary	Elementary schools, public	1956/57	290	926	380	30 477	7 227
	Elementary schools, private	1956/57	198	552	192	15 595	4 766
	Total	**1956/57**	**488**	**1 478**	**572**	**46 072**	**11 993**
	,,	1955/56	475	1 345	475	41 996	9 352
	,,	1954/55	468	1 290	429	40 232	8 247
	,,	1953/54	449	1 358	425	40 193	7 791
Secondary							
General	Secondary schools, public	1956/57	10	71	23	1 021	172
	Secondary schools, private	1956/57	12	81	24	1 371	302
	Total	**1956/57**	**22**	**152**	**47**	**2 392**	**474**
	,,	1955/56	20	138	40	1 860	372
	,,	1954/55	19	126	38	1 494	321
	,,	1953/54	17	118	35	800	180
Vocational	Vocational high school, public						
	Total	**1956/57**	**1**	**60**	**8**	**460**	**70**
	,,	1955/56	...	...	...	...	...
	,,	1954/55	1	...	...	174	...
Teacher training	Teacher training classes in 4-year high school, public [2]						
	Total	**1956/57**	**13**	**...**	**...**	**1 721**	**...**
	,,	1956/56	13	...	...	1 879	...
	,,	1954/55	13	...	...	1 884	...
	,,	1953/54	8	...	...	1 448	...
Higher	University, public	1956/57	1	40	13	269	53
	Colleges, private	1956/57	2	20	2	130	44
	Total	**1956/57**	**3**	**60**	**15**	**399**	**97**
	,,	1955/56	3	58	16	403	114
	,,	1954/55	3	56	16	422	109
	,,	1953/54	3	...	...	...	...
Adult	Fundamental education						
	Total	**1956/57**	**7**	**38**	**—**	**2 101**	**691**
	,,	1955/56	...	...	...	...	...
	,,	1954/55	19	31	...	800	...

1. Public schools only.
2. Data refer to number of centres where classes were conducted for teachers in service who attended evening classes or during the vacation period.

LIBYA

THE EDUCATIONAL SYSTEM

Articles 28, 29 and 30 of the Constitution of the United Kingdom of Libya affirm the right of all Libyans to education and state that schooling shall be compulsory for boys and girls.

The Educational Act of 1952 provided that each of the three provinces in the Kingdom should, within a reasonable period of time, establish the primary, secondary and technical schools required to meet the educational needs of the citizens; and that the provinces should maintain these schools out of their own budgets, and establish boarding sections.

The Minister of Education in the Government of the United Kingdom of Libya is assisted by an advisory body, the Higher Council of Education, which consists of the Minister as chairman, the Director-General of the Ministry of Education as deputy chairman, the Commissioners of Education in the three provinces, and six citizens, two from each province, who are appointed by the Minister of Education upon the recommendations of the Commissioners of Education.

The Ministry of Education is responsible for laying down the broad lines of educational policy, and for providing guidance and direction. It supervises the system of education and makes regulations concerning methods, textbooks, examinations, the granting of degrees, and the qualifications of teachers and inspectors. It also supplies provincial education authorities with information on recent ideas and trends in education. The Ministry does not itself establish schools and educational institutions, nor does it appoint teachers, pay their salaries, or recommend their promotion; all these and other matters are left to the provinces.

Each province has its own educational administration headed by the Commissioner (*Nazir*) of Education, who is a member of the Executive Council of the province and is responsible to the Legislative Council. Under each Commissioner of Education there is a provincial Department of Education, headed by a director. The provincial education authorities are responsible for establishing schools and educational and training institutions up to university level.

The role of local bodies in the Libyan educational system is practically confined to organizing literacy courses, adult education, and night schools. The Education Departments allow these bodies to use school buildings and facilities in the evenings, and supply them with whatever books and school materials they can make available.

The Free Education Act makes education free at all stages. Laws have been passed organizing primary, secondary, technical, and teacher education.

The structure of the Libyan school system is shown in the diagram on page 795.

THE DEVELOPMENT OF SECONDARY EDUCATION

Before achieving independence, Libya had only a few primary schools and secondary education was rarely available to the indigenous population. There were some specialized institutes for training teachers but these followed the pattern of the Italian schools and accepted only a very limited number of Libyan students.

Secondary education in the full sense did not begin until the year 1947. In the academic year 1947/48 there were 4 secondary schools with 234 students and 18 teachers. By 1956/57 the figures had risen to 9 schools, 4,650 students and 304 teachers. Before 1957 public education in Libya consisted of two levels, primary and secondary, but in 1958 it was decided to divide secondary education into lower and upper stages, known as preparatory and secondary.

Legal basis

In accordance with the Education Act of 1952, the Minister of Education, with the agreement of the Higher Council of Education, promulgated the Secondary Education Law, dated 5 December 1956. In 1957 regulations were issued covering technical schools and public and private teacher training colleges for men and women, and also the examinations held in these colleges. The Technical Education Law organizing and standardizing technical education throughout the country was passed in the same year.

Administration

Decisions with regard to the policy and planning of secondary education are communicated by the Ministry to the three provinces, with instructions and recommendations for their implementation.

The provincial departments usually have a special section for secondary education headed by a General Supervisor of Secondary Education.

Some technical institutes which can be considered to be at the level of secondary education have been established by the Ministry of Health. Among these are the Institute for Health Officers and Inspectors, the centres for the care of mothers and children, and the nurses' schools which are entirely administered and run by the Ministry.

Inspection. In appointing inspectors, the Departments of Education insist on high academic and teaching qualifications and also on experience. In addition Libyan inspectors are sent on study missions to countries with well developed educational systems, and special courses in education and psychology are organized for candidates for inspectors' posts.

Finance. All educational expenditure by the provincial Department of Education is provided for in the general

budget of the government of the province. This chapter of the budget, which is prepared by technical experts in the Department of Education, is referred to the Executive Council for ratification and then sent to the Legislative Council for discussion and adoption.

The Ministry of Education assists the Commissioners of Education to obtain special funds for school building programmes from the technical assistance agencies.

Some secondary schools, particularly those in the cities, have formed parents' associations to improve relationships between school and society and to help solve material and other problems.

Teachers are provincial public servants and their salaries are in accordance with civil service scales in the province.

Education is free, and the Government also makes every effort to provide further help for poor students to encourage them to continue their studies.

School buildings. School architects take into consideration the most modern educational and health requirements. The schools are well equipped and have large playing areas, land for agricultural experiments, and school gardens.

School welfare services. The provincial governments, and the educational authorities in particular, offer students various kinds of social and health services. School meals are provided for all the students in day schools. This programme is financed through customs duties, assistance from the international agency, Unicef, and from the American aid organization CARE.

TYPES OF SECONDARY EDUCATION

By the time a student has completed primary education, the school will have an idea of his interests and aptitudes and will advise him and his parent or guardian on the choice of the kind of further education for which he is fitted. Thus he is either enrolled in a preparatory (i.e., lower general secondary) school or enters an intermediate vocational school, such as a public teachers' institute, an agricultural, commercial, or industrial school, etc. At the end of the preparatory stage, he may either continue his general secondary education or enter one of the technical and vocational high schools, which include, in addition to the above-mentioned schools, the institutes of health officers and inspectors and applied engineering. Every student who concludes his secondary studies successfully has a chance to carry on his higher education: he may either be sent abroad on a scholarship, or enrolled in one of the colleges in the Libyan University, or may enter the Military College in Benghazi. Students who are unable because of personal circumstances to complete their secondary education, may enrol in evening schools in the larger towns or attend the special or technical courses which are organized whenever the number of students is sufficient.

The school year of 219 school days begins on 12 September and ends on 25 June, with a break from the 14th to the end of February. Schools are open every day of the week except Friday. A school day comprises 5 hours 20 minutes and is divided into periods of 45 minutes.

General secondary schools

Public secondary education in Libya is divided into two stages—preparatory and secondary proper.

The purpose of secondary education is to prepare good and useful citizens who will be able to contribute to the development of their community. The secondary school is intended to be a place in which the student may acquire self-knowledge and gain worth-while experience, and not a place in which his head is filled with information and rules that do not touch on the essential problems of living.

The preparatory (lower secondary) stage. To be admitted, a student must have a certificate proving that he has finished his primary studies, or that he has reached an equivalent level. During the 3-year course in preparatory schools the following subjects are taught: the Koran and religion, Arabic, a foreign language, history, civics, geography, mathematics, general science, hygiene, drawing, practical work (including handicrafts and horticulture for boys, and needlework and domestic economy for girls), songs, music, physical education and games. In addition, pupils take part in various free school activities adapted to the environment which give them an opportunity to follow their interests and reveal their talents.

Promotion examinations are held at the end of the first and second years. In the aggregate for each subject, marks earned throughout the year account for 25 per cent of the total, and the written examination at the end of the year for 75 per cent. The provincial education departments hold a general examination, in two stages, at the end of the final year of the preparatory stage; students who pass are awarded the Certificate of Preparatory Study.

The upper secondary stage. This is the second and final stage in public secondary education. Here again the course lasts 3 years. To be admitted a student is required to have the Certificate of Preparatory Study or equivalent qualifications. In the first year all students take the same subjects; in the second and third years studies are divided into two sections: arts and sciences. The time-table is shown on the following page.

Promotion examinations at the end of the first and second years of the upper secondary stage are organized by special committees appointed by the principal of the school; the committees set the papers, correct them, and announce the results. The final examination at the end of the third year, however, is organized by the Ministry of Education, with the assistance of professors from the Libyan University. Successful students are awarded the Certificate of Public Secondary Study. No student is considered to have passed the examination unless he obtains the prescribed minimum mark in each subject (e.g., 20 out of 40 for Arabic, 16 out of 40 for first foreign language, 12 out of 30 for second foreign language) and 50 per cent of the total marks obtainable in all subjects.

Teachers. As the number of Libyan teachers is not at present sufficient for the needs of the secondary schools, the provincial authorities employ competent teachers from abroad.

TIME-TABLE OF UPPER SECONDARY STAGE
(in periods per week)

Subject	Common studies 1st year	Arts sections 2nd and 3rd years	Science section 2nd and 3rd years
Koran and religion	2	2	2
Arabic	6	8	5
English	6	7	5
French	4	5	4
Mathematics	4	–	7[1]
History	2	2	–
Geography	2	2	–
Physics	2	–	3
Chemistry	2	–	3
Biology	–	–	3
Study of society	2	–	–
Elementary philosophy	–	2	–
Elementary sociology	–	2	–
Drawing	1	–	–
Practical hobbies	2	2	2
Physical education and games	2	2	2
Additional courses	–	3[2]	3[3]

1. Including mechanics.
2. Arabic, English, history, or geography.
3. Mathematics, physics, chemistry, or biology.

Religious institutes

These institutes have their own curricula and regulations, which do not differ greatly from those of the government schools except in that they emphasize the study of the Arabic language and Muslim Law. They are divided into the following sections: primary section (4 years); secondary (5 years after the primary section); advanced (4 years after the secondary section); specialization sections (2 years and 5 years after the advanced section).

Vocational and technical schools

The objectives of technical education are: to prepare young people for living in the modern world, and to train skilled artisans and technicians in the various fields and levels of productive activity, according to the technological needs of the country.

Generally speaking, schools providing technical and vocational education in Libya may be divided into three groups: industrial schools, agricultural schools, and commercial schools.

Technical education is further divided into two levels: (a) intermediate, training artisans and skilled workers; the courses last 4 years and are open to holders of the Primary Certificate; (b) advanced level, training highly skilled artisans and assistant technicians; the courses last 3 years, and are open to holders of the Preparatory (lower secondary) Certificate.

A written examination is held for promotion within the course, and there is also a final written examination. In schools where the course of study includes factory work, no student may sit for a written examination unless he has obtained at least 60 per cent of the total marks for practical training and factory work and the prescribed minimum marks for each branch and subject of the latter. In the proportion of 40 to 60 respectively, marks obtained for work (other than factory work) done during the year are taken into consideration in conjunction with those obtained in the written examination.

Training Centre for Fundamental Education. This centre was established with the aid of Unesco in 1957, and now offers a 3-year course. Students are trained in adult education, in methods of teaching literacy, in health and hygiene, rural occupations, and the teaching of general cultural subjects.

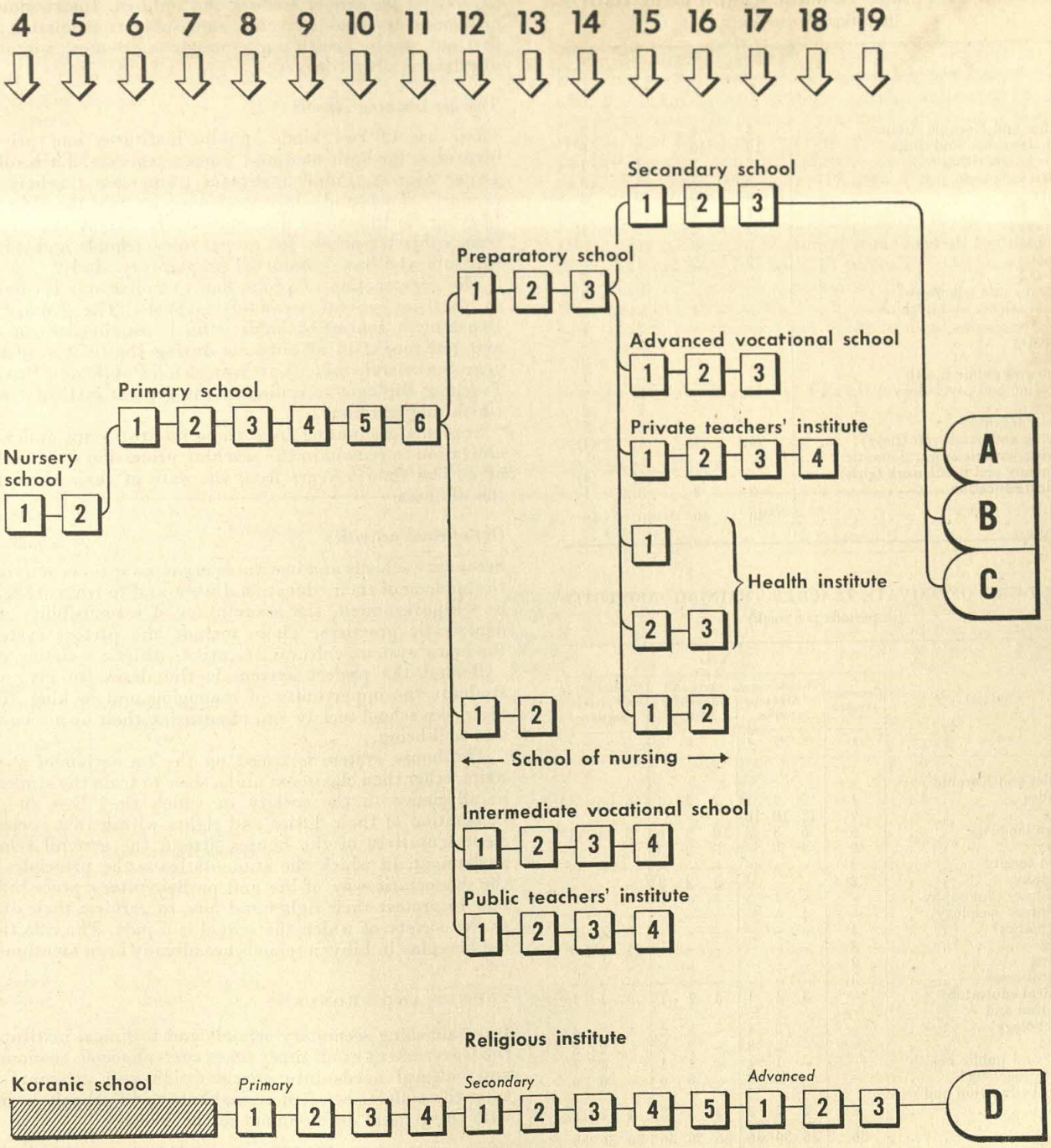
Institute for Health Officers and Inspectors. Established in 1957 by the Ministry of Health jointly with the World Health Organization and Unicef, this institute trains health officials, especially for rural areas. There are two sections. (a) *For health officers:* the aim is to train staff to run health services, including technical services, under the supervision of doctors. The duration of study in this section is 3 years. Entrants are required to have completed their preparatory (lower secondary) education. Subjects taught include elementary science and medicine, public health, health education, elementary surgery and first aid. The students receive practical training in hospitals and clinics and in the field. (b) *For health inspectors:* a 12-month course open to students holding the Preparatory Certificate. Subjects include arithmetic, physics, chemistry, sciences related to public health, statistics, etc. Special emphasis is placed on the study of environmental hygiene, contagious diseases, personal health, and health education.

GLOSSARY

NOTE. Age-scale is based on the official age for entry to primary school, which is 6 years. Average entry ages for most schools, particularly specialized vocational training schools, are higher than shown.

advanced vocational school: upper vocational secondary school (agricultural or industrial or commercial).
health institute: vocational training school for health inspectors (1-year course) and health officers (2 years).
intermediate vocational school: lower vocational secondary school (agricultural or industrial or commercial).
nursery school: pre-primary school.
preparatory school: lower general secondary school.
private teachers' institute: private teacher training school at upper secondary level for preparatory school teachers.
public teachers' institute: public teacher training school at lower secondary level for primary school teachers.
school of nursing: vocational training school with courses at lower and upper secondary levels.
religious institute: school of general education with curriculum emphasizing Arabic language and Muslim law.

A. University of Libya.
B. Military College.
C. Higher education abroad.
D. Specialized courses at religious institute.


4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Secondary school
1 2 3
Preparatory school
1 2 3
Advanced vocational school
1 2 3
Primary school
1 2 3 4 5 6
Private teachers' institute
1 2 3 4
Nursery school
1 2
A
B
C
1
Health institute
2 3
1 2
1 2
School of nursing
Intermediate vocational school
1 2 3 4
Public teachers' institute
1 2 3 4
Religious institute
Koranic school
Primary
1 2 3 4
Secondary
1 2 3 4 5
Advanced
1 2 3
D

TIME-TABLE OF PUBLIC TEACHER TRAINING INSTITUTES
(in periods per week)

Subject	Year			
	1	2	3	4
Religion and Koranic studies	4	4	3	3
Arabic language and songs	10	10	8	8
Arabic handwriting	2	2	1	1
Foreign language	5	5	3	3
History	2	2	2	2
Civics	1	1	–	–
Geography	2	2	2	1
Arithmetic and algebra	3	2	–	–
Geometry	2	2	1	–
Algebra	–	–	2	2
Geometry and trigonometry	–	–	–	2
General science and hygiene	3	4	–	–
Physics	–	–	2	1
Chemistry	–	–	2	–
Biology	–	–	–	2
School and public health	–	–	–	1
Education and psychology	–	–	2	2
Method	–	–	1	2
Practice teaching	–	–	5	5
Drawing and handicraft (boys)	(4)	(4)	(4)	(4)
Drawing, artistic work, domestic economy and needlework (girls)	(4)	(4)	(4)	(4)
Physical education	2	2	2	1
Total	40	40	40	40

TIME-TABLE OF PRIVATE TEACHER TRAINING INSTITUTES
(in periods per week)

Subject	Year									
	Common studies	Religion and Arabic section			Arts and languages section			Mathematics and science section		
	1	2	3	4	2	3	4	2	3	4
Religion and Koranic studies	1	5	4	3	7	5	4	6	5	4
Arabic	7	12	10	10						
Foreign language	6	6	3	3	10	8	9	5	4	3
History	2	4	–	–	5	2	3	–	–	–
Libyan society	2	–	–	–	–	–	–	–	–	–
Geography	2	–	–	–	5	2	3	–	–	–
Elementary philosophy	–	–	4	3	4	4	–	–	–	–
Elementary sociology	–	4	–	–	–	–	–	–	–	–
Mathematics[1]	4	–	–	–	–	–	–	9	6	7
Science[2]	5	–	–	–	–	–	–	11	6	6
Drawing	2	–	–	–	–	–	–	–	–	–
Practical arts[3]	3	–	–	–	–	–	–	–	–	–
Technical education	–	3	1	1	3	1	1	3	1	1
Education and psychology	–	–	3	4	–	3	4	–	3	4
Method	–	–	2	3	–	2	3	–	2	2
School and public health	–	–	1	1	–	1	1	–	1	1
Practice teaching[4]	–	–	6	6	–	6	6	–	6	6
Physical education and games	2	2	2	2	2	2	2	2	2	2
Total	36	36	36	36	36	36	36	36	36	36

1. Including mechanics in the mathematics and science section.
2. Physics, chemistry and biology; is replaced by botany and zoology in the mathematics and science section.
3. Handicrafts and horticulture for boys, needlework and home economics for girls.
4. One day a week and in the final year, a 3-week period in preparatory schools.

Centres for the care of mothers and children. Instruction of an elementary kind is given in such subjects as nursing and first aid, public health and contagious diseases, anatomy, physiology, obstetrics, etc.

Teacher training schools

These are of two kinds: public institutes and private institutes, for both men and women teachers. Each offers 4-year courses. Public institutes train class teachers for primary schools and admit students who hold the Primary Leaving Certificate or its equivalent. Private institutes train subject teachers for preparatory schools and admit students who have completed preparatory study.

The organization of promotion examinations is similar to that in general secondary schools. The Education Department concerned holds a final examination on the material taught in all subjects during the final academic year. Successful students are awarded a Public or a Private Teaching Diploma according to the type of institute from which they graduate.

Students graduating from these institutes are under an obligation to remain in the teaching profession for a period of no less than 6 years from the date of their obtaining the diploma.

Out-of-class activities

Secondary schools and institutes organize various activities to supplement their educational work and to train students in self-government, the assumption of responsibility and democratic practices. These include the prefect system, the house system, cultural, scientific, athletic societies, etc.

Behind the prefect system is the desire to give the students the opportunity of managing and looking after their own school society and of ensuring their own security and well-being.

The house system is based on the formation of social units, other than classroom units, so as to train the students in allegiance to the society in which they live and in recognition of their duties and rights within that society. Representatives of the houses attend the general school parliament, in which the students learn the principles of the democratic way of life and parliamentary procedures, how to protect their rights and how to perform their duty to the society of which the school is a part. The role that hobbies play in Libyan schools has already been mentioned.

TRENDS AND PROBLEMS

In establishing secondary schools and technical institutes, the Government at all times takes current social, economic, and cultural needs into consideration and attempts to keep the syllabuses of these institutes and schools in line with the general development of the country.

[*Text prepared by the Ministry of Education, Tripoli, in November 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 1,153,000.
Area: 679,360 square miles; 1,759,540 square kilometres.
Population density: 1.7 per square mile; 0.7 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment (not including foreign schools and some 20,000 pupils receiving religious instruction in Koranic schools) was over 97,000 pupils, or about 8.5 per cent of the total population. Of these pupils, 92 per cent were in primary schools, 5 per cent in general secondary schools, about 2 per cent in vocational and teacher training schools, and 0.2 per cent at the university. The proportion of girls was 18 per cent in primary schools and in teacher training schools. In 1956 girls made up only 2 per cent of the enrolment in general secondary schools, and 9 per cent in the vocational schools. At the university there were 3 girls enrolled in 1957. The average number of pupils per teacher in 1957 was 33 in primary schools, 15 in general secondary schools, and 8 in vocational schools. Total enrolment in 1957 was higher than the previous year by 14 per cent in primary schools, and by 25 per cent in general secondary schools. In the teacher training schools, enrolment more than doubled between 1953 and 1957. (See Table 1.)

Enrolment trends in secondary education, 1947–57. Table 2 shows that enrolment in general secondary education grew from 234 pupils in 1947 to 5,271 pupils in 1957, multiplying more than 20 times in a period of 10 years. Nevertheless the average enrolment for the 3 years 1955–57 represented less than 5 per cent of the estimated population 15–19 years old.

Source. Libya: Ministry of Education.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools						
	Total	**1957/58**	**[1]433**	**[1]2 733**	**...**	**[1]89 558**	**[1]16 400**
	,,	1956/57	418	2 566	...	78 824	13 753
	,, [2]	1955/56	334	1 997	...	62 160	10 930
	,, [2]	1954/55	285	1 726	...	54 272	8 963
	,, [2]	1953/54	244	1 509	...	46 536	7 193
Secondary							
General	Middle schools	1957/58	37	358	...	5 271	...
	Secondary schools	1957/58	8				
	Total	**1957/58**	**45**	**358**	**...**	**5 271**	**...**
	,,	1956/57	35	304	...	4 650	...
	,,	1955/56	23	199	...	2 806	...
	,,	1954/55	12	189	...	2 395	...
	,,	1953/54	12	111	...	1 571	...
Vocational	Commercial schools	1957/58	4	51	...	425	...
	Agricultural schools	1957/58	2	18	...	205	...
	Other schools	1957/58	2	18	...	92	...
	Total	**1957/58**	**8**	**87**	**...**	**722**	**...**
	,,	1956/57	7	85	...	873	79
	,,	1955/56	7	75	...	753	74
	,,	1954/55	7	69	...	583	21
	,,	1953/54	7	63	...	530	18
Teacher training	Teacher training schools						
	Total	**1957/58**	**4**	**131**	**...**	**1 568**	**285**
	,,	1956/57	4	94	...	1 300	224
	,,	1955/56	3	...	...	1 119	187
	,,	1954/55	4	...	...	870	210
	,,	1953/54	4	...	...	677	284
Higher	University of Lybia						
	Total	**1957/58**	**1**	**...**	**...**	**194**	**3**
	,,	1956/57	1	10	...	71	—
	,,	1955/56	1	...	...	33	...
	,,	1954/55	...	...	...	...	...

Note. Data on foreign schools are not included.

1. In addition there were 690 Koranic schools with 740 teachers and 19,839 pupils.
2. Tripolitania and Cyrenaica only.

2. TRENDS IN GENERAL SECONDARY EDUCATION, 1947–57

School year	Number of students enrolled		Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	Total	Per cent female			
1947	234	...	0.3	99	*0.3*
1948	293	...			
1949	385	...			
1950	628	...	1.3	*94	**1.3*
1951	795	...			
1952	978	...			
1953	1 571	...			
1954	2 395	...			
1955	2 806	...	4.2	96	*4.4*
1956	4 650	...			
1957	5 271	...			

LIECHTENSTEIN

THE EDUCATIONAL SYSTEM

The educational system in the Principality of Liechtenstein is governed by the Education Act of 9 November 1929 (*Landes-Gesetzblatt* 1929, No. 13); since then various amendments have been made to it which will necessitate recasting all school legislation in the very near future.

The sole differentiation made by the Education Act of 9 November 1929 is between the *Volksschule* (primary school) (Articles 42–78) and *Höhere Unterrichtsanstalten* (secondary schools) (Articles 79–85).

The primary schools include the *Alltagsschulen* (day schools) (Articles 52–60) and the *Fortbildungsschulen* (continuation schools) (Articles 61–71). The day schools (which correspond to the Swiss *Primarschulen*) cover 8 years of compulsory education, and the continuation schools, 2.

All other educational establishments are grouped together in the 1929 Act which has so far governed them as secondary schools.

Educational legislation is enacted by the Diet, the state legislative authority, on the proposal of the State Educational Council (*Landesschulrat*) and after prior consultation with the professional organizations concerned (i.e., the teachers' associations).

Decisions concerning curricula and regulations are taken by the State Educational Council after hearing the views of the teachers.

The Director of Education (*Schulkommissär*) is appointed by the Council. He is responsible for the drafting of legislation and curricula in public schools, and for seeing that the school laws are implemented. Private schools prepare their own curricula and submit them for approval.

TYPES OF SECONDARY EDUCATION

Secondary education as defined for the purposes of the present survey (second stage of school education proper, roughly covering the period from about 12 to 18 years of age) thus comprises classes and schools administered as primary schools as well as secondary schools proper.

The school year begins in all cases in the spring, and is divided into terms separated by the summer, Christmas and Easter holidays.

Seventh and eighth classes in the Volksschule course. These classes are also known as the *Oberstufe* (upper grades) or *Abschlussklassen* (terminal classes). Their programme is based on the new curriculum of 13 July 1948 (*Landes-Gesetzblatt* 1948, No. 15). These classes, like the *Volksschulen* in general, are maintained by the various municipalities, although for the most part the teachers' salaries are paid by the State. Under the Education Act, the supervision of these schools is the responsibility of the State Educational Council, which delegates its functions to the Director of Education.

The subordinate authority in each municipality is the Local Educational Council (*Gemeindeschulrat*).

Continuation schools. Children who have completed the *Volksschule* course and are not taking up vocational training or courses at a vocational school are required to attend a continuation school, where separate courses are given for boys and girls, for 2 years. For the boys, the course is recapitulatory in nature, with practical work and instruction in civics. For the girls, the emphasis is on home economics. A curriculum for these schools has been drawn up by the State Educational Council, which supervises them through the Director of Education. They are financed partly by the State and partly by the municipalities.

Realschulen (lower general secondary schools). A *Realschule* is maintained by the State (not the municipality) in each of the two counties. The Vaduz school was founded as early as 1858. The *Realschulen* in their present form, and also their curriculum, are governed by a Decree of 11 July 1952 (*Landes-Gesetzblatt* 1952, No. 15). Boys and girls are admitted to them on completion of 6 years of primary schooling in order to prepare themselves for particular occupations. The *Realschule* course lasts 3 years; the school year comprises 39 weeks, each normally consisting of 10 half days, with 35–38 periods a week. Supervision is exercised by the State Educational Council, acting through the Director of Education. A school principal is appointed every two years to take immediate charge of each school. The State is responsible for erecting the buildings, paying the teachers' salaries and covering the running costs, and gives yearly grants to pupils living outside the locality to meet their travelling expenses.

Private schools. Under the Education Act of 1929 (Articles 79–85), private schools also come under the State Educational Council which approves the curricula and exercises general supervision. The immediate administration of the school is in the hands of their boards of governors. So far as these schools serve the interests of the State, they receive an annual grant-in-aid towards their operational costs.

Collegium Marianum, Vaduz. This college, which is exclusively for boys, is run by Marist Brothers, and includes two schools of different types:

1. *Gymnasium* (general secondary school). This was founded as a *Progymnasium* (lower and middle part of a classical secondary school) in 1937, the boys being enrolled on completion of 5 years of primary schooling, receiving a 5-year course of secondary education and completing the rest of their studies up to the *Matura* (school-leaving certificate) level at Swiss or Austrian secondary schools. Determined efforts are now being made to develop the school up to school-leaving certificate level. The plan is to introduce a certificate course with Latin, French and English, but without Greek. The State Educational Council will in due course appoint a school-leaving certificate board.
2. *Wirtschaftliche Mittelschule* (intermediate commercial school). In 1953, an intermediate commercial school was also established. It has a 5-year course following on from the fifth year in the *Volksschule*, and teaches English as the first foreign language and French as the second. From class III onwards, it teaches shorthand, book-keeping, business management, commercial arithmetic and physics. Additional subjects in class IV are chemistry and typing, with technical drawing as an optional subject. Instruction in geography is completed in class V by economic geography, and instruction in history by an introduction to sociology. On completing class V, the pupils take a final examination set by a board appointed by the State Educational Council, and are awarded a state certificate.

Institut St. Elisabeth, Schaan. This school for girls, which has been in existence since 1946, is run by nuns. It provides a preparatory year, followed by 4 classes, and accepts pupils who have completed 5 years of primary schooling. The course concludes with a final examination which, however, is not yet organized on an official state basis. The school roughly corresponds in type with a commercial school.

Lyzeum Gutenberg, Balzers. This school, which consists merely of the last two classes of a mission school whose pupils take the lower and middle part of the course in Switzerland, was established in 1954 for the sole purpose of providing instruction for prospective members of a religious Order. The State Educational Council gives no grant-in-aid, but exercises the usual supervision and appoints the examination board which sets the school-leaving examination and issues the corresponding state certificate.

Vocational schools. Pupils who have completed courses at the *Realschulen*, or at the intermediate commercial school or private high school for girls, and embark on apprenticeship training are required to attend a vocational school (commonly known as *Gewerbeschule*, trade school) once a week during the 3 or 4 years of their apprenticeship. Because of the smallness of the territory, the State maintains no trade schools of its own but sends the apprentices to Switzerland, making a substantial contribution towards the cost of running the schools in return for the facilities granted. The syllabus is arranged by the Swiss professional organizations, Trade Federation and Apprenticeship Board, with a local Apprenticeship Board set up to watch over Liechtenstein's special interests.

Teacher training schools. There are no teacher training schools in the Principality, and prospective teachers receive their training at institutions in Switzerland. After serving two years' probation, they are required to take a local proficiency examination, and the State Educational Council appoints an examination board for that purpose.

[*Text prepared by the Department of Education, Vaduz, in December 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 15,000.
Area: 61 square miles; 157 square kilometres.
Population density: 246 per square mile; 96 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, there were 2,750 pupils enrolled in the 23 public primary schools and in the 6 secondary schools. This represents a school-going population equal to about 18 per cent of the total population. Total enrolment was 13 per cent higher in 1957 than in 1953, this being mainly due to increased enrolment at the secondary level. (See Table 2.)

Enrolment trends in secondary education, 1946–57. Secondary enrolment, which was 237 in 1946, had doubled by 1955. The secondary enrolment ratio, obtained by relating the average enrolment to the estimated population 15–19 years old, was 28 for 1946–49, 32 for 1950–54 and 50 for 1955–57.

Examination results in secondary education, 1953–57. The number of *Realschule* certificates awarded was 65 in 1957/58 as against 34 in 1953/54. Of these, 30 certificates were granted to girls in 1957/58 and 14 in 1953/54. Only 5 *Matura*-certificates were granted to boys in 1957/58 against 8 in 1956/57. Ten commercial training certificates were awarded in 1957/58 and 16 in 1956/57.

Educational finance, 1957. For the year 1957 (fiscal year begins in January), the Central Government spent 882,392 Swiss francs on education, which represented an average of 60 Swiss francs per inhabitant. Five per cent of the total was for capital expenditure, and the remainder was divided as follows: 86 per cent for instructional expenditure and 9 per cent for administration and subsidies. (See Table 1.)

Source. Liechtenstein: Department of Education, Vaduz; replies to Unesco questionnaire.

1. EDUCATIONAL EXPENDITURE, 1957 (in Swiss francs)[1]

Expenditure by purpose	Amount	
Total expenditure[2]		**882 392**
Recurring expenditure		840 024
For administration or general control	17 422	
For instruction		
Salaries to teachers, etc.	758 809	
Other instructional expenditure	18 793	
Subsidies	45 000	
Capital expenditure		42 368

1. Official exchange rate: 1 Swiss franc = 0.23 U.S. dollars.
2. Closed account. Expenditure by the Central Government only.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	14	67	26	1 978	1 016
	Complementary courses, public	1957/58	9	7	5	197	133
	Total	**1957/58**	**23**	**74**	**31**	**2 175**	**1 149**
	"	1956/57	23	73	31	2 211	1 178
	"	1955/56	23	73	31	2 174	1 150
	"	1954/55	23	72	31	2 119	1 109
	"	1953/54	23	70	32	2 107	1 094
Secondary	Secondary schools, public	1957/58	2	11	2	243	109
	Secondary schools for boys, private	1957/58	3	16	—	163	—
	Secondary schools for girls, private	1957/58	1	10	9	169	169
	Total	**1957/58**	**6**	**37**	**11**	**575**	**278**
	"	1956/57	6	[1]10	[1]2	541	251
	"	1955/56	6	[1]10	[1]2	474	213
	"	1954/55	6	[1]9	[1]2	415	180
	"	1953/54	5	[1]8	[1]2	326	134

1. Teachers in public schools only.

GENERAL INDEX

aboriginal children, education of, *see* minorities.
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adaptation of education to changing society: Australia, 202; Austria, 224; Belgium, 241; Chile, 354; France, 486, 492; Greece, 603, 606; Hawaii, 1392; Italy, 727; New Zealand, 884; Philippines, 952; Poland, 961; Rumania, 1003; U.S.S.R., 1129; U.S.A., 1377; Viet-Nam, Rep., 1452. *See also* curriculum adapted to local and national needs; economic and social development related to education.
Aden, 1274–8.
administration [see national chapters under this heading]. *See also* secondary education (teacher training, vocational and technical education), separate administrative provisions for.
administration, changing patterns and responsibilities in, 108–10.
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THE EDUCATIONAL SYSTEM

Education is dealt with under Article 23 of the Constitution (17 October 1868), which reads:

'The State shall ensure that every Luxembourg citizen receives primary education. It shall establish centres of secondary education and the necessary courses in higher education.

'The methods of financing public education and the particulars of its supervision by the central and local government authorities shall be determined by statute, as also all matters relating to education. All Luxembourg citizens are at liberty to carry out their studies either in the Grand Duchy or abroad and to attend the university of their choice save as regards the provisions of the law respecting the conditions of admission to employment and the practice of certain professions.'

The linguistic factors which affect education in Luxembourg have arisen from the geographical position of the country at the meeting-point of the Latin and Germanic worlds; since the twelfth century Luxembourg life has tended towards the former, with the result that French has become the official language whilst the national idiom is kin to the Germanic languages and German is, with a few exceptions, the language of the Church and the Press. Every layer of the population speaks Luxembourgeois (a French-Moselle dialect), a circumstance which is responsible for prolonging secondary education since the pupils must master three foreign languages (German, French and English). The country is thus trilingual (dialect, German and French), English being less widely known and opportunities for its use being more rare.

From the social point of view, the *lycées* are attended by pupils whose parents are engaged in a variety of occupations. Needy pupils are exempt from payment of school fees, which in any case are only nominal (the *minerval*). There is no discrimination on grounds of race or religion. The majority of the population is Catholic, and it rarely occurs that non-practising persons avail themselves of their right to withhold their children from courses on Christian doctrine. Finally, since the last war, a new factor has come to affect secondary schools, their methods and curricula: the arrival of children from other European countries and their participation with young Luxembourgers in the same educational programme.

Secondary education, in provincial towns as well as in the capital, is completely subordinate to the Central Government (Ministry of National Education). In theory the State is responsible for providing the buildings, furniture and equipment for secondary and vocational establishments, and for their upkeep. In practice, the respective contributions of the State and the commune in question are fixed by special laws, whose provisions may vary from one establishment to another.

Certain private bodies that possess buildings of their own provide education for girls; in this they act as substitutes for the State. These schools emphasize moral education and religious instruction.

The diagram on page 803 shows the structure of the school system.

THE DEVELOPMENT OF SECONDARY EDUCATION

Towards the middle of the nineteenth century the secondary schools belonging to the State were the Athénée at Luxembourg, the Progymnase (lower secondary school) at Diekirch and the École Moyenne et Industrielle (Secondary and Industrial School) at Echternach, which reverted to its original name of Progymnase in 1869. The two *progymnases* were transformed into *gymnases* (complete secondary schools with classical course)—the one at Diekirch, which is closer to the main economic centres of the country, in 1891 and the Echternach school in 1900. Education was still predominantly classical, but as a result of the economic and industrial expansion of the nineteenth century and in particular the exploitation of iron ores, it began to include the sciences and tended more towards practical needs.

The Athénée at Luxembourg originally comprised a *gymnase* and an industrial school; but the latter became an autonomous institution and after the addition of a commercial section was called the Industrial and Commercial School. Another industrial and commercial school was established in 1901 at Esch-sur-Alzette, chief town of the mining area; in the same year industrial sections were added to the *gymnases* of Diekirch and Echternach.

In 1908 a law was passed reforming the general secondary system by the establishment of a Greek-Latin section and a Latin section; English replaced Greek in the latter.

In 1911 two *lycées* for girls were opened at Luxembourg and at Esch-sur-Alzette; they comprised a lower division (3-year course) and an upper division (4-year course) with a Latin section, a modern languages section and a vocational section (2 years). In 1946 the 3 sections of the upper division were given a new name: Latin section, modern languages section (domestic science), and modern languages section (commercial); each of these sections is of 4 years' duration.

Since 1945 several changes have been made in the Luxembourg system of studies in order to bring it more into line with those of neighbouring and allied countries. Firstly, the industrial and commercial schools were called *lycées de garçons;* they comprise a Latin section and a modern section, an industrial sub-section and a commercial sub-section. The term 'secondary education' was given to the instruction provided in the *gymnases* (the Luxembourg Athénée and the *lycées classiques* at Diekirch and Echternach), and in the *lycées* for boys and the *lycées* for girls. Finally, the certificates awarded by secondary institutions (*diplômes de maturité* for *gymnases* and *lycées; diplômes de*

capacité for industrial and commercial schools) were given the uniform title of 'secondary school leaving certificate' (*diplôme de fin d'études secondaires*).

Vocational education. A state trade school was founded in 1896 'with the aim of providing young persons destined for the various trades with the technical or artistic knowledge and the practical aptitude which are the basis of formal apprenticeship with a private firm'.

A vocational school was established provisionally in 1914 at Esch-sur-Alzette 'with the aim of completing the practical instruction of apprentice-tradesmen by a theoretical programme designed to develop their intelligence and to introduce them to the theoretical basis of their trades'. This establishment was accorded definitive status in 1924.

The Apprenticeship Act of 5 January 1929 made it obligatory for heads of undertakings to give their apprentices the opportunity, without loss of wages, of attending vocational courses in the communes where such courses exist. Since the promulgation of the Apprenticeship Act of 8 October 1945, which amends the Act of 1929, employers (*chambres professionnelles patronales*) are bound to enrol their apprentices in courses given by a vocational school. Each employer must ensure that his apprentices attend these courses regularly. The courses are given by the state vocational school at Esch-sur-Alzette, and by the state vocational education centres (which still have provisional status).

In 1953 an Act to establish vocational education centres for apprentices in the handicrafts, industry and commerce merely gave legal sanction to a situation of fact which had existed since 1946.

By the Act of 2 August 1958 the old École d'Artisans (lower vocational secondary school of technical studies) at Luxembourg was replaced by the Institut d'Enseignement Technique (Technical Training Institute) grouping two schools: École des Arts et Métiers (School of Arts and Crafts), with sections for training craftsmen in woodworking, cabinet-making, artistic wrought iron work, ceramics, decorative painting and sculpture, the building trades, mechanical engineering, electro-technical work and industrial tool-making; and the École Technique (Technical School), for technicians (*techniciens*) and practical engineers (*ingénieurs-techniciens*), with sections for civil engineering, mechanical engineering and electro-technology.

A Ministerial Order authorizes these two schools to give courses leading up to the qualifying examination for master-craftsmen, and also to provide refresher courses.

The Act of 1958 was intended firstly to legalize a *de facto* situation which had developed during a slow process of evolution since the promulgation of the Act of 1896, and secondly to give legal status to the former advanced technical courses (*cours techniques supérieurs*) which had been instituted provisionally in 1957.

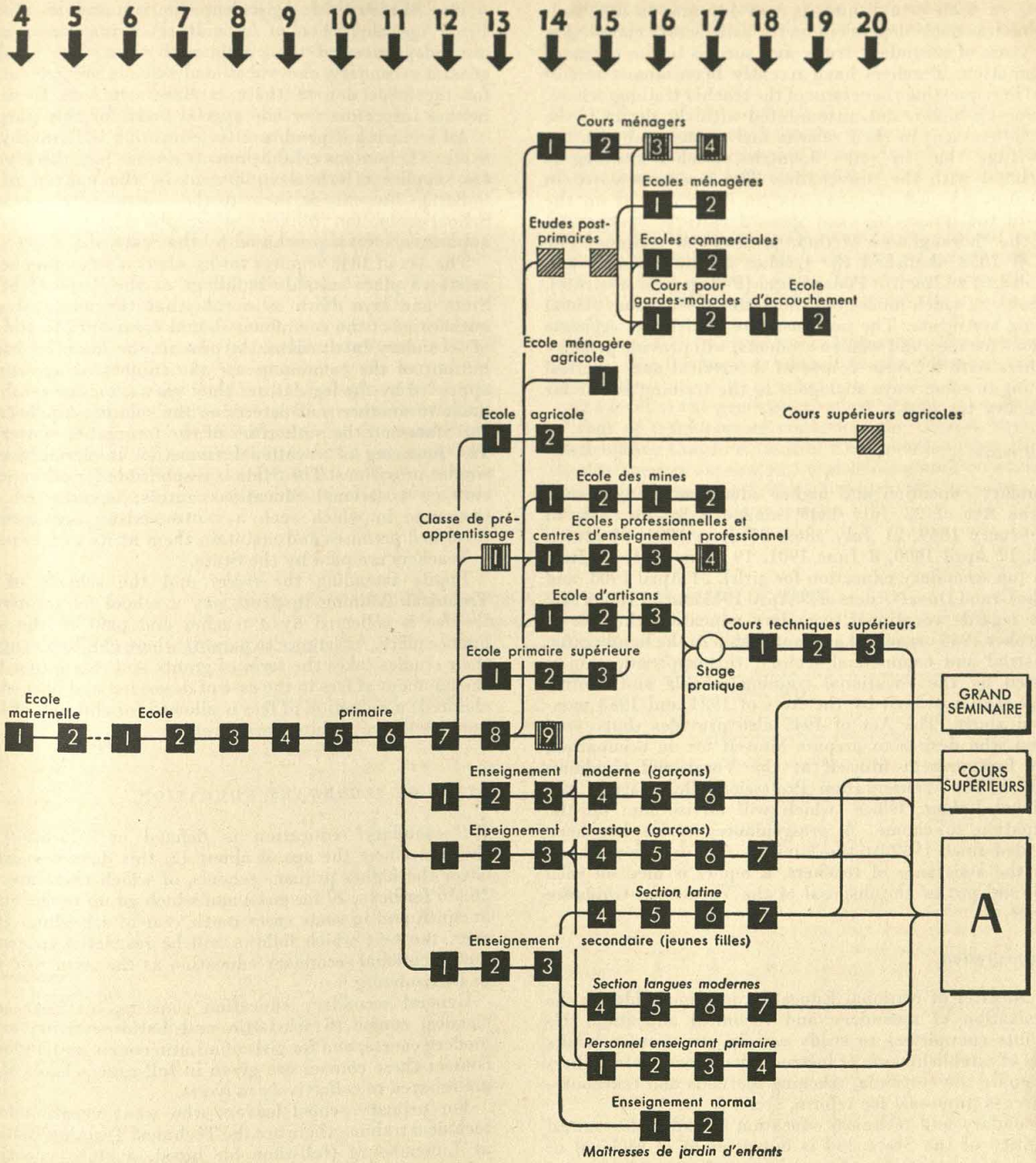
Teacher training schools. A teacher training school has existed in the country since 1845, and was the subject of various legislative provisions until its status was fixed by the Primary Education Act of 1912. This Act established a teacher training school for male teachers (*instituteurs*), and one for female teachers (*institutrices*); the duration of the

GLOSSARY

classe de préapprentissage: pre-vocational training class.
cours ménagers: vocational training courses in home economics.
cours pour gardes-malades: vocational training courses in nursing.
cours supérieurs: see under 'Higher Education' below.
cours supérieurs agricoles: 6-month courses of advanced training in agriculture for students with at least 5 years' practical experience after leaving the *école agricole.*
école agricole: vocational training school of agriculture.
école d'accouchement: vocational training school of midwifery.
écoles des arts et métiers: lower vocational secondary school of technical studies.
école des mines: vocational training school of mining.
école maternelle: pre-primary school (nursery school or kindergarten) at which attendance is voluntary.
école ménagère agricole: vocational training school of rural home economics.
école primaire: primary school.
école primaire supérieure: literally, higher primary school ; equivalent to a lower general secondary school with practical bias.
écoles commerciales: vocational secondary schools of commerce.
écoles ménagères: vocational secondary schools of home economics.
écoles professionnelles et centres d'enseignement professionnel: part-time vocational training schools, compulsory for pupils not enrolled in full-time schools, providing theoretical training for apprentices in trade and industries.
école technique: upper vocational secondary courses of technical studies.
enseignement classique (garçons): general secondary education (boys) with compulsory Latin and optional Greek.
enseignement moderne (garçons): general secondary education (boys) without Latin.
enseignement secondaire (jeunes filles): general secondary education (girls) with course including the study of Latin (*section latine*) or course emphasizing modern languages (*section langues modernes*).
enseignement normal: teacher education, including a course for teachers in primary schools (see *institut pédagogique)* and kindergarten teachers (*maîtresses de jardin d'enfants*).
études post-primaires: post-primary studies.
Grand Séminaire: see under 'Higher Education' below.
institut pédagogique: teacher training college.
maîtresses de jardin d'enfants: see *enseignement normal.*
personnel enseignement primaire: see *enseignement normal.*
section langues modernes: see *enseignement secondaire (jeunes filles).*
section latine: see *enseignement secondaire (jeunes filles).*
stage pratique: period of practical training in trade or industry.

HIGHER EDUCATION

A. *Études supérieures à l'étranger:* higher education abroad.
cours supérieurs: post-secondary courses, equivalent to 1 year of university studies, leading to various professions including secondary teaching.
Grand Séminaire: Catholic theological seminary.


4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Cours ménagers
1 2 3 4
Ecoles ménagères
1 2
Etudes post-primaires
Ecoles commerciales
1 2
Cours pour gardes-malades
Ecole d'accouchement
1 2 1 2
Ecole ménagère agricole
1
Ecole agricole
1 2
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1 2 1 2
Classe de pré-apprentissage
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1 2
Maîtresses de jardin d'enfants

course in both establishments was 4 years. In 1929 admission was made dependent on the satisfactory completion of 3 years of secondary study and success in the entrance examination. Teachers have recently been almost unanimous in requesting the reform of the teacher training school, a request which is not unconnected with the desire to see an improvement in their salaries and status, and with the knowledge that in some countries teacher training is associated with the universities. The measures voted in 1958 may be said to guarantee an improvement on the past in the quality of their general cultural background and the thoroughness of their professional training. The Act of 1958 abolished the teacher training schools and established an Institut Pédagogique (Pedagogical Institute), entrants to which must hold the national secondary school leaving certificate. The new institute, which has separate sections for men and women students, will provide primary teachers with a 2-year course of theoretical and practical training in some ways analogous to the training course for secondary teachers.

Legal basis

Secondary education and higher education are governed by the Act of 23 July 1848, amended by the Acts of 6 February 1849, 21 July 1869, 27 June 1891, 28 March 1892, 17 April 1900, 8 June 1901, 19 June 1901, 17 June 1911 (on secondary education for girls), 21 April 1908, and by the Grand Ducal Orders of 20 April 1945 and 30 June 1945.

As regards vocational secondary education the Act of 8 October 1945 organized apprenticeship in the handicrafts, industrial and commercial sectors; this apprenticeship is assisted by the vocational training schools and centres whose status is fixed by the Acts of 1924 and 1953 mentioned above. The Act of 1945 also provides that every person who desires to prepare himself for an occupation, must first present himself at the Vocational Guidance Office (Office d'Orientation Professionnelle), part of the National Labour Office, which will advise him on the occupation to choose. A pre-guidance service has been provided since 1949 at the Ministry of Education where, with the assistance of teachers, a report is filed on each pupil and put at the disposal of the Vocational Guidance Service.

Administration

The Minister of National Education is responsible for the organization of secondary and technical education. He appoints committees to study certain questions, consults heads of establishments or instructs conferences of teachers to prepare the curricula, teaching methods and textbooks, to discuss proposals for reform, etc.

Secondary and technical education is under the central authority of the State and is independent of regional or local administrations. Supervision of secondary and vocational institutions is to a certain degree ensured by committees of trustees or supervisory commissions, whose members are chosen from the various professions; these commissions are appointed by the Minister of Education. The Minister of Labour is represented on the supervisory commissions of vocational education centres.

The Ministry of Agriculture is responsible for the École Agricole (School of Agriculture). Private institutions are independent of the public authorities. The heads of general secondary and vocational schools are responsible for the inspection of these establishments as there are neither inspectors nor any special body for this purpose.

All recurring expenditure for education is borne by the State. The various establishments do not pay the invoices for supplies of school equipment or the upkeep of the buildings but submit them to the central administration. School equipment (libraries, geographical maps, laboratory apparatus, etc.) is purchased by the State.

The Act of 1848 requires towns where a secondary school exists to place suitable buildings at the disposal of the State and lays down as a rule that the administrative authorities of the communes should contribute to the cost of secondary institutions. At present the financial contributions of the communes are the subject of agreements approved by the legislature; they vary from one establishment to another and determine the relationship between the State and the authorities of the communes concerned. The financing of vocational education is the subject of similar provisions. The State is responsible for all expenditure on vocational education centres; nevertheless, the commune in which such a centre exists must provide furnished premises and maintain them at its own expense.

Teachers are paid by the State.

Pupils attending the *lycées* and the schools of the Technical Training Institute pay a school fee (*minerval*); the fee is collected by a teacher and paid to the state finance office. Assistance to parents whose children continue their studies takes the form of grants and exemption from the payment of fees in the case of deserving and necessitous children; a reduction of fees is allowed for children of large families (three children or more).

TYPES OF SECONDARY EDUCATION

If 'secondary' education is defined as education for children above the age of about 12, this definition would cover the higher primary schools, of which there are now 26 (16 for boys, 10 for girls) and which go up to the eighth or ninth and in some cases tenth year of schooling. However, the text which follows will be restricted to general and vocational secondary education as the terms are used in Luxembourg.

General secondary education consists, for boys, of a classical course (Greek-Latin and Latin sections) and a modern course, and for girls of a Latin course and a modern course; these courses are given in full-time schools which are referred to collectively as *lycées*.

For primary school leavers who want vocational and technical training there are the Technical Training Institute at Luxembourg (full-time for boys), a state vocational school at Esch-sur-Alzette and state vocational education centres (full-time or part-time courses for boys and girls), a full-time agricultural school for boys, and full- or part-time schools of home economics for girls. There are also a number of private vocational schools throughout the country.

On completion of the classical course at secondary school the pupils may begin university studies of all kinds:

the modern section pupils may study architecture, business or public administration.

The school year in secondary and vocational establishments begins in mid-September and ends in mid-July, and is divided into three terms; there are holidays of a few days for All Saints' Day and at carnival time, a week at Whitsun, 10 days at Christmas and 12 days at Easter. The school day is from 8 a.m. until noon and from 2 to 4 p.m. in the *lycées*, and from 8 a.m. until noon and from 2 to 6 p.m. in the vocational establishments. General secondary schools have a half-holiday on Tuesdays and Thursdays, while technical schools are closed on Saturday afternoon.

In *lycées* and teacher training schools and in the Technical Training Institute, the assessment of the results obtained by the pupils is made at the end of each term at a meeting between the principal and the teaching staff and is based on the marks obtained by the pupils; at the end of the third term this meeting decides on the promotion of pupils to the class immediately above. In general secondary, teacher training and vocational schools, the pupils take the entrance and final examinations before a jury appointed by the Minister of Education. Pupils attending the *lycées* also have to pass a promotion examination permitting access to a higher class.

Apprenticeship courses have no examinations but prepare the pupil for a certificate of professional aptitude.

General secondary schools

The purpose of these schools is to give the pupil mental and moral training and help him to acquire the knowledge indispensable for an educated person. In the more advanced classes, however, it is possible to speak of a certain degree of specialization in preparation for university studies. In so far as the *lycées* in their higher classes do not prepare pupils for university entrance examinations, or for careers in public administration, their aim is to provide the country with educated citizens, giving free development to their faculties and fulfilling their responsibilities to the community.

Admission is by entrance examination. The content of the courses for boys is shown in the following weekly time-tables.

The level of the general secondary schools is comparable to that of neighbouring countries; the courses have this particularity that in default of a national language lending itself to literary expression, emphasis is placed on advanced studies in German and French, which to a certain extent are becoming national languages.

GENERAL SECONDARY EDUCATION FOR BOYS—CLASSICAL COURSE
(in hours per week)

Subjects	Year of study													
	Lower stage	Middle stage		Upper stage										
		3rd and 4th		5th			6th				7th			
	1st and 2nd	GL	L	GL	L		GL	L			GL	L		
					A	B		A	B	C		A	B	C
Christian doctrine	2	2	2	2	2	2	2	2	2	2	2	2	2	2
French	6	6	6	5	5	5	4	4	4	4	4	4	4	4
English		(2)	4	(2)	4	4	(2)	4	4	4	(2)	4	4	4
German	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Luxembourgeois	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Latin	7	6	6	6	6	5	6	6	4	4	6	6	4	4
Greek	–	4	–	4	–	–	4	–	–	–	4	–	–	–
Greek authors	–	–	–	–	1	–	–	1	–	–	–	1	–	–
Arithmetic	3	–	–	–	–	–	–	–	–	–	–	–	–	–
Mathematics	–	3	3	3	3	5	3	3	5	3	3	3	6	3
Special Mathematics	–	–	–	–	–	–	–	–	–	1	–	–	–	1
Geometrical drawing	–	–	–	–	–	2	–	–	1	–	–	–	1	–
General and national history	2	2	2	2	2	2	2	2	2	2	2½	2½	2½	2½
Geography	1	1	1	1	1	1	–	–	–	–	–	–	–	–
Natural sciences	1	1	1	2	2	2	1	1	1	1	–	–	–	–
Practical Natural Sciences	–	–	–	–	–	–	–	1	–	1	–	–	–	–
Physics	–	–	–	–	–	–	2½	2½	2½	2½	2½	2½	2½	2½
Practical Physics	–	–	–	–	–	–	–	–	½	½	–	–	½	½
Chemistry	–	–	–	–	–	–	1½	1½	1½	1½	1½	1½	1½	1½
Practical Chemistry	–	–	–	–	–	–	–	–	½	½	–	–	½	½
Public law and administration	–	–	–	–	–	–	–	–	–	–	½	½	½	½
Art	2	1	1	1	1	(1)	–	(1)	–	1	(1)	(1)	–	(1)
Physical education	2	2	2	1	1	–	1	1	1	1	1	1	1	1
Music	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Dutch	–	–	–	(1)	(1)	(1)	–	–	–	–	–	–	–	–
Total	31	31	31	30	31	31	30	32	32	32	30	31	33	30

Note. GL = Greek-Latin section; L = Latin section; figures in parentheses are optional hours.

GENERAL SECONDARY EDUCATION FOR BOYS
MODERN COURSE
(in hours per week)

Subjects	Year of study								
	Lower stage			Upper stage					
				4th		5th		6th	
	1st	2nd	3rd	Ind.	Com.	Ind.	Com.	Ind.	Com.
Christian doctrine	2	2	2	2	2	2	2	2	2
French	7	7	6	6	5	4	4	4	4
English	5	5	5	4	4	3	3	3	3
German	3	3	3	3	3	2	2	2½	2½
Luxembourgeois	1	1	–	–	–	–	–	–	–
Arithmetic	3	4	–	–	–	–	–	–	–
Mathematics	–	–	5	6	3	7	2	8	–
General and national history	2	2	2	2	2	2	2	2	2
Geography	1	1	1	1	1	1	1	1	1
Natural sciences	2	1	1½	1	–	–	–	–	–
Physics	–	–	–	–	–	4	–	4	–
Practical physics	–	–	–	–	–	–	–	½	–
Chemistry	–	–	–	–	1	3	2	2	2
Practical chemistry	–	–	–	–	–	–	–	½	–
Public law and administration	–	–	–	–	–	–	–	½	½
Commercial arithmetic	–	–	–	–	2	–	2	–	3
Accounting	–	–	–	–	3	–	4	–	3½
Commercial correspondence	–	–	–	–	2	–	2	–	2
Civil and commercial law	–	–	–	–	2	–	2	–	2
Political economy	–	–	–	–	–	–	2	–	2
Art	2	2	3	4	–	3	–	2	–
Physical education	2	2	2	2	2	1	1	1	1
Music	1	1	–	–	–	–	–	–	–
Shorthand typing	–	–	–	(1)	(1)	–	(1)	–	(1)
Dutch	–	–	–	(1)	(1)	–	–	–	–
Total	31	31	30½	31	32	32	31	33	30½

Note. Ind. = Industrial section; Com. = commercial section; figures in parentheses are optional hours.

Teaching staff. The majority (90 per cent) of the general secondary school teachers hold degrees (doctors of philosophy and literature, doctors of physical and mathematical sciences or doctors of natural sciences); the remainder consists of teachers of special subjects (commercial sciences, drawing, physical training).

Graduate teachers must hold the classical school-leaving certificate and must have followed university courses in languages or sciences for 8 terms. Teachers of special subjects must have the classical or modern school-leaving certificate and must have received training in their special subject for 6 terms.

Before receiving an appointment as teacher every candidate must after completing his studies undergo a training period (*stage pédagogique*) lasting 2 years. This period is spent as a rule in a *lycée* in Luxembourg, at the choice of the education authorities. One part of the course consists of an initiation into teaching; for this purpose the candidate-teacher must attend model lessons in the various classes and himself give lessons in his special subjects. The second part of the course consists of seminars on adolescent psychology, the theory and history of education and the methodology of the subjects which he will teach. During his training period the future teacher must write a literary or scientific thesis (*dissertation*) on a subject chosen from his special field, and a further thesis on some aspect of pedagogics or didactics. The theoretical course is followed by teaching practice.

Secondary teachers may be detached by the Minister of Education for special functions; they may act as educational or government advisers.

Vocational and technical schools

In vocational training apprenticeship constitutes the lowest level, the training of technicians and practical engineers the medium level and the training of graduate engineers (*ingénieur diplômé*) the highest level.

The importance accorded to vocational education may be judged from the number of trades for which training is provided, and the enrolment in establishments providing such education. There are 'pre-apprenticeships' (*pré-apprentissage*) in industry and commerce; there are apprenticeships for 33 trades, 9 different occupations in industry and 8 in commerce; the School of Arts and Crafts has 7 sections and the Technical School has 3 divisions.

Pre-vocational training takes place at the primary level, but as regards the actual training belongs to the technical education programme.

Training for industry and handicrafts. The Technical Training Institute at Luxembourg comprises the School of Arts and Crafts, which provides training for artisans; and the Technical School, for technicians and practical engineers.

The School of Arts and Crafts gives a 3-year course; there is an entrance examination, and candidates must be not less than 14 years of age and must first have reported to the Vocational Guidance Office. A leaving certificate equivalent to the vocational proficiency certificate (*certificat d'aptitude professionnel*) is conferred on pupils who have passed the final examination of the School of Arts and Crafts.

The Technical School has an entrance examination, for which candidates must not be under the age of 16 years. This school has a preparatory section with a course lasting 1 year and 3 years of technical studies. The diploma of technician (*diplôme de technicien*) is delivered to pupils who at the end of the second year have successfully passed a special examination. Pupils who at the end of the third year successfully pass the final examination receive the practical engineer's certificate.

The teaching staff of the School of Arts and Crafts and the Technical School comprises teacher engineers and architects in possession of a diploma, teachers in possession of a doctor's degree who hold a certificate of aptitude as teacher in the higher and secondary schools, or a special primary teacher's certificate equivalent to the former, teachers of commercial sciences, vocational education teachers, workshop chiefs and lecturers.

The State Vocational School at Esch-sur-Alzette provides training for the principal trades, and at present has nine apprenticeship sections. A full-time pre-apprenticeship class with courses lasting four terms is attached to the school.

The state vocational education centres, of which there are seven in the country, also provide training for the principal trades. These schools do not deliver a school leaving

certificate, but they prepare for a certificate of professional aptitude which is given to apprentices who successfully pass the examination at the end of their apprenticeship.

At the hotel management school the full-time classes (1 October to 1 May), alternate with practical work in the trade (apprenticeship to an hotel from 1 May to 15 July).

The relations between the various technical and vocational schools on the one hand, and commerce and industry on the other, are governed by an inter-ministerial committee comprising the Ministers of National Education, of Labour and of Economic Affairs, who act in consultation with three different committees dealing respectively with vocational training for industry, commerce and the artisan trades.

Mention should also be made, in connexion with technical education, of the Emile-Metz Institute at Dommeldange, which is privately financed and of two schools, the vocational school at Differdange and the School of Mines at Esch-sur-Alzette, the costs of which are shared equally between the State, the commune and private enterprise. The last-mentioned school is a part-time institution consisting of a preparatory school (2 years) and a school of mines proper (also 2 years), which trains pit foremen, pit managers and surveyors.

Training for commerce and the distributive trades. This is provided in, among other establishments, a commercial school which is part of the vocational school of Esch-sur-Alzette, vocational education centres at Luxembourg, Ettelbruck and Wiltz, the hotel management school at Diekirch, and a number of communal and private schools with commercial sections which prepare for the official examinations in accounting, shorthand and shorthand-typing.

Agricultural training. The State School of Agriculture was established in 1883 at Ettelbruck for young farmers. The course lasts 2 years and the pupils are all boarders. After passing the final examination the pupils receive a diploma, which qualifies them for careers in agricultural co-operatives or in communal administration, as well as in practical agriculture.

Education is both theoretical and practical, and general education is given an important place. Practical work, which is complemented by demonstration visits, is carried out in the testing fields and in the garden of the school.

The school also organizes higher courses, which are accessible to former pupils possessing the final diploma, who have worked for two years on farms. These higher courses last five months.

In addition to the regular courses of the School of Agriculture, seasonal courses are given by senior officials of the Services de Vulgarisation Agricole (Agricultural Propaganda Service). These courses are organized regularly during the winter months and take place alternately in three of the six districts (*circonscription*) of the country. Pupils of all ages, from 16 to 50, take part in these courses.

Home economics. Girls may follow courses at the state École Ménagère Agricole (Rural Home Economics School) at Mersch, which was founded in 1947. This school takes pupils between the ages of between 15 and 16 years, and provides both theoretical and practical training.

There are 21 communal and private schools of home economics, which are subsidized by the State and prepare for the official examinations for the certificates of kindergarten teacher, domestic training teacher and handicraft teacher.

Teacher training schools

As already mentioned, the 4-year teacher training schools based on only 3 years of secondary schooling were abolished and replaced by the Pedagogical Institute. Since entrants must be over the age of 18 and have completed their secondary studies, the institute does not come within the scope of this report. However, the change is of recent date and pupils enrolled in July 1958 in the teacher training schools are to complete their training under the programme of these schools. Thus, in the autumn of 1958 the teacher training schools had only three classes instead of four; in the autumn of 1959 they were reduced by a further class and in the autumn of 1960 only the final class will still be in existence. The first class of the Pedagogical Institute will begin to operate in the autumn of 1960, and the second in the autumn of 1961, by which date the teacher training schools will be finally eliminated.

Pupils undergoing training at the institute (*stagiaires*) will receive a salary (*indemnité de stage*). At the end of the second year of studies they will take a final examination to obtain the teacher's certificate (*brevet d'aptitude pédagogique*).

Specialized schools

The Conservatoire de Musique de Luxembourg is a municipal establishment subsidized by the State and under the control of a supervisory committee of five members, two of whom are appointed by the Government. Pupils are of both sexes and there is no age limit.

The École de Musique at Esch-sur-Alzette is a municipal establishment subsidized by the State and controlled by a municipal supervisory committee of seven members.

TRENDS AND PROBLEMS

A reform now in preparation will effect a more organic relation between secondary and primary education. With a view to shortening the period of secondary schooling by one year without lowering the educational standards, the real secondary course will begin in the primary school, in a special sixth class for those pupils who intend to continue their studies. This class will remain a part of the primary school.

The courses in the *lycées* for boys and for girls (Latin section and modern languages section) will also last 6 years. It is proposed to make the work more specialized during the final year, on the conclusion of which the usual leaving certificate will be conferred. The preparation for administrative careers and university studies will not be changed.

The proposed reform envisages the constitution of a Fund for Study Grants which will emphasize the democratic nature of university loans.

Other proposed reforms will make possible the elimination of the promotion examination (between the fourth and fifth years in the boys' *lycées* and between the third and fourth years in the girls' *lycées*), and the adoption of a different promotion system from one class to another: account will be taken of pupils' marks at the end of each of the three terms instead of those obtained at the end of the third term only.

A general educational reform has already been begun, taking full account of pedagogical factors. The present age requires that young people should have from their early years a heightened sense of discipline and responsibility, well-informed minds and well-tempered characters. Besides providing instruction, the school will thus stress the development of the whole person; primary teachers will be prepared for their tasks at the Pedagogical Institute and secondary teachers through a new system of training which is to be established for them. Also with a view to emphasizing this broader interpretation of education, an Educational Council (Conseil d'Education) is to be set up for the secondary level, replacing the Schools Commission (Commission Scolaire) and Committee of Trustees (Commission des Curateurs) which have up to now supervised the institutions; parents will have a voice on the new council, and it is possible that pupils will be accorded consultative status.

Technical and vocational education was reformed in 1958. It will take more and more into account modern production methods and will establish in the two schools of the institute at Luxembourg the working conditions which the pupils will meet in factories, technical services, research offices and workshops. An enlargement of the premises is envisaged, and particularly of the machine-shop, so that professional apprenticeship may take place under the best possible conditions.

[*Text prepared by the Luxembourg National Commission for Unesco in July 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 320,000.
Area: 998 square miles; 2,586 square kilometres.
Population density: 321 per square mile; 124 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, there were 39,000 pupils enrolled in all public schools, which account for the major part of pupil enrolment. Including private education, the total enrolment, which may be estimated at 42,000, would represent about 13 per cent of the total population. The enrolment in public schools was distributed by level as follows: pre-primary 10 per cent; primary 69 per cent; secondary general 11 per cent, vocational 8 per cent, teacher training, less than 1 per cent; the rest being students enrolled in 2 university courses and children enrolled in special schools for handicapped children. Girls made up 50 per cent of the primary school enrolment and 26 per cent of the enrolment in general secondary schools. Women teachers were 51 per cent of the teaching staff in primary schools, where the pupil-teacher average was 24. Between 1953 and 1957, primary school enrolment *decreased* by 5 per cent. (See Table 4.)

Enrolment trends in secondary education, 1930–57. Pupil enrolment in public schools was 60 per cent higher in 1957 than in 1934 for general secondary education, 6 times as high for vocational education, and 50 per cent higher for teacher training. In vocational schools, there was a substantial decline from the high enrolment figures reached in 1947 and 1948. Taking all three categories of public secondary schools together, the average total enrolment in 1955–57 represented about 37 per cent of the estimated population 15–19 years old. (See Table 2.)

1. EDUCATIONAL FINANCE, 1957 (in Luxembourg francs)[1]

Recurring expenditure by level and type of education[2]	Amount		Per cent	
Total recurring expenditure[2]		**[3]272 121 293**		**100.0**
Primary education		155 709 365		57.2
Secondary education[4]		109 248 906		40.2
General[4]	74 182 171		27.3	
Vocational	32 166 316		11.8	
Teacher training	2 900 419		1.1	
Higher education[4]		...		...
Special education		7 163 022		2.6

1. Official exchange rate: 1 Luxembourg franc = 0.02 U.S. dollar.
2. Recurring expenditure of the Ministry of National Education only. In addition, 10,740,000 francs were allocated to the communes for school buildings and 5,416,092 francs were contributed by the Ministry of Agriculture for agricultural education. Data concerning expenditure made by other Ministries and the communes are not available.
3. Including expenditure for adult education but not including expenditure for central administration or for pre-primary education (financed by the communes).
4. Expenditure for higher education is included with general secondary education.

Examination results in secondary education, 1953–57. The number of secondary school leaving certificates increased by more than 50 per cent between 1953 and 1957; the proportion of girls receiving these certificates was 28 per cent in 1957/58. A total of 888 certificates were granted in 1957 for various types of vocational training, as compared with 858 in 1953. Teacher's certificates doubled. (Table 3.)

Educational finance, 1957. Recurring expenditure for education from the Ministry of Education amounted to 272 million francs, averaging 860 francs per inhabitant. (See Table 1.)

Source. Luxembourg: Ministère de l'Education Nationale, reply to Unesco questionnaire.

2. TRENDS IN SECONDARY EDUCATION 1930–57: PUBLIC SCHOOLS ONLY

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	...	...	...	...	73	52			
1931	...	...	...	...	106	48			
1932	...	...	...	...	107	44	[1]3.4	21	*16*
1933	...	...	...	...	137	37			
1934	2 692	25	562	...	146	38			
1935	...	...	...	...	155	38			
1936	...	...	...	...	166	40			
1937	...	...	...	...	175	43	[2]4.3	20	*21*
1938	3 242	23	846	...	181	45			
1939	...	...	...	...	176	47			
1944	3 600	31	...	...	198	71	...	21	...
1945	4 002	28	1 580	...	132	55			
1946	3 518	25	5 535	...	129	47			
1947	3 109	22	6 348	...	137	47	7.9	24	*33*
1948	2 793	21	6 153	...	144	47			
1949	2 755	21	3 218	...	139	45			
1950	2 700	21	2 696	...	135	46			
1951	2 839	22	2 733	...	130	47			
1952	3 024	23	2 869	...	125	45	6.0	20	*30*
1953	3 278	24	2 730	...	131	46			
1954	3 536	24	2 742	...	159	47			
1955	3 859	...	2 974	...	171	48			
1956	4 092	26	3 076	...	189	48	7.4	20	*37*
1957	4 343	26	3 279	...	218	50			

1. For 1934 only.

2. For 1938 only.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
School leaving certificate	211	42	246	53	268	60	281	68	332	94
Diploma of technician	19	—	24	—	27	—	27	—	25	—
Certificate from lower vocational school of technical studies	91	—	103	—	111	—	113	—	135	—
Vocational proficiency certificate:										
Technical	500	...	427	...	470	...	413	...	462	...
Commercial	154	...	113	...	121	...	157	...	144	...
Book-keeping certificate	94	...	108	...	98	...	98	...	122	...
Teacher training certificate:										
Teachers in primary schools	28	14	52	29	43	23	54	27	67	33
Kindergarten teachers	10	10	8	8	11	11	12	12	15	15

4. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1957/58	...	103	103	3 899	...
	Kindergartens, private	1957/58	...	10	10	...	...
	Total	**1957/58**	**...**	**113**	**113**	[1]**3 899**	**...**
	"	1956/57	...	121	121	[1]3 853	...
	"	1955/56	...	115	115	4 146	...
	"	1954/55	...	113	113	4 281	...
	"	1953/54	...	112	112	4 119	...
Primary	Primary schools, public	1957/58	...	1 100	548	26 419	12 988
	Higher primary schools, public	1957/58	...	26	10	608	226
	Primary schools, private	1957/58	...	33	31	976	755
	Total[2]	**1957/58**	**...**	**1 159**	**589**	**28 003**	**13 969**
	"[2]	1956/57	...	1 132	573	29 578	14 553
	"[2]	1955/56	...	1 117	568	29 475	14 503
	"[2]	1954/55	...	1 102	568	29 469	14 476
	"[2]	1953/54	...	1 090	556	29 483	...
Secondary *General*	Secondary schools, public	1957/58	7	306	50	4 343	1 120
	Secondary schools, private	1957/58	5	...	...	...	...
	Total	**1957/58**	**12**	[1][3]**306**	[1][3]**50**	[1]**4 343**	[1]**1 120**
	"	1956/57	12	[1][3]300	[1][3]52	[1]4 092	1 060
	"	1955/56	12	[1][3]297	[1][3]48	[1]3 859	...
	"	1954/55	11	[1][3]281	[1][3]42	4 287	1 602
	"	1953/54	11	[1][3]281	[1][3]41	3 935	1 439
Vocational	Agricultural schools, public	1957/58	2	20	10	207	45
	Commercial schools, public	1957/58	7	[4]179	...	[5]672	...
	Technical schools and centres, public	1957/58				[5]2 400	...
	Commercial schools, private	1957/58	...	...	...	...	...
	Technical schools, private	1957/58	...	...	...	...	...
	Total[1]	**1957/58**	**9**	[4]**199**	**...**	[5]**3 279**	**...**
	"[1]	1956/57	9	[4]190	...	[5]3 076	...
	"[1]	1955/56	9	[4]188	...	[5]2 974	...
	"[1]	1954/55	11	[4]188	...	[5]2 974	...
	"[1]	1953/54	15	[4]188	...	[5]3 052	...
Teacher training	Teacher training schools, public	1957/58	2	[6]8	[6]6	218	110
	Teacher training school, private	1957/58	1	...	...	16	16
	Schools for kindergarten teachers, private	1957/58	3	...	...	26	26
	Total	**1957/58**	**6**	[1][6]**8**	[1][6]**6**	**260**	**152**
	"	1956/57	6	[1][6]9	[1][6]7	238	140
	"	1955/56	6	[1][6]9	[1][6]7	+217	+128
	"	1954/55	6	[1][6]9	[1][6]7	209	125
	"	1953/54	6	[1][6]9	[1][6]7	170	90
Higher	University courses, public						
	Total	**1957/58**	**2**	[7]...	[7]...	**80**	**25**
	"	1956/57	2	[7]...	[7]...	99	24
	"	1955/56	2	[7]...	[7]...	81	16
	"	1954/55	2	[7]...	[7]...	71	19
	"	1953/54	2	[7]...	[7]...	65	14
Special	School for deaf mute children, public	1957/58	1	3	—	29	8
	School for blind children, public	1957/58	1	1	1	6	...
	School for backward children	1957/58	1	6	6	131	...
	Total	**1957/58**	**3**	**10**	**7**	**166**	**...**
	"	1956/57	3	10	7	162	...
	"	1955/56	3	10	7	160	...
	"	1954/55	3	10	7	154	...
	"	1953/54	3	10	7	156	...

1. Public schools only.
2. Not including pre-vocational schools where there were 157 pupils enrolled in 1957/58, 150 in 1956/57, 185 in 1955/56, 154 in 1954/55 and 97 in 1953/54.
3. Not including part-time teachers who numbered 19 (F.7) in 1957/58, and 1956/57, 17 (F.5) in 1955/56 and 13 (F.5) in 1954/55 and 1953/54.
4. Including part-time teachers.
5. Including part-time students.
6. In addition, teachers of general secondary schools also gave lessons in teacher training schools.
7. Courses are held by teachers of general secondary schools.

THE EDUCATIONAL SYSTEM

The Federation of Malaya became an independent nation within the British Commonwealth on 31 August 1957. Under the new constitution the Federation Government has power to make laws with respect to: elementary, secondary and university education; vocational and technical education; training of teachers; registration and control of teachers, managers and schools; promotion of special studies and research; and scientific and literary societies.

The Education Ordinance of 1957, upon which the education system rests, is based on the recommendations of a Committee appointed in September 1955 'to examine the present Education Policy of the Federation of Malaya and to recommend any alterations or adaptations that are necessary with a view to establishing a national system of education acceptable to the people of the Federation as a whole, which will satisfy their needs and promote their cultural, social, economic and political development as a nation, having regard to the intention to make Malay the national language of the country whilst preserving and sustaining the growth of the language and culture of other communities living in the country'.

Under the Ordinance, the organization and administration of education is now shared between the Federation Government and local education authorities broadly as follows: (a) educational policy in general, secondary education, teacher training are the responsibility of the Minister of Education; (b) local education authorities are responsible for primary and trade education.

In framing its policy the Federation of Malaya faces a difficulty common to any nation with a plural society. Owing to historical factors intimately bound up with the development of the country, there are three principal races: Malay, Chinese and Indian. The difficulties attendant upon the diversity of languages—Malay, the various dialects of Chinese, and the languages of the sub-continent of India, are complicated by a similar diversity of religion and custom.

Present policy has the aim of creating a consciousness of Malayan citizenship which will unite the groups and encourage the use of Malay as the national language to promote understanding and solidarity. English, as a world language, is to be maintained, with Malay as an official language.

Financial provision for education is made, in the case of secondary schools, in the form of direct payment to the board of governors of each school, the monthly sum being 'the difference between fees collected and teachers' salaries'. Payment of recurring expenses incurred in the running of a school is by grant annually, excepting in the case of teachers' salaries. In the case of primary and trade schools, local education authorities distribute the money, which they receive part as a Ministry grant and part from education rates, to schools within their control.

At present there are 12 local education authorities, one for each State of the Federation (11) and one for the Municipality of Kuala Lumpur.

THE DEVELOPMENT OF SECONDARY EDUCATION

The development of secondary education in the Federation of Malaya was, until recently, almost entirely confined to the schools using English as the medium of instruction. The reason for this was a practical one: until the second world war English gave admission to higher studies, particularly in England, which were not then available in Malaya or South-East Asia. Graduate staff, mostly recruited from the United Kingdom, helped greatly in the part-time training of teachers recruited locally and trained through part-time courses (the 'normal-training system').

Thus the curricula pattern was based upon that of similar schools in England. The adoption of the Cambridge Junior and Senior Local Examinations, as set by the Cambridge Examinations Syndicate, ensured that syllabuses were parallel with those of English secondary schools. Although these examinations have been replaced by the Cambridge Oversea School Certificate and Higher School Certificate, this pattern is still maintained, though it is being continually modified to suit Malayan needs.

The period since the second world war has seen a tremendous increase in secondary education in English and the establishment of a Malayan University where English is the medium of instruction. The University was formed in 1949 through a fusion of Raffles College (founded 1928) and the King Edward VII College of Medicine (founded 1904). There are now two divisions of the University, one in Kuala Lumpur and one in Singapore.

Until 1958 there was no secondary education in the Malay medium except in teacher training establishments producing teachers for Malay primary schools. In 1958, however, Malay medium secondary classes were opened at various centres. Staffing in these classes is still a problem.

Before World War II secondary education in the Chinese medium was extremely restricted in the Federation and followed the traditional Chinese pattern. There was a tendency to send children back to China to complete their education. War in China from 1937 onwards and World War II interrupted this and the result has been a tremendous increase in the number of secondary (junior middle and senior middle) schools, many of which are independent of government financial assistance.

Administration

Secondary education is organized by the Minister of Education with the advice of the Permanent Secretary for Education and his staff and also on the advice of other advisory committees and agencies. For instance, advice on

school syllabuses is supplied by the General Syllabus Committee, and on Malay language and literature by the Literature Agency (Dewan Bahasa dan Pustaka).

Through his ministerial staff, the Minister controls the Chief Education Officers, each of whom controls the organization of secondary education within a state. The Chief Education Officer provides general administration while the schools themselves, within the general policy, are run by their principals and boards of governors.

The 1957 Ordinance made provision for a Federal Inspectorate which submits reports on all types of schools to the Ministry. Further supervision is also provided by the Chief Education Officers and their professional staff.

Parents' committees and parent-teacher associations are still in the early stages of formation and as yet exercise little influence on general policy or upon individual schools.

Finance. The Federal Government's expenditure on education is derived from the general revenue. Estimates are prepared a year in advance and submitted to the Federal Legislature for inclusion in the annual budget in the normal way. Grants are made to local education authorities for distribution to primary schools and trade schools and direct to boards of governors of secondary schools.

Schools may be built entirely on government grant, or receive partial aid, or be entirely the result of private effort.

Pupils are charged fees at the rate of 5 Malayan dollars per month in fully assisted secondary schools. Fees are collected monthly and the money made available monthly to each school represents the difference between expenditure on salaries and the school fees collected.

Assistance to parents takes the form of pre-university scholarships, federal minor scholarships, state scholarships, free places, and the subsidizing of hostels where Malay boys from rural areas are accommodated while attending schools in the towns.

A school medical and dental service is in operation but is in need of expansion.

TYPES OF SECONDARY EDUCATION

English-medium schools. These schools offer a 5-year course (forms 1 to 5) leading to the Oversea School Certificate examination of the Cambridge University Syndicate, or the Federation of Malaya Certificate of Education. Sixth forms take the Cambridge Higher School Certificate as preparation for a university course.

Pupils enter the school as a result of selection based upon a federal examination—the Secondary Schools Entrance examination. Those from schools whose language medium is other than English undergo a year's intensive course in English, before entry into form 1, in 'remove' classes in the secondary school.

This is in addition to the special opportunities which still exist for Malay children to convert from Malay medium to English during their primary course via 'special Malay classes'. A selection by examination, on a state basis, is made at primary 3 or 4 level in Malay primary schools, and the successful candidates enter special Malay classes in English-medium primary schools. They pass into standard 6 of the English school after a 2-year course with special emphasis on the English language. If successful in the Secondary Schools Entrance examination, these pupils go straight into form 1 in an English-medium secondary school.

The subjects generally taught are the national language (Malay), English language, literature, mathematics, general science, history, geography and art. Provision is also made for the teaching of Chinese and Tamil language and literature where the demand exists. Where staffing permits and there are workshop facilities, metalwork, technical drawing, cookery, needlework, etc., are taught.

Promotion is automatic up to the end of the third year, when pupils sit for a public examination—the Lower Certificate of Education. Only candidates satisfying particular conditions are allowed to go on to the 2-year courses leading to the School Certificate Examination or the 3-year courses in the technical institutes.

Sixth-form (2-year) courses divided into two streams, arts and science, are also provided at selected centres. They lead to the Cambridge Higher School Certificate examination, which qualifies pupils for entrance into most English-speaking universities throughout the world and is used as an entrance examination by the University of Malaya.

The subjects taught at this level are those of a normal pre-university course in science subjects, but arts subjects have additional options in Malay, Chinese and Tamil language and literature.

The teaching staff in English-medium secondary schools is mainly recruited in Malaya. At the lower levels teachers hold a School Certificate and take a 2 years' course in a teachers' training college in Malaya or in one of the two special colleges established in the United Kingdom.

At form 4 level and beyond, most teachers have degrees granted by the University of Malaya or diplomas from its predecessor, Raffles College. There are some with honours degrees from the University of Malaya and a decreasing number of people with honours degrees who were recruited overseas in the United Kingdom or in India.

Chinese-medium schools. This is a period of change for Chinese secondary schools and new patterns are still being formed. In the past, Chinese secondary schools offered a 6-year course—3 years in the junior middle classes, followed by 3 years in senior middle classes. Under the 1957 Education Ordinance a change is required to bring the course into line with other schools; some schools have already made the necessary alterations.

Schools may either prepare for the Lower Certificate of Education, taken in the English medium after 4 years, or for the Chinese Schools Promotion examination taken in Chinese after 3 years. Those which opt for the former may go on to the examinations for the Cambridge Oversea School Certificate or the Federation of Malaya Certificate, while those which keep to the Chinese medium prepare for the Chinese Schools Leaving Certificate.

Traditionally all Chinese schools have been run by management committees who have financed the school and run it on their own lines. The 1957 Ordinance requires that, in order to qualify for full assistance, Chinese schools shall eventually be run as other secondary schools will be—

i.e., by boards of governors—and that they shall prepare for the Lower Certificate Education and the School Certificate/Federation of Malaya Certificate examinations.

Partially assisted Chinese-medium secondary schools are at present graded—those assigned to grade 1 receive a *per capita* government grant of $36 per pupil per year, while those in grade 2 receive $21 per pupil per year, and in grade III $15 per year.

The teaching staff of Chinese secondary schools is now appointed by the management committees. The majority of teachers at the lower levels have usually passed either senior middle 3 or junior middle 3 and have undergone 2 years' part-time teacher training ('Chinese normal-trained'). In senior middle classes most of the teachers have either been college trained in China or possess Chinese university degrees.

With effect from 1958 special provision has been made for the training of Chinese-medium teachers at the Malayan Teachers' Training College in Penang and from 1959 at the Language Institute in Kuala Lumpur. Selection is from among those who have passed senior middle 3 with distinctions in Chinese and credits in English.

Malay-medium schools. In 1958 a start was made in providing secondary education in Malay, when Malay-medium classes were opened in existing English secondary schools. These follow the academic pattern of the English-medium school and will eventually offer candidates for the Lower Certificate of Education Examination in the Malay medium.

Vocational and technical schools

Secondary schools. Greater emphasis is now being placed upon technical training and more practical subjects are being introduced into the previously entirely academic school curriculum. Many large secondary schools have been provided with metal and woodwork shops, and equipment for technical drawing. Where these facilities are available the aim is that pupils with a practical bent should take these subjects up to School Certificate level.

In an increasing number of schools facilities are also available to study commercial subjects to the same level.

Staff is drawn from amongst ordinary non-graduate teachers who have undergone specialist training for the work.

Technical institutes. At present there are two in the Federation, one in Penang and one in Kuala Lumpur. They provide a 3-year course from Lower Certificate of Education level up to the level of the Oversea School Certificate/Federation of Malaya Certificate examinations in general education, together with mechanical engineering, electrical engineering and building construction. During the third year pupils are sent for 3 months' training in industry.

These technical institutes have grown up out of the old junior technical trade schools, which they are replacing.

The lecturing staff falls into three categories: those with engineering qualifications from the Technical College plus 2 years training in the United Kingdom; senior instructors who have passed the final City and Guilds examination (London) and have some teaching experience; and instructors who are college-trained teachers.

The Technical College. This college, which has residential accommodation for 500 students, is situated in Kuala Lumpur. It offers 3-year courses in civil, electrical, mechanical and radio engineering, and land surveying and architecture, leading to a diploma which is accepted as a qualification for entry into government technical departments at 'technical assistant' level. The minimum qualification for entry is a grade 2 School Certificate in the Cambridge Oversea School Certificate examination with credits in Malay or English, mathematics and general science.

The lecturing staff is at present made up of Indian university graduates and persons holding professional qualifications from the United Kingdom, while all heads of departments have honours degrees in engineering subjects from recognized universities.

Rural trade schools. These schools are new and experimental. Like primary schools, they are the responsibility of local education authorities. The six schools in the Federation cater largely for Malay boys who have completed their primary education. Tuition is in Malay and the courses follow a syllabus which emphasizes the practical aspects of general building and mechanical work.

Staff is recruited from tradesmen in industry or from among instructors with experience in the old junior technical trade schools.

Teacher training schools

The great expansion in educational facilities since 1946 has necessitated a radical revision of the old 'normal-training' system by which teachers underwent professional training at week-ends whilst at the same time observing and practising in the schools.

Primary teacher training. In 1957 the Day-Training College/Centre Scheme was introduced. Twelve centres have now been established throughout the Federation to supplement the 3 residential colleges—Sultan Idris Training College, Tanjong Malim, Malay Women's Training College, Malacca, Kota Bharu Training College—which were then in existence. All of these make use of both Malay and English and 10 of them offer instruction through the medium of Chinese as well.

The minimum qualification for entry into 'day training' is a pass in the Lower Certificate of Education examination, but special arrangements are made for the admission of candidates from Chinese-medium schools not yet preparing for the L.C.E.

Courses are divided so as to give students 2 years' full-time instruction, broken by several weeks' practical teaching in schools, followed by a year of full-time teaching with formal instruction only in week-end classes.

Lecturing staff in these day-training college centres are teachers with at least 5 years' practical experience.

About 1,000 Malay School teachers in remote areas are receiving part-time training by correspondence from a staff specially trained for this work in Australia, under the Colombo Plan.

Secondary teacher training. There are four colleges for secondary teacher training. Two are in the United Kingdom and

two in Malaya. One in England pays special attention to producing teachers of English, and one in Malaya (the Language Institute) to providing teachers of the national language and other languages commonly in use in Malaya.

The minimum qualification for admission to these colleges is a Federation of Malaya Certificate of Education/ Cambridge School Certificate or a pass in the senior middle III examination with a distinction in Chinese.

The staff, whether from India or the United Kingdom, or local officers, all have university degrees and appropriate teaching and training experience.

The Vocational Teacher Training College. This offers to trained teachers a 1-year course in woodwork and metalwork leading to competence to teach those subjects up to form 3 level in secondary schools. There are also advanced courses in the same subjects for teachers of forms 4 and 5.

Instructors are trained teachers with teaching experience and City and Guilds Certificates.

Out of class activities

All types of secondary schools have well-developed extra-curricular activities: various sports, cultural clubs ranging from art and photographic societies to literary, debating and dramatic societies, Boy Scouts, Girl Guides, Boys' Brigade, the St. John's Ambulance and Red Cross organizations, Army Cadet and Air Training Cadet Units, etc.

TRENDS AND PROBLEMS

Fundamental to the consideration of trends and problems are: (a) the great increase in the school population from 1946 (404,319) to January 1959 (1,248,831); (b) trade recessions, particularly affecting the price of tin and rubber, the source of most of the Federation of Malaya's revenue.

Since 1956 the aim of government policy has been to bring primary education within the reach of all children. By 1958 this had almost been accomplished, although the stage at which primary education can be declared free and compulsory for all has not yet been reached.

The increase in school population has naturally already begun to affect secondary schools, and the problem of financing new schools and extending existing ones in the face of financial stringency is already urgent.

The supply of honours graduates with teaching diplomas has not been able to keep pace with the expansion of secondary education. The shortage of science teachers has been particularly acute. However, it is likely that in the near future the University of Malaya will be able to come closer to meeting the demand.

Industrialization poses various other problems. In spite of the increasing demand for rural schools as the rural population realizes the need for education, the demand for urban schools continue to grow in proportion with the drift to the towns. Secondly, it is becoming increasingly obvious that not all who find their way into secondary schools are fitted for an academic career, nor does an academic career necessarily suit the opportunities for employment that exist in modern life. School Certificates are no longer a passport to a successful career, and there is an increasing need for more technical and vocational training to fit people for work in the new industries.

While this is sufficiently obvious to planners wrestling with financial restrictions in order to meet the need, it is not so obvious to the general population. Malaya faces the problem common to many countries, that tradition has accorded extra kudos to white-collar jobs, and there is a shortage of those who wish to become engineers and technicians below university degree level. It is the problem of the educated unemployed, or of the man forced to do a job that he thinks is beneath his dignity.

Another fundamental problem is that of language within the school system. It is intimately bound up of course with the need to create a Malayan nation out of our plural society.

It is the government's policy to increase the use of Malay until it is in fact, as well as name, the national language. Malay is a compulsory subject in every government and assisted school, and fluency in the language will eventually become a condition of entry into government service. Initially this will throw a strain on suitably qualified staff since at the same time Malay secondary classes are being set up and make their own call upon Malay-speaking teachers. It is to satisfy this special demand that the Language Institute has been opened.

At present Malay and English are official languages. For some time to come, it is probable that English, offering the same advantages as Latin did in medieval Europe as a *lingua franca*, will continue to be used, especially in higher education. However, a great deal of education is still carried on in the Chinese medium.

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STATISTICS

Population (mid-year 1958 estimate): 6,515,000.
Area: 50,690 square miles; 131,387 square kilometres.
Density: 129 per square mile; 50 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment was about 1,118,000 not including handicapped children attending special schools and persons attending

adult education courses; this represented about 18 per cent of the total population. There were also 1,134 students enrolled at the University of Malaya, then located only in Singapore, and some 1,700 students overseas (in Australia and the United Kingdom). From 1953 to 1957 total enrolment in pre-primary, primary, secondary, and vocational schools and in teacher training centres increased by approximately 40 per cent.

In 1957/58, primary schools accounted for 87 per cent of the total enrolment, general secondary schools 11 per cent, vocational schools 0.9 per cent, teacher training institutions 0.7 per cent. The proportion of girls was 41 per cent in primary schools, 36 per cent in general secondary schools, 40 per cent in vocational schools. The proportion of women on the teaching staff was 32 per cent in primary schools (29 per cent in 1953/54), and 29 per cent in general secondary schools (28 per cent in 1953/54). The pupil-teacher ratio in primary schools was 33 (32 in 1953/54). (See Table 1.)

Enrolment trends in secondary education, 1949–57. Table 2 shows rapid expansion of both general and vocational secondary education between 1949 and 1957, so that the 1957 enrolment in each case was more than five times as high as in 1949. As to teacher training, there was an increase in enrolment from 1950 to 1953, but a subsequent decline reduced the 1957 enrolment to only 70 per cent of the enrolment in 1950. Nevertheless, taking all three categories together, the average total enrolment for the period 1955–57 was nearly twice the average enrolment for 1950–54 and possibly three times as high as the 1949 total enrolment. For the period 1955–57, the ratio of total secondary enrolment to the estimated population 15–19 years old stood at 22.

Examination results in secondary education, 1953–57. From 1953 to 1958 the number of successes in the Cambridge School Certificate examination increased by 48 per cent. The number of London Chamber of Commerce certificates awarded in 1957/58 was 3 per cent more than in 1954/55. The ratio obtained by relating the number of certificates granted to the number of pupils enrolled in the corresponding course was higher for teacher training than for the other types of education under review. (See Table 3.)

Educational finance, 1957. During the fiscal year beginning in January 1957, nearly 120 million Malayan dollars was spent on education, representing 19 Malayan dollars per inhabitant. This does not include a grant of $4,250,000 made to the University of Malaya. Of the total expenditure, 92 per cent came from federal government funds. Capital expenditure was nearly 9 per cent of the total. (See Table 4.)

Sources. Federation of Malaya: Ministry of Education, replies to Unesco questionnaires.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, private						
	Total	**1957/58**	...	...	...	**2 517**	**1 054**
	"	1956/57	...	...	...	6 602	3 197
	"	1955/56	...	...	...	5 180	2 504
	"	1954/55	...	...	...	3 386	1 700
	"	1953/54	...	...	...	1 913	1 028
Primary	Primary schools, public	1957/58	4 323	27 649	8 691	910 209	374 424
	Primary schools, private	1957/58	641	1 592	778	63 947	23 731
	Total	**1957/58**	**4 964**	**29 241**	**9 469**	**974 156**	**398 155**
	"	1956/57	4 853	26 311	8 263	851 992	329 871
	"	1955/56	4 726	24 601	7 486	775 784	290 862
	"	1954/55	4 559	23 437	6 918	719 713	260 020
	"	1953/54	4 443	21 913	6 402	699 414	251 375
Secondary *General*	Secondary schools, public	1957/58	181	2 603	802	78 956	26 402
	Secondary schools, private	1957/58	121	451	74	43 829	18 382
	Total	**1957/58**	**302**	**3 054**	**876**	**122 785**	**44 784**
	"	1956/57	304	3 031	859	108 091	39 419
	"	1955/56	285	2 652	749	92 346	32 600
	"	1954/55	256	2 532	720	81 042	28 157
	"	1953/54	253	2 195	621	73 090	25 962
Vocational	Technical institute, public	1957/58	1	...	...	122	—
	Junior technical trade schools, public	1957/58	3	...	...	459	—
	Rural trade schools, public	1957/58	2	...	...	105	—
	Domestic science schools, public	1957/58	30	...	...	2 489	2 489
	Other schools, public	1957/58	22	...	...	2 291	23
	Commercial schools, private	1957/58	13	...	...	4 947	1 696
	Total	**1957/58**	**71**	**...**	**...**	**10 413**	**4 208**
	"	1956/57	66	...	...	9 401	3 226
	"	1955/56	71	...	...	8 148	2 584
	"	1954/55	44	...	...	6 946	3 277
	"	1953/54	22	...	...	6 215	2 151

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Second. [Cont.] *Teacher training*	Teacher training centres, public						
	Total	**1957/58**	**72**	...	...	**5 038**	...
	,,	1956/57	60	...	...	5 579	...
	,,	1955/56	62	...	...	5 432	...
	,,	1954/55	...	...	...	5 984	2 175
	,,	1953/54	...	...	...	8 077	2 712
Higher *Teacher training*	Teacher training colleges, public						
	Total	**1957/58**	**22**	...	...	**2 529**	...
	,,	1956/57	17	...	...	3 871	...
	,,	1955/56	17	...	...	2 850	...
	,,	1954/55	...	...	...	445	209
	,,	1953/54	...	...	...	...	...
Technical[1]	Technical college, public	1957/58	1	24	1	265	1
	Agricultural college, public	1957/58	1	9	1	107	—
	Total	**1957/58**	**2**	**33**	**2**	**372**	**1**
	,,	1956/57	2	29	1	512	1
	,,	1955/56	2	31	1	483	1
	,,	1954/55	2	29	1	495	1
	,,	1953/54	2	27	1	316	—
Special	Schools for the blind, private	1957/58	2	...	...	...	...
	School for the deaf-and-dumb, private	1957/58	1	...	...	...	...
	Total	**1957/58**	**3**	...	...	...	...
Adult	Malay literacy courses	1957/58	[2]245	...	...	4 562	1 860
	Chinese literacy courses	1957/58	[2]276	...	...	6 887	4 615
	Tamil literacy courses	1957/58	[2]49	...	...	949	154
	Malay language courses	1957/58	[2]201	...	...	5 006	2 200
	English language courses	1957/58	[2]293	...	...	6 616	2 350
	Vocational classes	1957/58	[2]42	...	...	*800	*200
	Total	**1957/58**	**[2]1 106**	...	...	**24 820**	**11 379**
	,,	1956/57	[2]2 033	...	...	51 270	17 952
	,,	1955/56	[2]715	...	...	15 885	4 697
	,,	1954/55	[2]648	...	...	13 718	3 779
	,,	1953/54	[2]847	...	...	*19 392	*4 910

1. Not including the University of Malaya located in Singapore. (In 1957, 1,134 (F. 237) students from Malaya).

2. Number of classes.

2. TRENDS IN SECONDARY EDUCATION, 1949–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1949	24 081	27	1 926	...	...	...	[1]26	459	[1]6
1950	27 666	26	2 299	27	7 163	31			
1951	25 495	28	...	...	7 453	32			
1952	48 609	30	5 080	34	7 379	34	63	500	*13*
1953	73 090	36	6 215	35	8 077	34			
1954	81 042	35	6 946	47	5 984	36			
1955	92 346	35	8 148	32	5 432	...			
1956	108 091	37	9 401	34	5 579	...	122	560	*22*
1957	122 785	37	10 413	40	5 038	...			

1. General and vocational education only.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Cambridge School Certificate	2 315	629	2 792	809	3 267	952	3 627	1 170	3 432	1 172
London Chamber of Commerce Certificate	...	...	889	...	711	...	816	...	918	...
Teacher Training Certificates:										
Malay	—	—	484	...	697	...	876	...	1 095	...
Chinese and Tamil	432	...	668	...	655	...	733	...	645	...

4. EDUCATIONAL FINANCE, 1957 (in Malayan dollars)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**119 290 240**
Federal government	110 032 779
State governments	1 179 727
Tuition fees	3 438 968
Gifts, endowments, etc.	1 162 898
Voluntary agencies	3 475 868

B. EXPENDITURE BY PURPOSE

	Amount
Total expenditure[2]	**[3]117 336 068**
Recurring expenditure	106 805 253
Capital expenditure	10 530 815

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure	**[3]106 805 253**	**100.0**
Central administration	6 989 283	6.5
Instruction	89 039 477	83.4
Primary education	71 380 372	66.8
Secondary education	13 884 340	13.0
Vocational education	717 685	0.7
Teacher training	2 766 841	2.6
Higher education	[3]290 239	[3]0.3
Other recurring expenditure	10 776 493	10.1
Scholarships (local and study abroad)	2 089 341	2.0
Board and lodging	2 898 613	2.7
Maintenance of buildings, etc.	3 291 374	3.1
Other	2 497 165	2.3

1. Official exchange rate: 1 Malayan dollar = 0.327 U.S. dollar.
2. Closed account.
3. In addition a grant of $4,250,000 was made to the University of Malaya.

MEXICO

THE EDUCATIONAL SYSTEM

The present educational system came into being as a result of the Mexican Revolution of 1910. In addition to its economic and political aims the revolutionary movement set itself objectives of a social nature, with particular emphasis on culture and education. Once the armed struggle was ended, consideration was given to the urgent need—side by side with an improvement in the living conditions of the masses—of organizing an extensive educational system which could bring about the cultural advancement of broad sections of the population and the creation of a full sense of nationhood while ensuring the continuous progress of the work of emancipation.

The triumph of the revolutionary movement was followed by the promulgation of the Political Constitution of 1917, in which the central principles for which the struggle had been so resolutely waged found their legal embodiment.

Presenting in an integrated form all aspects of Mexican political and social thinking, the Constitution as a whole is a fountain-head of educational doctrine, although it is Article 3 which is specifically concerned with the control and organization of the educational system.

The present Article 3, which has been in force since 1946, reads as follows:

'The education imparted by the State—the federation, states or municipalities—shall tend towards the harmonious development of all the human faculties, and at the same time foster patriotism and the sense of international solidarity based on independence and justice.

'I. With freedom of religious belief guaranteed by Article 24, the guiding principle of such education shall be to remain aloof from any religious doctrine whatsoever and, in the light of the results of scientific progress, to combat ignorance and its effects—servitude, fanaticism and prejudice.

'Furthermore, (a) it shall be democratic, bearing in mind that democracy is not only a juridical structure and a political system but also a way of life based on the continuous economic, social and cultural advancement of the people; (b) it shall be national, in so far as its aims are to promote—while eschewing hostility and exclusivity—an understanding of our problems, the development of our resources, the defence of our political independence, the safeguarding of our economic independence and the continuity and progression of our culture; (c) it shall contribute towards better human relations, both by the contribution it makes towards inculcating in the pupil not only a respect for the dignity of the individual and the integrity of the family but also a firm belief in the importance of the common good, and by the attention it pays to fostering the ideals of fraternity and the equality of rights of all men, avoiding privileged treatment in respect of a particular race, sect, group, sex or individual . . . .'

Under the new Public Education Act, of 23 January 1942, which regulates Articles 3, 31 (Section I), 73 (Sections X and XXV) and 123 (Section XII) of the Political Constitution of the United States of Mexico, the national educational system embraces the schools, institutes, laboratories and scientific research centres depending directly or indirectly on the State, and the cultural activities conducted by them, the private primary, secondary, and teacher training schools, and schools of any type or level specially designed for workers and peasants, which operate under legal authorization, and the special private schools and institutes of all types which are officially recognized.

The national educational system covers the following types of education: pre-primary, primary, secondary, teacher training, vocational and preparatory, higher technical and professional, including universities; education imparted in laboratories or scientific research institutes, including universities; out-of-school education, including that given at universities, and imparted at schools providing special types of education not included among those already mentioned. The structure of the system is shown in the diagram on page 821.

Role of the public authorities

The federation, the states and municipalities share in the provision of education, the major responsibility devolving on the Federal Government. At federal level educational and cultural matters come within the province of the Secretariat of Public Education, the functions, scope and powers of which are prescribed by the State Secretariats and Departments Act of 30 December 1939, now in force, with certain amendments and additions.

Some of its more important tasks, as laid down in this Act, are as follows: to see that the various types of education on which the national educational system is based are all made available in the appropriate schools, and to provide physical training and artistic education in schools; to supervise and control public education; to exercise administrative and technical control over all schools of whatever type set up by the Federation, with the exception of those maintained and technically directed, in accordance with the law, by other state secretariats or departments; to ensure observance of the legal provisions governing primary, secondary and teacher training education in private schools and to prescribe the measures to be applied to carry them into effect; and to exercise similar supervision over the private technical, industrial, commercial and higher schools coming under the federal educational system; to establish a system of promotion and insurance for teachers; to establish equivalence of university studies, diplomas, titles or degrees; to regulate the exercise of the professions.

The Secretariat also has wide responsibilities for the promotion of art, archaeology, science, music, the theatre, sport, etc.

In pursuance of these manifold functions the Public Education Secretariat has set up appropriate directorates, departments and institutes, including directorates-general for primary education in the federal district, primary education and inspection in the states and territories, teacher training, agricultural training, regional technical and special schools, pre-primary education, Indian affairs, social welfare, the liberal professions, legal affairs and educational equivalences, audio-visual aids, school hygiene, literacy and out-of-school education, higher education and scientific research, and administration. It has also established the National Institute of Fine Arts, the National Institute of Anthropology and History, the National Polytechnical Institute, the Youth Institute, the Federal Institute for Advanced Teacher Training, the Pedagogical Museum, and other special institutions.

The governments of the federated states, which, as indicated, share with the Federal Government in exercising the social function of providing education, maintain and direct their own state school systems which in many cases cover the entire range from pre-school to university. The Public Education Act already referred to regulates educational activity throughout the Republic both on the federal level and in the states, municipalities, federal district and federal territories.

The state governments have their own education directorates, which control and direct school activities, and where there are university institutes special departments have been set up to take charge of this type of higher education.

In order to promote the technical unification of education throughout the Republic, the Public Education Secretariat has attached to itself a National Technical Council of Education (Consejo Nacional Técnico de la Educación) which is an advisory body of the secretariat itself and of the federated states; while a Joint Education Board (Comisión Mixta de la Educación) operates in each of the latter as a co-ordinating body between the states and the federation.

Role of private agencies

The existence of private interests in education is recognized by the State. However, this recognition is subject to statutory legal provisions, which are laid down in Sections II, III, IV and V of Article 3 of the Constitution.

'II. Private individuals may impart education of all types and levels; but in the case of primary and secondary education, teacher training, and education of any type or level designed for workers and peasants, they must receive the prior authorization of the public authorities. Such authorization may be refused or revoked without the possibility of legal or other redress.

'III. Private schools imparting education of the types or levels specified in the foregoing section must adapt themselves unreservedly to the provisions of Sections I (the text of this has already been given) and II above, and must also comply with the official curricula and syllabuses.

'IV. Religious bodies, ministers of religion and limited liability companies engaging, either exclusively or predominantly, in educational work, and associations or societies connected with the spread of any religious belief whatsoever, shall take no part in any form in the affairs of schools where primary and secondary education, teacher training or special education for workers and peasants are imparted.

'V. The State may, at its discretion and at any time, withdraw its official recognition of the instruction given at private schools.'

THE DEVELOPMENT OF SECONDARY EDUCATION

The history of modern secondary education in Mexico can be divided into two periods. The first was inaugurated in effect by the Law of 2 December 1867 which established, on the initiative of Dr. Gabino Barreda, a direct disciple of the philosopher August Comte, the National Preparatory School (Escuela Nacional Preparatoria) with a curriculum based on the hierarchy of sciences drawn up by the founder of French Positivism. The second stage began in 1926 with the establishment of the present system of general secondary schools, thanks mainly to the efforts of Professor Moisés Sáenz.

The preparatory school system was soon adopted by the governments of all the federated states, which set up schools known as *institutos* or *colegios*. During the succeeding 50 years or so the curriculum, which was the same for all pupils, underwent various reforms and counter-reforms, the fiercest attacks of its opponents being directed against its positivist bias. Nevertheless, it was able to maintain itself more or less intact until the end of the first decade of the present century.

But the Revolution of 1910 had its own demands to make as regards the solution of educational problems, while the study of developments in Europe and the United States of America also contributed to the reform of Mexican education. It was realized that neither the *Escuela Nacional Preparatoria* nor other schools following the same system were in a position to provide a secondary education accessible to large sections of the population, since they were based on a curriculum designed purely to prepare students for entrance to university and a professional career. Persons who could not afford to continue their studies at a professional school were doomed to a sense of failure.

There were two things about these schools, as Professor Sáenz observed, that were most noticeable. The first was the divorce between the intelligentsia and the working classes—between the preparatory schools which produced graduates, and the technical schools which produced 'practical men', and also between the institutes attended by the sons of the well-to-do middle class, young patricians or children enjoying special privileges, and the trade and vocational schools attended only by the poor. The second was that far too many children failed to complete their studies at the preparatory schools.

The 1926 reform. In 1917, when Dr. Sáenz was director of the Escuela Nacional Preparatoria, he and a group of teachers tried to find a solution for the problems raised by

this type of school, but the results were not very satisfactory. He then travelled extensively over Europe, where he studied reforms in secondary education. It was not a question, however, of copying any of the European systems but rather of gaining a clear insight into the trends of secondary educational reform throughout the world in order to find a suitable solution to Mexico's own problems in that respect, making due allowance for the requirements of the national situation. That solution could not, of course, be completely original or completely different from the solutions applied to similar problems in other countries, since their experience was bound to be the same in regard to many aspects of the problem.

In 1923, the course of instruction at the Escuela Nacional Preparatoria and teacher training schools in the federal district was split up into two cycles, the first of which, covering 3 years, was designed as the secondary cycle, while the rest of it constituted the preparatory cycle proper and the vocational cycle at the teacher training schools.

The groundwork for the reform of secondary education having thus been prepared, two presidential decrees were issued to give it legal effect. The first, dated 29 August 1925, authorized the Public Education Secretariat to set up secondary schools suitably organized in accord with established law and democratic educational principles. These secondary schools were to be equivalent as regards curriculum and standard to the so-called 'secondary cycle' of the Escuela Nacional. The second, dated 22 December 1925, provided for the complete separation of the Escuela Nacional secondary cycle in buildings other than those intended for the preparatory cycle, and set up a Directorate for Secondary Education (which began operations on 1 January 1926) within the Public Education Secretariat. In 1926, also, the new integrated system of secondary education was initiated, covering five different types of school: two resulting from the detachment of the secondary cycles at the Escuela Nacional and the National Teacher Training School (the latter being created in 1925 by the merger of the two teacher training schools in the federal district); another two which began to function in mid-March; and a night school for adults which was transferred to the directorate's control in June and which constituted the secondary cycle of the Preparatory Night School.

The Directorate was authorized, at the time of its foundation, to take charge of the inspection and control of private secondary schools, and the field of action of the new system went on extending in that direction. On 16 November 1926, a decree was issued specifying the conditions for incorporating private schools into the official system for the secondary cycle. A series of conditions were therefore laid down governing the school and its equipment, the teaching staff, the curriculum and the organization of work. In 1927, there were 11 incorporated private secondary schools, including 10 in the federal district. In 1958, there were 409.

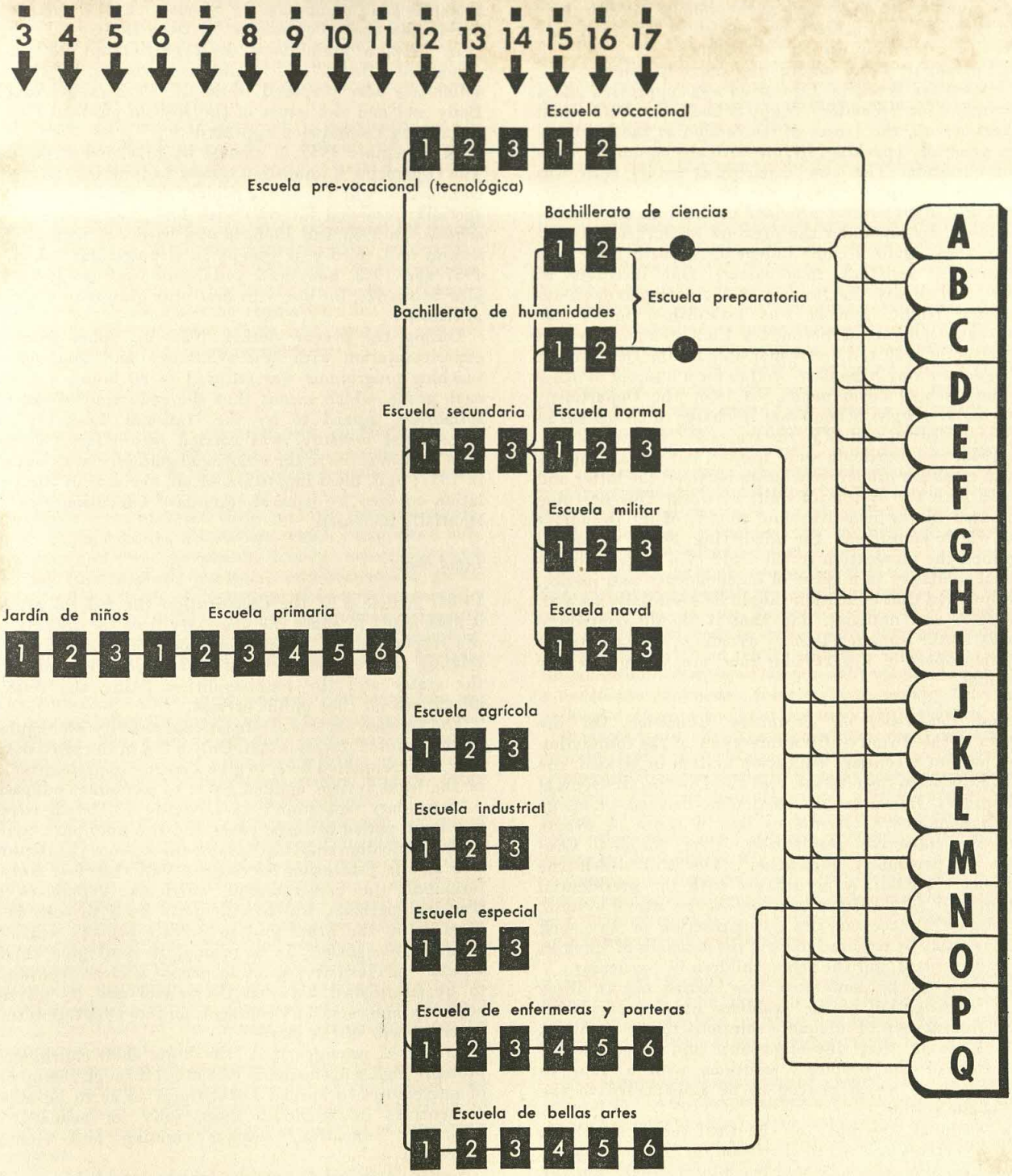
The socialist bias in secondary education. Following this process, which might be described as the initial and foundational one in the system of general secondary education, the most important change in it occurred during the term of office of President Cárdenas (1934–40), as a result of the amendment in December 1934 of Article 3 of the Constitution. The effect of this was to give to primary and secondary education, teacher training and education for workers and peasants, a socialist impress, this tendency being specially marked in the history, geography and civics syllabuses. A great impetus was also given at that time to the establishment of secondary night schools for workers, of which there were 2 in 1934, with 1,566 students, and 28 in 1940, with 4,816 students. To direct them the Public Education Secretariat set up a Department for Workers' Education which was also responsible for a considerable number of primary night schools, trade night schools, boarding schools for workers' children and a preparatory

GLOSSARY

bachillerato de ciencias: see *escuela preparatoria.*
bachillerato de humanidades: see *escuela preparatoria.*
escuela agrícola: vocational training school of agriculture.
escuela de bellas artes: vocational training school of music, dancing or fine arts.
escuela de enfermeras y parteras: vocational training school for nurses and midwives.
escuela especial: vocational training school for industrial and commercial occupations.
escuela militar: vocational training school (army).
escuela naval: vocational training school (navy).
escuela normal: teacher training school.
escuela preparatoria: upper general secondary school with courses leading to baccalaureate in science (*bachillerato de ciencias*) and arts (*bachillerato de humanidades*), and a baccalaureate of general type (*bachillerato único*).
escuela pre-vocacional (tecnológica): lower vocational secondary school.
escuela primaria: primary school.
escuela secundaria: lower general secondary school.
escuela vocacional: upper vocational secondary school.
jardín de niños: pre-primary school.

HIGHER EDUCATION

A. *Medicina y cirugía:* medicine and surgery.
B. *Ingeniería y arquitectura:* engineering and architecture.
C. *Química industrial y farmacia:* industrial chemistry and pharmacy.
D. *Ciencias físico-matemáticas:* physics and mathematics.
E. *Ciencias naturales:* natural sciences.
F. *Ingeniería agrícola:* agriculture.
G. *Ingeniería militar:* military engineering.
H. *Contadores y auditores:* accountancy and auditing.
I. *Contadores y actuarios:* accountancy and actuarial science.
J. *Filosofía y letras:* philosophy and literature.
K. *Escuela normal superior:* institute of education.
L. *Economía:* economics.
M. *Ciencias políticas y sociales:* political and social sciences.
N. *Bellas artes:* fine arts.
O. *Antropología e historia:* anthropology and history.
P. *Jurisprudencia:* law.
Q. *Escuela normal de especialización:* specialized teacher training college.


3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Escuela vocacional
1 2 3 1 2
Escuela pre-vocacional (tecnológica)
Bachillerato de ciencias
1 2
Escuela preparatoria
Bachillerato de humanidades
1 2
Escuela secundaria
1 2 3
Escuela normal
1 2 3
Escuela militar
1 2 3
Jardín de niños
1 2 3
Escuela primaria
1 2 3 4 5 6
Escuela naval
1 2 3
Escuela agrícola
1 2 3
Escuela industrial
1 2 3
Escuela especial
1 2 3
Escuela de enfermeras y parteras
1 2 3 4 5 6
Escuela de bellas artes
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school. Some of the secondary night schools were sections of the 9-year night schools opened in 1938, which also covered the 6 years of primary schooling.

In December 1940, under the next President, the Department for Workers' Education was suppressed and a Department for Secondary Night Schools for Adults and Workers set up, the course of instruction at these schools being, generally speaking, in line with the secondary day-school curricula. The new department in its turn was suppressed in January 1943, and its schools were transformed into night courses provided at the ordinary secondary schools. Later, under the pressure of workers' organizations, they again became independent, with their own headmasters, assistant headmasters and directors of studies, and finally, in January 1947, a Department for Secondary Night Schools was established under the Directorate-General for Secondary Education, which had been set up in 1940 and was responsible for the Department for Secondary Day Schools as well as for a number of other secondary school departments. In 1958, the Department for Secondary Night Schools was in charge of 28 schools in the federal district and 42 in the states and territories.

In 1945, new curricula were worked out for all courses so as to establish proper correlation between the latter and to fit in with the system of units of work. This new line culminated in the constitutional reform of 30 December 1946, which suppressed the qualifying term 'socialist', prescribed the inculcation in the child of a sense of international solidarity in a spirit of independence and justice, and stipulated that education should be essentially secular, democratic and national, and that it should contribute towards better human relations, avoiding privileged treatment in respect of a particular race, sect, group, sex or individual.

National Conference on Secondary Education. On the occasion of the twenty-fifth anniversary of the foundation of the present secondary education system in Mexico, the Public Education Secretariat, and the Directorate-General of Secondary Education, in particular, decided to merge the commemorative ceremonies into a series of events under the collective designation, 'The National Conference on Secondary Education'. The aim which the conference set itself, in accordance with the presidential sanction of 6 July 1950, was to assess the school system, and propose if necessary its reconstruction or any such changes as may be required to meet the demands of Mexican society in general and the schoolchildren in particular.

The work of the conference was carried out in three stages: investigation of the problems of secondary education; formulation of adequate solutions to the problems emerging from that investigation; and experimental application of the proposed solutions with a view to extending those which proved to be satisfactory to the whole of the system.

The National Assembly of the Conference laid down general directives and detailed criteria for the formulation of new curricula, syllabuses and teaching methods, but the 12 days during which it met were too short a time to allow it to complete the work of formulation. It therefore set up a Policy Committee of the Organizing Commission, a Commission for General Secondary School Curricula and Syllabuses, a Commission for Special School Curricula and Syllabuses, and a Permanent Advisory Body.

In 1952, a preliminary draft curriculum for general secondary schools and preliminary drafts of the new syllabuses were prepared while the Permanent Advisory Body met and two issues of the *Revista* published by the Organizing Commission appeared.

In December 1952, a change in government occurred. The Organizing Commission ceased to function, and a new commission was appointed which prepared a curriculum specially intended for trial with first-year groups in two schools. In 1955 and 1956, it was tried out with all first, second and third-year groups in a particular school. In 1957 and 1958, new draft syllabuses were prepared, and also textbooks, for use with first-year groups in a number of schools.

During the 6-year period 1953–58, apart from this experimentation with new syllabuses and methods, the teaching programme was reduced to 30 hours a week in each grade, which meant that the reduction of the 1945 syllabuses, agreed to by the National Assembly as a transitional measure, was carried into effect; a strong impetus was given to the vocational guidance work initiated in 1947; and, most important of all, the size of the population covered by general secondary education was substantially increased.

Legal basis

Under Article 3 of the Constitution the federal congress is authorized to enact the necessary laws for apportioning the responsibilities for public education, including those relating to secondary education, between the federation, the states and the municipalities, fixing the requisite allocations for that public service.

The detailed aspects of educational activity are regulated by the Public Education Act. Only a few of the provisions of this Act are quoted here, to give a more comprehensive idea of the legal system applied by it to secondary education.

'Secondary education', says Article 73, 'shall cover a minimum period of three years and the minimum content of the curriculum shall be the same throughout the Republic. The Public Education Secretariat will therefore have to formulate the corresponding curricula, syllabuses and teaching methods, which will apply both to schools depending on the State and to private schools which are officially recognized. In so doing, it shall give them a measure of elasticity, so as to permit a close relationship to be established between the school and its physical, economic and social environment, and its adaptation to the specific needs of the pupils.'

Article 92 provides that 'the State shall endeavour to promote higher professional education through the medium of universities or special institutions, so as to be able to concentrate its resources more fully on primary and secondary education, teacher training and technical education . . .' .

Lastly, Article 119 provides for the establishment of an advisory body of the Public Education Secretariat and the Federated States, known as the National Technical Council of Education, to be responsible for formulating or studying curricula, syllabuses and teaching methods for the various

types and levels of education, including secondary education, and to investigate problems relating to the organization and administration of schools and methods of achievement evaluation. The council includes representatives of the federation, the federated states and leading Mexican cultural institutions.

Secondary education is governed in particular by the Regulations for Work in Secondary Schools, of 1 August 1946. This enactment classifies schools as general secondary schools or special secondary schools; it defines the functions of the principal, assistant principal-secretary, inspectors-general, directors of studies (*jefes de enseñanza*) for special subjects, teaching staff and administrative and maintenance staff; it lays down the conditions for enrolment, the rights and duties of the pupils, the criteria for evaluating pupils' progress, as also the regulations for the pupils' associations, parents' associations and study groups set up for each speciality by serving teachers.

Administration

Secondary education is directed and controlled in accordance with the legal provisions mentioned above, which confer responsibility in that connexion upon the Public Education Secretariat.

The latter has entrusted these tasks to the Directorate-General for Secondary Education, which comprises a sub-directorate and six departments dealing respectively with technical (pedagogical) matters, administration, public secondary day schools in the federal district, secondary day schools outside the federal district (*secundarias foráneas*), secondary night schools and recognized private secondary schools incorporated in the national system (*escuelas encorporadas*).

The Sub-Directorate of Secondary Education has the main responsibility for questions of a technical nature, and therefore has direct links with the Technical Department and is also responsible for prior investigation in connexion with the appointment of inspectors-general and the other officials responsible for control and supervision.

On 4 February 1959, an Advisory Technical Section of the Directorate-General of Secondary Education was set up to study and propose solutions for the technical problems submitted to it by the Directorate-General and to recommend suitable measures to improve the standard of the secondary teaching staff. It has permanent committees for educational planning, curricula and syllabuses, pedagogical research and vocational guidance, teaching methods, achievement evaluation and school supervision, textbooks, and out-of-school activities. The chairman of this advisory body is the head of the Technical Department of the Directorate-General.

The persons mainly responsible for the control of secondary schools are: the principal of the school, the Director of Studies, the Inspector-General, the Head of Department concerned, the Director-General of Secondary Education.

Supervision and inspection. The actual work of school inspection devolves on the inspectors and directors of studies. Since 1953, these officials come under the departments whose schools they are required to supervise, and they conduct their activities in accordance with the instructions emanating from those departments and the provisions of the Regulations for Work in Secondary Schools. The inspectors supervise the general organization, administration and operation of the schools, while the directors of studies deal with all matters relating to teaching in their respective specialities.

Teaching staff. The responsibility for selecting secondary teachers rests with the Directorate-General of Secondary Education, working through the sub-directorate. In accordance with the Professions Act, the teachers appointed are those who have specialized in a particular course either at the Higher Teacher Training School (Escuela Normal Superior) or at the Faculty of Philosophy and Letters of the National Autonomous University of Mexico, the only limit on appointments being the budget allocation.

The appointed teachers begin with an initial period of 6 hours of classwork a week, and then come under the Directors of Studies, who are responsible for allocating them to the schools where their services are required.

Secondary school teachers are classified as follows: (a) class teachers of various categories (A-B-C-D-E); (b) subject teachers; (c) workshop instructors; (d) art teachers (for drawing, modelling, music, physical education); (e) experimental class and workshop assistants; (f) prefects (*prefectos*)—who supervise the pupils; (g) vocational advisers; and (h) directorial staff.

The directorial staff, consisting of the principal and an assistant principal-secretary, are in charge of all the other categories. To qualify for such posts, they must have previously performed the duties of the successive categories of class teacher and have obtained from the National Registration Commission (Comisión Nacional de Escalafón) a certificate confirming their right to occupy those posts without detriment to the interests of third parties.

In accordance with the regulations, every school has a general pupils' association comprising separate specialized groups which promote the civic and social education of the children. They include clubs of various kinds (sports, music, literary, dramatic, recreational, public service, school decoration, etc.) and are an effective instrument for corporate discipline in the schools.

There are also parent-teacher associations whose specific aim is to ensure co-operation in achieving the educational and social objectives of the schools. These associations are linked together in a federation.

Finance. At present, the Public Education Secretariat allocates 50 million pesos to the Directorate-General of Secondary Education, most of this sum going to cover the salaries of the teaching, administrative and maintenance staff.

The following are examples of monthly salaries: inspector-general for secondary education, 2,691 pesos; principal of secondary night school in the federal district, 2,009 pesos; principal of secondary day school in the federal district, 2,583 pesos; class teacher, category A, 1,138 pesos; class teacher, category E, 2,153 pesos; subject teacher in the federal district, 99 pesos an hour.

To meet the other costs of maintaining the school, public schools have additional funds, such as those accruing

from their share of the 'minor expenses' fund (300 pesos a year), and the income they receive for special examinations and copies of documents. As the total funds from all these sources are insufficient, the parents' associations have agreed to the establishment of a *cuota de cooperación*, to meet the most urgent needs, which takes the form of an annual enrolment fee of 30 pesos per pupil.

The limited amount budgeted every year for the establishment of new schools in the states and territories makes it very difficult to meet the requests made in this connexion. It is already impossible, in these circumstances, to establish new schools depending entirely on the federal authorities, which is why the system has been developed of schools in co-operative status, with equal sums payable by the federation and the local authorities and compulsory participation by the other interested sectors, organized into patronage committees and responsible for looking after the material side.

However, as the federal authorities have still found it impossible by these means to meet all the requests for establishing secondary schools in different parts of the country, recourse has had to be had to the system of subsidies, although on a small scale, to schools needing assistance. These subsidies range from 6,000 to 40,000 pesos a year.

Buildings and equipment. In general, secondary school premises are inadequate. Most of the schools are housed in unsuitable buildings which fail to provide proper teaching conditions, the only justification for this being necessity. The Public Education Secretariat is responsible for paying the rent of those buildings which are not the property of the nation; it also pays the charges for electricity, water, telephone and other public services.

Another aspect of this problem is the inadequacy of furniture and equipment.

School welfare services. The main welfare services conducted at secondary schools are vocational guidance, social work and school medical care.

TYPES OF SECONDARY EDUCATION

Secondary education may be subdivided into two types: general and intermediate vocational (*sub-profesional*).

In the first category come the schools which continue the work of the primary schools and help to develop the personality of young people and adults, while at the same time providing proper vocational guidance during the 3 school years that make up this cycle. For those who wish to take up a professional career 2 more years of study are needed at an upper secondary school (*escuela preparatoria y vocacional*) so as to enable them to make a firm choice of a career at a university or polytechnical institute.

The general secondary schools are of three types: secondary, pre-vocational and university extension.

The intermediate vocational schools (*escuelas de segunda enseñanza subprofesionales*) continue primary education but give the pupils an opportunity of preparing themselves for employment as skilled workers, as tradesmen or as technical assistants in industry, commerce or agriculture. These schools are of three types: special, agricultural and technical.

General secondary schools

It is the secondary schools (*escuelas secundarias*) which absorb the bulk of the schoolchildren coming from the primary schools. They provide a well-defined and all-round course of instruction, enabling those who complete it to obtain a secondary education certificate, whether they wish to continue their studies or terminate them in order to enter employment.

The State provides this education free of charge to all persons without any limitation other than the quotas for each school.

The secondary schools are run according to two types of school calendar, 'A' and 'B', which are the same as for the rest of the country's educational system, and are based on climatic considerations. They each divide the school year into 2 terms of 5 months, with 2 holiday periods of 10 days, 1 in each term on completion of the courses, and 2 months' vacation before the next school year opens.

Under the 'A' calendar, the work of enrolment, classification of groups and special examinations takes place during the second fortnight of January, and under calendar 'B' during the second fortnight of August. In the first case, the classes start at the beginning of February and conclude at the end of November, and in the second they start at the beginning of September and conclude at the end of June.

The secondary schools have different time-tables for day classes and evening classes, depending on local requirements and the needs of the school population.

Some secondary day-schools work from 8 a.m. to 2 p.m., from Monday to Saturday, with 6 or 7 50-minute periods a day and a 10-minute break after each period, as well as a 20-minute recess to enable the children to have some light refreshment; the Saturdays are devoted to social activities or meetings of the pupils' clubs. Other day schools work from 8 a.m. to 12 noon and from 2 to 4 p.m., from Monday to Friday. The periods are of 50 minutes as a minimum, with a 10 minute break in between. Club activities are held one evening per week.

The secondary evening and night schools have a shorter time-table of 4 hours, from Monday to Friday, with 5 periods also of 50 minutes but without breaks. There are no workshop classes, since the pupils are young people or adults already employed in workshops or offices; nor are there any special sports lessons, because of the inconvenience of the time, although team matches are organized on Sundays. The time-table is from 4 to 8 p.m. for the evening schools and from 5.30 to 10 p.m. for the night schools.

Aims. The purpose of the *escuelas secundarias* is to produce young people with well developed personalities, capable of contributing to the general welfare of society; to inculcate desirable attitudes and standards of conduct; to impart a general culture; and to discover and guide the children's aspirations.

Curriculum. The secondary curriculum is characterized by (a) its uniformity, as evidenced by the common subjects

compulsory for all grades at all secondary schools, the period (3 years) normally allotted to it, and the total time devoted to each course; (b) its variability, as evidenced by the workshop subjects, which are taught in accordance with local requirements and the pupils' needs; and the club activities which enable pupils to use their leisure time in an organized manner; (c) its flexibility, as evidenced by the option of taking one of the subjects in the third grade for a course of two extra periods a week in addition to the normal course so as to help the pupils to discover where their vocational bent lies, and the exemption from workshop and sports activities of pupils who attend secondary night schools because they are at work during the day; and (d) its adaptability to the pupils' capacities as evidenced by the facilities provided to enable those who fail to pass in all their subjects in any school year to bring themselves to the proper level, and the arrangement whereby pupils failing to pass in four or more subjects can take them at their own schools under special conditions.

The curriculum provides for courses enabling the pupils to become acquainted with the elements that have contributed towards the culture, work and advancement of the Mexican nation, as well as those that make for the fulfilment of individual physical, health, social, aesthetic and recreational needs. It is characterized by the organization of related courses into integrated programmes, the content of which is presented in a cyclic pattern, e.g., arithmetic, algebra, geometry and trigonometry are integrated in the mathematics course and reappear in each of the three successive grades.

The subjects and activities are listed in the following table, together with the number of 50-minute periods allocated to each.

TIME-TABLE FOR SECONDARY SCHOOLS[1]
(in periods per week)

Subject	Year		
	1	2	3
Spanish language and literature	4	3	3
Mathematics	4	3	3
Biology	3	3	3
Physics	–	3	–
Chemistry	–	–	3
Geography	2	2	3
World history	2	2	–
Mexican history	–	2	2
Civics	2	2	2
English or French	3	2	2
Drawing	2	–	–
Technical drawing	–	2	–
Modelling	–	–	2
Music	2	1	1
Physical education	2	2	2
Workshop crafts or home economics	4	3	3
Option[2]	–	–	2
Total	30	30	31

1. Day schools. Pupils in night secondary schools are exempted from physical education and workshop crafts or home economics.
2. Two extra hours per week in any subject of the third year programme except geography, Mexican history, modelling, music, or physical education.

The content of the syllabuses is arranged as a series of 'units', each of which covers a central theme of interest to the pupils, and their general as well as particular objectives are clearly defined by the list of activities, which all contribute towards the development of the personality of the pupils, although the educational objectives are paramount.

Conditions for admission. Admission to secondary schools will become increasingly difficult, owing to the fact that the establishment of new schools is failing to keep pace with the annual growth of population, despite the considerable joint efforts being made by the authorities and the active elements in each local community.

In order to provide accommodation for the greatest possible number of pupils, the following types of secondary school have been established; all types keep to uniform standards as regards curriculum and teaching and differ only in the way in which they are financed:

Federal or state secondary schools. These are run by the authorities, and charge no fees. Where the number of would-be pupils exceeds the quota, selection tests are held.

Federal secondary schools with co-operative status. Private initiative, in the form of patronage committees or parents' associations, assists either with the cost of construction or, under special agreements, by paying fixed sums to cover staff salaries; but appointments to the staff are made on the nomination of the federal or state government and the principal and assistant principal are appointed by the federation. Education in this type of school may be free or subject to contributions within everyone's means.

Recognized private schools (*escuelas encorporadas*). These are run financially as business concerns and their entire costs are covered by monthly tuition fees paid by the parents. The teaching and directorial staff, and the school building, have to meet statutory requirements as the condition for operation. They are required to admit 5 per cent of their pupils free, on the basis of scholarship grants to those unable to find a place at the state schools, so that only a very small number of applicants are left without a school to attend.

All applicants for admission to secondary schools must have a primary education certificate, be under 15 years of age for secondary day schools and over 15 (or prove that they are employed) for secondary night schools, and pass selection and group classification tests.

Group classification in the first year is based on the level of preparation and age of the pupil; evaluation tests are being made in order to form groups which are as homogeneous as possible as regards both previous education and interests.

In the succeeding years, when the children are better known, they are grouped in accordance with their progress and their bent.

Achievement testing. The evaluation of the knowledge, habits, aptitudes, skills, attitudes and experience of the children, for diagnostic and promotion purposes, is effected on the basis of their work in and out of class, such as exercises, tasks, or research or documentation work set them by the

teacher, and of the results of the final examinations on a given subject or group of subjects, and of occasional tests during the year.

The marks obtained are recorded so as to give an idea of the pupil's progress, application and efforts to reach the monthly standard for the period in question. The scale of marks is from 1 'very poor' to 10 'excellent'.

Success or failure in each course or activity is evaluated separately.

Promotion. The secondary school tries to ensure that promotion is as rapid as possible, and therefore offers pupils the fullest possible facilities to complete their studies within the normal 3 years, but at the same time allows a longer time for those who fail to do so because of conditions of work or for other reasons. The length of time is, in fact, adapted as far as possible to the requirements of the individual pupil, thus ensuring that the educational purposes are at all times fulfilled.

The following examinations are conducted with that object in view:

1. Special semester examinations, for pupils who for justifiable reasons fail to sit for the ordinary semester examination, or for those who fail to attend the minimum number of classes for each course (60–80 per cent attendance). The examination covers the subject matter for the corresponding school period.
2. Special annual examinations, for pupils who fail to reach the final minimum pass standard. These examinations are conducted in two stages—before the beginning of the courses for the school year, and halfway through the year. They cover the subject matter for the two terms.
3. Proficiency examinations, for pupils who are not entitled to sit for the two above-mentioned examinations on account of their failure to put in the minimum attendance, or for those who are self-taught or have followed a different curriculum or syllabus. The examination covers the subject matter for the entire course and consists of practical and written tests.

Vocational and technical schools

The Instituto Politécnico Nacional is the state institution, attached to the Secretariat of Public Education, which provides technical education throughout the country.

Its chief functions are the following:

Planning, establishing, directing and supervising the national technical education system.

Providing and supervising technical education at its different levels throughout the country, and at the same time putting into practice the most modern educational and technical methods of teaching and research.

Establishing such schools, study centres and scientific research centres as it deems appropriate, in accordance with the methods best adapted to the aims of the institute.

Introducing, modifying or discontinuing courses, study plans and curricula in all schools and institutions included in the national technical education system.

Issuing study certificates, diplomas and degrees at different levels.

Ratifying, at its discretion, the equivalence of studies completed in schools or institutions outside the national technical education system.

Five types of education are provided by the Instituto Politécnico Nacional: pre-vocational, vocational, professional, post-graduate and training for skilled workers and foremen.

The following are institutions at secondary level.

Pre-vocational schools. These follow after the primary school and give a minimum of 3 years' training. Their aims are to provide pupils with a basic general education, to develop the pupils' manual dexterity and promote industrious habits by means of work in workshops and the study of technology, and to initiate vocational investigation. There is a single curriculum.

This study cycle leads to the Pre-vocational School Certificate, equivalent to the Secondary School Certificate.

Vocational schools. Entrance to these is from the pre-vocational school or the secondary school. The course occupies a minimum of 2 years, and corresponds to the *bachillerato* course in general schools. The aims are to raise the level of the student's general culture and to give specialized preparation for technical or professional studies. The curricula naturally vary according to the specific character of the individual schools, each course leading to the corresponding Vocational School Certificate or Diploma. Thus, for example, No. 1 Vocational School of Civil Engineering and Architecture, in Mexico City, awards the Certificate of Vocational Education in Civil Engineering and Architecture, which is required for admission to the Escuela Superior de Ingenieria y Arquitectura. Other types of vocational school are those for electrical and mechanical engineering, commerce and administration, economics, medical and biological sciences, chemical engineering, textiles. Either the Vocational School Certificate or the *bachillerato* admits to the higher professional schools which award the professional degrees of engineer, chemist, doctor, accountant, auditor, etc.

Training schools for skilled workers and foremen. These have the following aims: (a) to provide short courses for young people and workers who are, or desire to be, engaged on productive work, in order to confirm or improve their status as workers in a given branch of activity, or to transfer to a different branch; (b) to provide technical education below professional level (*enseñanza subprofesional*) so as to train technicians who will occupy intermediate posts in industry and serve as a link between the professionally trained engineers and the ordinary workers. Both types of course are planned within the context of the social and economic development of the country.

The requirements for admission for the short training courses are the primary school certificate or an ability test; and for the foremen's courses, the pre-vocational school certificate or the secondary school certificate.

Study in these schools leads to a certificate, in the case of the short training courses (e.g. skilled radio technician's certificate, skilled electrician's certificate, skilled mechanic's certificate, etc.), and to a diploma for the foremen's courses (e.g. diploma for the mechanical technician's course, the electrical technician's course, etc.).

Regional technical centres. These centres, which are attached to the National Polytechnical Institute, endeavour to meet regional requirements in technical education, and to promote and encourage commercial, industrial and agricultural development. They provide various study cycles, appropriate to the purposes for which they were created, including technical training for young people, courses for workers, re-education for adults, pre-vocational courses, vocational courses, professional courses and courses in industrial research.

Teacher training schools

The teacher training schools are responsible for the training of primary school teachers.

The teacher training system comprises federal teacher training schools, founded and supported by the federation; state teacher training schools, maintained by the governments of the individual states, and private teacher training schools, financed from private sources.

There are rural teacher training schools, and urban teacher training schools.

To solve the problem of the numerous unqualified primary school teachers who are working in rural areas, the Instituto Federal de Capacitación de Magisterio was established by the Law of 26 December 1944.

TRENDS AND PROBLEMS

Now that 33 years have elapsed since the *escuelas secundarias* were first set up, it can be stated that the principles which originally governed their establishment have retained with very little change their full validity in face of present-day needs and imperatives. On the other hand, a careful examination of the present position of secondary education shows that in practice there have been deviations from those objectives, aims and concepts.

In response to the necessity for reform and consequent reconstruction of the national educational system—a problem which has been receiving the active attention of the Public Education Secretariat—three essential documents have been issued analysing the present situation, namely:

1. Basic principles governing the national educational system, and objectives and requirements of curricula and syllabuses (study approved by the heads of the technical departments of the Directorates-General of the Public Education Secretariat and published by the National Technical Council of Education in March 1959).
2. Inaugural address by the Secretary for Public Education at the second plenary assembly of the National Technical Council of Education on 29 July 1959.
3. General Regulations governing the formulation of secondary school curricula and syllabuses, a study based on discussions at the National Conference for Secondary Education and submitted by the Directorate-General of Secondary Education for consideration and decision by the second plenary assembly of the National Technical Council for Education, which unanimously approved it on 31 July 1959.

Without undertaking a close examination of these important documents, it is sufficient to summarize the basic principles which—having regard to the various functional defects of secondary education—should inspire any new planning of education at that level. They are:

1. Principle of unity: secondary education should be planned on uniform lines throughout the country.
2. Principle of adaptation: secondary education should be planned to operate in a form adapted to the needs of secondary school children and of society.
3. Principle of efficiency: secondary education should be planned so as to meet the requirements of the all-round development of the personality of the pupil and also to make him reasonably proficient in an activity determined by his bent and by local requirements.
4. Principle of co-ordination: the planning of secondary education should ensure close co-ordination between the courses and activities, and between them and the aims and objectives of secondary education, with constant regard to the preceding and subsequent levels of education.
5. Principle of guidance: secondary education, in its planning and more especially in its programming and development, should fulfil the essential purpose of guiding the pupils.
6. Principle of economy: secondary education should be planned so as to achieve the maximum progress with the minimum waste of vital energy, in the interests of the physical and mental health of pupils.
7. Principle of training for citizenship: in secondary education, an important place should be given to training for citizenship, through constant attention to those of the pupils' activities which enable them to acquire proper attitudes to other people and habits of co-operation and social service.

It should be added that during the first year in office of Dr. Adolfo López Mateos, as President of the Republic, the Public Education Secretariat, on his express instructions and through the agency of Dr. Jaime Torres Bodet, the Secretary for Public Education, sponsored a far-reaching reform of school curricula and syllabuses at the pre-primary, primary, secondary and teacher training levels—a reform which is due to come into force in the immediate future and which sets a new course for public education in Mexico's continued efforts to develop and improve its public education system.

[*Text prepared by Professors Vicente Casarrubias Caamaño, Francisco Hinojosa Guerrero, Luis Guevara Ramírez and Abel Rodríguez Escudero, and transmitted by the Mexican Permanent Delegation to Unesco in June 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 32,348,000.
Area: 760,337 square miles; 1,969,269 square kilometres.
Population density: 43 per square mile; 16 per square kilometre.

Summary of school statistics, 1953–57. In 1957 total enrolment at all levels of education reached nearly 4.5 million pupils, or 14 per cent of the total population. About 4 per cent of the pupils were attending kindergartens, 88 per cent were in primary schools, almost 3 per cent in the junior and senior secondary schools together, less than 2 per cent in vocational schools, less than 1 per cent in teacher training schools, and slightly over 2 per cent in universities and colleges. As to the proportion of girls enrolled, data available for the latest years relate to general secondary schools (33 per cent girls in 1956), vocational schools (48 per cent girls in 1956), teacher training schools (61 per cent girls in 1956), and universities and colleges (28 per cent girls in 1957). For earlier years, the proportion of girls enrolled in primary schools was reported to be about 65 per cent (see *World Survey of Education: II-Primary Education*).

Between 1953 and 1957 primary school enrolment increased by 26 per cent, and the teaching staff increased by 33 per cent. Average number of pupils per teacher in primary schools was 38 in 1957 as compared with 40 in 1953. (See Table 1.)

Enrolment trends in secondary education, 1949–57. Table 2 shows that total enrolment in general and vocational secondary education more than doubled in the period of 9 years; in teacher training it more than tripled. Thus the average total enrolment for the period 1955–57 was more than twice as high as in 1949 and represented about 7 per cent of the estimated population 15–19 years old.

Examination results in secondary education, 1953–56. Complete data on examination results are not available. The number of teaching certificates granted each year from 1953 to 1956 were as follows: kindergarten teachers, 67 (1953), 86 (1954), 97 (1955), 133 (1956); rural school teachers, 7 (1953), 34 (1954); *profesor de instrucción primaria superior*, 1,603 (1953), 2,494 (1954), 2,729 (1955), 2,309 (1956).

Educational finance, 1959. According to data published by the Unesco Regional Office for the Western Hemisphere in the *Boletin trimestral de Proyecto Principal de Educación Unesco-América Latina*, Vol. 2, No. 5 (January–March 1960), the 1959 budget estimate of the Ministry of Education amounted to 1,482,480,000 pesos, an average expenditure of 44.5 pesos per inhabitant. An amount of 555 million pesos, about 37 per cent of the total budget, was allotted to primary education. Official exchange rate: 100 pesos = 8 U.S. dollars.

Sources. Mexico: Dirección General de Estadística, *Compendios estadisticos*, and *Estructura Económica de la Educación Mexicana: Problemas y Proyecciones*, Tome II, México, 1959, by Victor Gallo-Martínez; replies to Unesco questionnaires.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens						
	Total	**1957**	**1 426**	**5 070**	**5 070**	[1]**199 951**	...
	"	1956	1 403	4 891	4 891	164 811	...
	"	1955	1 294	4 459	4 459	149 517	...
	"	1954	1 211	4 007	4 007	136 675	...
	"	1953	1 132	3 785	3 785	123 262	...

1. In 1957 pupils enrolled at beginning of the school year.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957				3 144 033	...
	Primary schools, aided private	1957	29 755	103 003	...	509 590	...
	Primary schools, unaided private	1957				262 324	...
	Total	**1957**	**29 755**	**103 003**	**...**	**3 915 947**	**...**
	,,	1956	28 417	89 931	...	3 679 952	...
	,,	1955	27 826	85 797	...	3 526 869	...
	,,	1954	27 319	81 695	...	3 340 468	...
	,,	1953	26 626	77 678	...	3 098 240	...
Secondary							
General	Junior secondary schools (*secundarias*)	1957	637	9 348	...	108 065	...
	Senior secondary schools (*preparatorias*)	1957	...	...	...	...	...
	Total	**1957**	**[2]637**	**[2]9 348**	**...**	**[2]108 065**	**...**
	,,	1956	769	14 309	...	124 578	40 654
	,,	1955	594	11 129	...	90 187	30 813
	,,	1954	629	14 033	...	110 205	33 689
	,,	1953	573	12 789	...	88 411	26 927
Vocational	Pre-vocational schools	1957	...	...	...	...	...
	Vocational schools	1957	[3] ...	[3] ...	...	[3] ...	...
	Commercial schools	1957	[4]487	[4]6 880	...	[4]70 563	...
	Practical agricultural schools	1957	13	148	...	1 892	...
	Other[5]	1957	[3] ...	[3] ...	...	[3] ...	...
	Total	**1957**	**[6]500**	**[6]7 028**	**...**	**[6]72 455**	**...**
	,,	1956	487	7 386	...	71 568	34 709
	,,	1955	418	7 289	...	65 137	31 276
	,,	1954	502	7 767	...	70 775	34 264
	,,	1953	415	5 807	...	55 690	28 805
Teacher training	Teacher training school						
	Total	**1957**	**140**	**4 691**	**...**	**33 056**	**...**
	,,	1956	118	4 330	...	32 682	19 900
	,,	1955	112	3 644	...	23 877	13 924
	,,	1954	122	3 611	...	24 025	14 301
	,,	1953	96	2 496	...	16 634	10 450
Higher	Universities and colleges						
	Total	**1957**	**...**	**...**	**...**	**103 485**	**28 841**
	,,	1956	...	...	...	85 825	30 799
	,,	1955	...	...	...	78 924	23 425
	,,	1954	...	...	...	87 211	27 271
	,,	1953	...	...	...	75 270	21 954

2. Junior secondary schools (*escuelas secundarias*) only. In 1956, the number of pupils in the senior secondary schools (*escuelas preparatorias*) was 18,478 (F.3,896).
3. Data included with commercial schools.
4. In 1956, the number of pupils was distributed as follows: in vocational schools, 7,104 (F.1,079); commercial schools, 35,233 (F.22,323); other, 20,819 (F.10,768).
5. Schools of fine arts, arts and crafts, industrial schools, etc.
6. Not including pre-vocational schools, of which the number of pupils enrolled was 6,920 (F.539) in 1956.

2. TRENDS IN SECONDARY EDUCATION, 1949–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1949	55 912	30	31 948	56	10 052	53	98	2 563	4
1950	76 911	29	38 066	56	12 489	48			
1951	80 312	28	39 610	55	10 823	65			
1952	85 663	29	47 745	47	13 281	54	154	2 785	6
1953	88 411	30	55 690	52	16 634	63			
1954	110 205	31	70 775	48	24 025	60			
1955	90 187	34	65 137	48	23 877	58			
1956	124 578	33	71 568	48	32 682	61	*215	3 116	*7
1957	[1]108 065	...	[2]71 455	...	33 056	...			

1. Not including senior secondary schools (*preparatorias*) at which the number of pupils in 1956 was 18,478 (F.3,896).
2. Not including pre-vocational schools at which the number of pupils in 1956 was 6,920 (F.539).

MONACO

THE EDUCATIONAL SYSTEM

Public education comes under the Government Councillor for the Interior. An Education Committee composed of 12 members appointed for three years by HRH the Prince Regnant is responsible for the supervision, control and promotion of both primary and secondary education.

Two school inspectors, appointed for a term of three years by the Prince Regnant, are responsible for the standard of teaching given in the various schools, for ensuring that administrative instructions are carried out, and for recommending measures for any reforms and improvements which may seem to them necessary.

The State bears all costs of public education, including the construction, equipment and maintenance of all state schools, and defrays their running costs, including the purchase and renewal of supplies for classical and scientific education.

Teachers, whether seconded from France or not, are remunerated by the State of Monaco in accordance with the rates of pay prevailing in France. However, a special bonus is paid to teachers who are *agrégés*, so as to attract and retain the most highly qualified staff.

A school medical inspection service, set up in 1950, is responsible for supervising the health of pupils and staff in public and private schools.

The structure of the school system is similar to that of France.

THE DEVELOPMENT OF SECONDARY EDUCATION

The principal laws governing secondary education are the following:

Sovereign Decree of 25 September 1910, founding the Monaco *lycée*.

Sovereign Decree of 30 January 1919, instituting a secondary education course for girls.

Law No. 250 of 24 July 1938, instituting free secondary education for pupils who are nationals of Monaco.

Sovereign Decree No. 2197 of 8 September 1938, laying down the conditions for admission to the *lycée* and to the girls' secondary school.

Sovereign Decrees No. 1649 of 30 October 1934 and No. 1373 of 1 August 1956, founding the Académie de Musique Rainier III, and Departmental Order of 11 October 1934, providing regulations for the running of that institution.

TYPES OF SECONDARY EDUCATION

Owing to the smallness of its territory and its tiny population, the Principality of Monaco has only one general secondary school, the *lycée*, which prepares pupils for the two parts of the secondary leaving certificate, or *baccalauréat*. The course lasts 7 years and is free for Monaco nationals, a very small charge being made to foreigners. Curricula are identical with those in France but with the addition of the history of Monaco and religious instruction. The staff is composed mostly of qualified secondary teachers (*agrégés* and *certifiés*) seconded from France.

The examining authority for the Monaco *lycée* is the *Académie* of Aix-en-Provence.

The passing of the *baccalauréat* at the end of the secondary school course qualifies students for entrance to universities in France—and sometimes elsewhere—for whatever higher studies they may wish to pursue.

For training in music and the arts the Principality of Monaco has a School of Design and Decorative Art and a School of Music (the Académie Rainier III) which has many classes for vocal and instrumental music where the teaching is given by soloists of the National Orchestra of the Monte Carlo Opera who are *premiers prix de Conservatoire.*

TRENDS AND PROBLEMS

Owing to the country's special situation, developments in secondary school curricula and teaching methods in the Principality of Monaco are closely linked with those in France.

[*Text prepared by the Monaco National Commission for Unesco in November 1959.*]

STATISTICS

Population (mid-year 1958 estimate): 21,000.
Area: 0.4 square miles; 1 square kilometre.

Summary of school statistics, 1953–57. In 1957/58 enrolment in 6 public primary and one public general secondary school was 2,563 pupils, of whom 45 per cent were girls, representing some 13 per cent of the total population. There were, in addition, about 200 pupils at a private secondary school. Enrolment in commercial, vocational and domestic science courses numbered 158 pupils in 1958/59. Compared with 1953/54, the number of teaching staff in public primary and secondary schools was unchanged at 132, of whom three-quarters were women. The pupil-teacher ratio in public primary schools was 20 and in the public *lycée* 18. Enrolment in public schools had increased by 12 per cent over 1953/54. (See Table 3.)

Enrolment trends in secondary education, 1930–57. Enrolment in the public *lycée* increased by 123 per cent over this period. The ratio of enrolment to the estimated age group 15 to 19 years old rose from 33 in the 5 years 1930–34 to 80 in the 3 years 1955–57. (See Table 2.)

Examination results in secondary education, 1953–57. The number of students passing the second part of the *Baccalauréat* increased from 25 to 37, including 17 girls, in the 5 years under review.

Educational finance, 1957. Total recurring expenditure on education was 141 million French francs in 1957 (fiscal year beginning January). (See Table 1.)

Source. Monaco: Ministère de l'État, reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1957 (in thousand French francs)[1]

Expenditure by purpose[2]	Amount
Total recurring expenditure[3]	**141 063**
For administration or general control	7 732
For instruction:	
Salaries to teachers, etc.	127 446
Other instructional expenditure	5 012
Other recurring expenditure	873

1. Official exchange rate (1957): 100 French francs = 0.24 U.S. dollar (approx.).
2. Not including capital expenditure.
3. Closed account.

2. TRENDS IN GENERAL SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled[1]		Average total enrolment	Estimated population 15–19 years old	Secondary enrolment ratio
	Total	Per cent female			
1930	385	33	332	*1 010	*33*
1931	310	41			
1932	342	40			
1933	323	42			
1934	300	38			
1935	320	36	348	1 030	*34*
1936	319	44			
1937	352	43			
1938	354	44			
1939	393	39			
1940	423	39	427	800	*53*
1941	397	41			
1942	437	40			
1943	436	36			
1944	442	42			
1945	487	38	527	880	*60*
1946	482	37			
1947	491	40			
1948	579	45			
1949	594	48			
1950	603	46	656	945	*69*
1951	603	45			
1952	643	43			
1953	706	43			
1954	727	40			
1955	733	41	779	970	*80*
1956	747	43			
1957	858	44			

1. Public school only.

3. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary[1]	Primary schools, public						
	Total	**1957/58**	**6**	**85**	**47**	**1 705**	**783**
	"	1956/57	6	85	47	1 661	807
	"	1955/56	6	84	46	1 624	800
	"	1954/55	6	85	46	1 582	805
	"	1953/54	6	85	46	1 592	822
Secondary							
General	*Lycée*, public	1957/58	1	47	16	858	377
	Secondary school, private	1957/58	1	...	...	*200	200
	Total	**1957/58**	**2**	**[2]47**	**[2]16**	***1 058**	**577**
	"	1956/57	2	[2]47	[2]16	[2]747	[2]324
	"	1955/56	2	[2]47	[2]16	[2]733	[2]303
	"	1954/55	2	[2]47	[2]16	[2]727	[2]288
	"	1953/54	2	[2]47	[2]16	[2]706	[2]300

1. No data are available concerning one primary private school.

2. Public school only.

MONGOLIAN PEOPLE'S REPUBLIC

THE EDUCATIONAL SYSTEM

Before the revolution in 1921, Lama monasteries were the main educational institutions in the country, and only one secular school existed. Shortly after the revolution the Government took steps to set up primary schools and in 1923 the first literacy campaign was launched. In the following year, the Mongolian People's Republic was proclaimed and a Ministry of Education was established. In addition to government-supported schools, there were a number of voluntary schools organized and financed by the people themselves. As the majority of the people were nomads, special attention was given to the setting up of boarding schools.

In 1940, following the political unification of the country, a single unified school system was introduced, marking the beginning of a vigorous extension of public education. The reform of the alphabet took place in 1941, when Cyrillic letters replaced the ancient characters, and in 1942 compulsory education was introduced.

Article 90 of the Constitution of 1952 proclaims the right of all citizens to education. The enjoyment of this right is ensured by the provision of compulsory general primary education, the development of a network of schools and institutions of secondary and higher education, the use of the pupils' mother tongue as the medium of instruction, the system of state scholarships for students in institutions of higher and specialized secondary education, and by the free vocational training of workers.

The educational system is entirely secular and there is no discrimination or privilege affecting entry to schools. Girls have the same educational rights as boys. Kazakh pupils go to schools in which they are taught in their own language.

The Ministry of Education exercises general control over the whole educational system. In each of the 18 *aimak* (provinces) into which the country is divided, there is a Department of Public Education responsible to the Provincial Government for education in the area.

The financing of public education is borne by the *aimak* authorities, for schools under their jurisdiction, and by the Central Government.

The educational ladder begins with a kindergarten which admits children from the age of 3. The primary school has a 4-year course and is followed by the 3-year incomplete secondary school. This leads to a further 3-year course in the upper classes of the complete secondary school or specialized (vocational and technical) secondary education. Institutions at the higher level include the State University at Ulan-Bator, founded in 1942.

TYPES OF SECONDARY EDUCATION

The aim of the general education course is to produce good citizens by cultivating in each child a consciousness of civic duty, a love of country and humanity, and an interest in work and in socialism. The curriculum for the secondary classes (fifth to tenth years of the general course) includes Mongolian language and literature, arithmetic, algebra, geometry, trigonometry, astronomy, chemistry, physics, zoology, botany, history and constitution of the Mongolian People's Republic, history of the Union of Soviet Socialist Republics, geography, Russian, a second modern language, practical work, drawing, technical drawing, singing and physical education. Latterly, great importance has been attached to polytechnical education and production training has been introduced into all secondary schools. Every school has well equipped workshops and ground for practical work in agriculture. Pupils are taken to state factories and enterprises to study production.

Secondary school teachers are trained at the Pedagogical Institute (at higher education level) and at the State University.

Vocational and technical schools at secondary level include 'technicums', vocational training schools, and teacher training schools for primary teachers.

[*Text prepared by the Unesco Secretariat in July 1960.*]

STATISTICS

Population (mid-year 1958 estimate): 1,040,000.
Area: 591,000 square miles; 1,531,000 square kilometres.
Population density: 1.8 per square mile; 0.7 per square kilometre.

Summary of school statistics, 1956. Available data are very incomplete and cannot be summarized in tables. In 1956, there were 78 nursery schools enrolling approximately 4,000 children, and 432 primary and secondary schools with 91,000 pupils. Of the latter group of schools, 349 were 4-year elementary schools, 52 were 7-year schools and 31 secondary schools. About 5,000 pupils were enrolled in 15 vocational and teacher training institutions. There were 4 higher educational institutions with a total enrolment of 3,200 students. In all, some 263,000 pupils were enrolled in educational institutions at all levels in 1956, representing about a quarter of the total estimated population. The total teaching staff numbered approximately 3,500 in 1956.

Sources. *The Statesmen's Yearbook*, 1959, *The International Yearbook and Statesmen's Who's Who*, 1959.

MOROCCO

THE EDUCATIONAL SYSTEM

Following independence, the Moroccan Government inherited a complex educational system which had been set up under the Protectorate for purposes that no longer concorded with the changed circumstances, and which had been moulded by a number of diverse ethnic, linguistic, social, cultural, religious and economic factors. For example, the coexistence of different ethnic and religious communities led to the establishment of both Franco-Muslim and Franco-Jewish schools, and also of schools coming under the Alliance Israélite Universelle (AIU) but subject to educational control by the Ministry of Education, and receiving the subvention necessary for their operation. Similarly, language differences have also had their impact on education: Spanish has been the language of instruction in the northern area, and French in the rest of the country.

Under the Protectorate, schooling was mainly the preserve of the children of French officials and the upper strata of Moroccan society, so that education acquired an urban impress and primary education developed more rapidly in the towns than in the countryside. The existence of this 'field of recruitment' has led to the opening in Rabat, Casablanca, Fez, Meknès, Marrakesh and Agadir of large general and technical secondary schools.

These centres, which are provided with well-equipped boarding facilities, are capable of accommodating large numbers of children thanks to a system of scholarships, and thus provide the means for training the higher staff of which Morocco stands in need. The creation of 1,867 new scholarships for general secondary education, has brought the total number now awarded up to 6,318 and the appropriations required to 220,000 NF. For technical education, the number of scholarships awarded is 3,849 while for Muslim education there are 2,119.

Since it became independent, Morocco has shown a wish to return to the deep-rooted traditions of Islam and of Arab civilization, and for that purpose to establish contact with the Eastern world. North Africa has always been a bridge between East and West; hence the aim of Moroccan education must be to form a specifically Moroccan individuality composed of elements drawn from the two sources of Eastern and Western civilization. In addition, the special characteristic of Islam is that it is intimately linked with Arab culture. The educational objective must therefore be to maintain the bonds between religion and education intact.

Finally, the importance of economic factors must be stressed: the country's needs demand the opening of certain schools, an engineering school, for example, which will come into operation in October 1960. These requirements cover higher-grade staff—mechanical, electrical, chemical and civil engineers and architects; middle-grade staff (holders of industrial or commercial secondary school certificates) (*brevets*); and skilled workers. Indeed it may be said that ethnic, linguistic, cultural and religious factors are losing their importance while the social and economic factors are becoming predominant.

The public authorities naturally take the lead at all administrative levels in providing educational facilities. At the local level, the regional inspectorates study demand and supply as regards premises, teaching staff and school recruitment. The information is collected by the provincial authorities and channelled towards the Central Government, i.e., the Ministries of Education, National Economy, Agriculture and Public Works, at which level the authorities concerned, once all the information is at their disposal, formulate a policy for establishing schools in accordance with national priorities.

The public authorities are assisted in their work by private bodies such as the advanced training boards (one for each school); the patronage committees, whose aim is to give technical education material and moral support in each locality; and the National Association for the Development of Vocational Training, which is now emerging from a period of somnolence. The Government also receives valuable assistance from the chambers of commerce and industry, the Chambres Syndicales du Patronat, the Comité des Industriels, the Association des 'Jeunes Patrons' and old pupils' associations, all of which draw members from every walk of life and are able at all times to keep the authorities alive to the needs and potentialities of the labour market.

Moroccan education today takes the following forms:

Modern state education. This comprises three levels and is provided in schools set up by the Ministry of Education and the French Mission Universitaire Culturelle. It is heir to the French system established under the Protectorate.

The secondary level is open to children who, over a period of 5 years of primary education, have acquired the necessary foundation for continuing general or technical education. At the end of the 7-year secondary course, pupils sit for the French general or technical *baccalauréat.*

On leaving a *lycée* or *collège* the young Moroccan has a fair knowledge of French and a reasonably wide background of Western type. However, his knowledge of Arabic is inadequate and he is likely to abandon traditional concepts whose worth has been proved over the ages.

Islamic education. This also comprises three levels and is a form of state education. It is provided in Koranic schools, *medersas* and universities, of which the most famous is the Karawiyīn University at Fez. Secondary schooling covers 6 years and is followed by a higher course (3 years) of literary and legal studies. At the end of the 9 years pupils may obtain a certificate—the *'Ālemiya.* The young Moroccan who completes this course has a very good knowledge of Arabic and the Islamic sciences, is fairly well abreast of Western thought and often eager to tackle the new problems of our time.

To complete this rather scholastic education and counteract the competition of the French *baccalauréat,* which until now has been the gateway to higher education and hence to many public posts, Rabat University is offering modern courses leading to a Moroccan *licence* (arts or law).

Muslim private education. This was established under the Protectorate to withstand the invasion of French in all disciplines and to provide schooling for children who could not attend the Protectorate schools. All subjects are taught in Arabic and adapted to local conditions. However, French is regarded as the second language. The secondary course covers 7 years and leads to the Moroccan *baccalauréat* (first and second parts).

The principals of private schools receive a government subsidy which defrays almost half the costs of the school (mainly salaries).

Jewish private education. Provided by the Alliance Israélite Universelle, this is available in principle to Moroccan Jews. It is similar to that given in French schools. A few hours are devoted to the teaching of Hebrew, and in recent years an effort has been made to extend the teaching of Arabic, which had been rather neglected.

European private education. This comprises both denominational and secular schools and is restricted mainly to the primary level. There are only a few secondary classes.

The Moroccan educational system is governed by a number of laws and regulations introduced over the past forty years. The *Dahir* of 26 July 1920 instituted a Directorate of Education, while the general organization of the educational service was dealt with in the *Dahirs* of 17 December 1920, 8 March 1921, 30 August 1926 and 28 September 1940.

When Morocco formed its first independent Government (7 December 1955) the Directorate of Education and Fine Arts became the Ministry of Education, Youth Activities and Sports (October 1956). Other very important reforms followed. Some were aimed at endowing the country with permanent institutions whose role it would be to advise the Ministry at the higher level, to work out an appropriate policy for education and culture and to ensure a certain continuity in its application. Thus a Higher Council of Education and a National Council of Popular Culture were set up. The Higher Council of Education (*Dahir* No. 1-59-121 of 1 June 1959) is consulted on proposed reforms affecting the various types of education; it gives its opinion on all questions of national import affecting

education and training, whatever ministerial department they may concern. The National Council of Popular Culture (*Dahir* No. 1-59-140 of 1 June 1959) advises the Government on all questions of out-of-school education and cultural activities.

Other reforms have dealt with the structure and internal organization of educational services with a view to bringing the administration into line with the country's new needs and resources. The *Dahir* of 9 February 1959 outlines the organization of the Ministry of Education and a ministerial decree implements it by defining the structure and duties of the different services.

The diagram on page 837 shows the structure of the Moroccan educational system.

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary education, in the sense of education for adolescents, existed before the establishment of the French Protectorate over Morocco in 1912. Available to pupils who had been educated in the Koranic schools, it was given in the mosques, the most famous of which was the Karawiyīn University at Fez.

The teaching was almost entirely religious (theology, religious sciences, Muslim law and the grammar necessary for reading texts). It led on to higher Islamic education—also given in the mosques—which was designed to train jurists, scholars and theologians. This education still exists.

In the early days of the Protectorate European secondary schools in conformity with the French educational system were opened at Tangier (1909) and at Casablanca (1914) for boys and also at Casablanca (1915) for girls. As time went on *lycées* and *collèges* sprang up in the big centres to meet the needs of the growing French and other European population. The French curriculum was strictly applied so that pupils could transfer easily to or from schools in France. European schools were open to Moroccans and Europeans alike, under the same conditions regarding age and ability qualifications.

Alongside these European schools secondary schools specially designed for Muslim Moroccans were set up at Rabat and Fez from 1915 on, and these Muslim *collèges* became public schools in 1920, with the institution of a Muslim Education Service within the Directorate of Education. Special curricula were drawn up, largely on the lines of the European secondary school curriculum, but including a few hours of Arabic. However, despite the important place occupied by Arabic, the Koran and Islamic disciplines, the teaching of Arabic remained inadequate. Teachers were French or Moroccan according to the subject taught.

After 1930 the increase in the school population made it necessary to open further secondary schools in various regions, and boarding facilities were added in a number of schools. The curricula and examinations applying to Muslim secondary education were successively modified. By 1956, the examinations comprised the lower secondary certificate (*brevet d'études du premier cycle*), common to European and Muslim schools, the Muslim secondary school certificate and the *baccalauréat*.

At that time there were seven Muslim secondary schools, some of which extended only to the end of the first cycle (classes 6 to 3), others went as far as the second or first class. (The numbering of secondary classes follows an inverse order—see diagram.) In order to obtain the second part of the *baccalauréat* pupils had to go to a European school for the final year or years.

The advent of independence was to lead to important policy changes in secondary education. Some European schools were taken over by the French Mission Universitaire et Culturelle in Morocco, while others remained under the authority of the Ministry of Education. In 1956 the Muslim Secondary Education Service became an autonomous service distinct from that of primary education and secondary schools without the two final classes were extended to include them. Complementary schools (primary continuation schools) became *collèges* offering the first cycle (first 4 years) of the secondary course, new schools were founded, and secondary education for girls quickly developed. To the girls' *collèges* set up at Rabat (in 1945) and at Fez (in 1947) were added first-cycle *collèges* and also a *collège* at Meknès (in 1958).

In 1957, under King Mohammed V, a commission was appointed to draw up a reform of secondary education, aimed at the gradual 'Moroccanization' of education and the unification of time-tables and curricula. The new curricula came into force in October 1957, and a secondary teacher training school was opened to train teachers to educate pupils in the spirit of the reform.

In October 1958 the Secondary Education Division was formed, combining the Muslim Secondary Education Service with the European Education Service, which until then had been autonomous. At the same time, an Educational Research Centre was set up with the help of secondary school teachers and inspectors to assist the Ministry of Education.

At present there are 54 secondary schools of the European or Moroccan type, which, thanks to their flexible curricula, provide a good education perfectly suited to a school population of diverse origin.

Technical education, too, was introduced in Morocco at an early stage, the necessity of training qualified staff for industry and commerce leading to the foundation, in 1917, of the Casablanca industrial and commercial school, now a purely industrial school. Another development was the opening of technical sections annexed to some of the general secondary schools (Collège des Orangers, Rabat, Collège de Mers Sultan, Casablanca, Collège de Kénitra). However, it was not until October 1945 that technical education was properly planned and organized.

Until independence secondary education was governed by French provisions with the modifications imposed by local conditions. But Morocco had no law or regulation making school attendance compulsory.

Administration

In pursuance of Article 2 of the *Dahir* of 9 February 1959, the Ministry of Education comprises a general secretariat, a general administrative service and five divisions: Primary Education, Secondary Education, Technical Education, Higher Education, Youth Activities and Sports.

In so far as secondary education is concerned, laws and regulations are drawn up by the head of the division in question. In matters of teaching he is assisted by the Higher Council of Education and the Educational Research Centre. In close liaison with the head of division, this centre works out curricula suited to the peculiar conditions of the country and of modern life, advocates teaching methods, approves textbooks, etc. The resultant policy is submitted by the Minister of Education to the Cabinet before it is implemented. The head of division is further assisted by provisional bodies—particularly by commissions composed of Moroccan personalities, inspectors and specialized teachers.

The principals of general schools come directly under the authority of the central administration. There is no decentralization: secondary schools (with the exception of technical schools) are not answerable to any other public administration and have no administrative connexion with private bodies.

In the case of technical education its organization is jointly studied, drafted and reviewed by the services of the Ministry, the Division of Technical Education and the Research Centre. The Division of Technical Education is under the control of the Minister of Education. The Head of Division is assisted by a head of service and various specialized inspectors (industrial education, commercial education, agricultural education, domestic science, fine arts). He has at his disposal an administrative service with several departments dealing respectively with teaching staff, finance, building plans, school equipment. These services are in direct contact with schools which come under the Technical Education Division, but liaison with multipurpose schools is maintained through the Division of Secondary Education.

Some schools come under several ministries: Education and Public Works (special schools for training Public Works staff), Education and Agriculture (Meknès College of Agriculture), Education and Labour and Social Welfare (vocational training school).

The chambers of commerce and industry and other private bodies mentioned above are in contact with the Technical Education Division in many different ways, such as direct contacts between principals of schools and members of the division, written or verbal communications

GLOSSARY

NOTE. For secondary classes in *lycées* and *collèges* the diagram shows the inverse order of numbering which is usual in these institutions, the secondary level beginning at the 6th class and progressing to the 1st, with a terminal class T. The usual names of the primary classes are *cours préparatoire* (CP), *cours élémentaire, 1 et 2* (CE.1 and CE.2) and *cours moyen, 1 et 2* (CM.1 and CM.2).

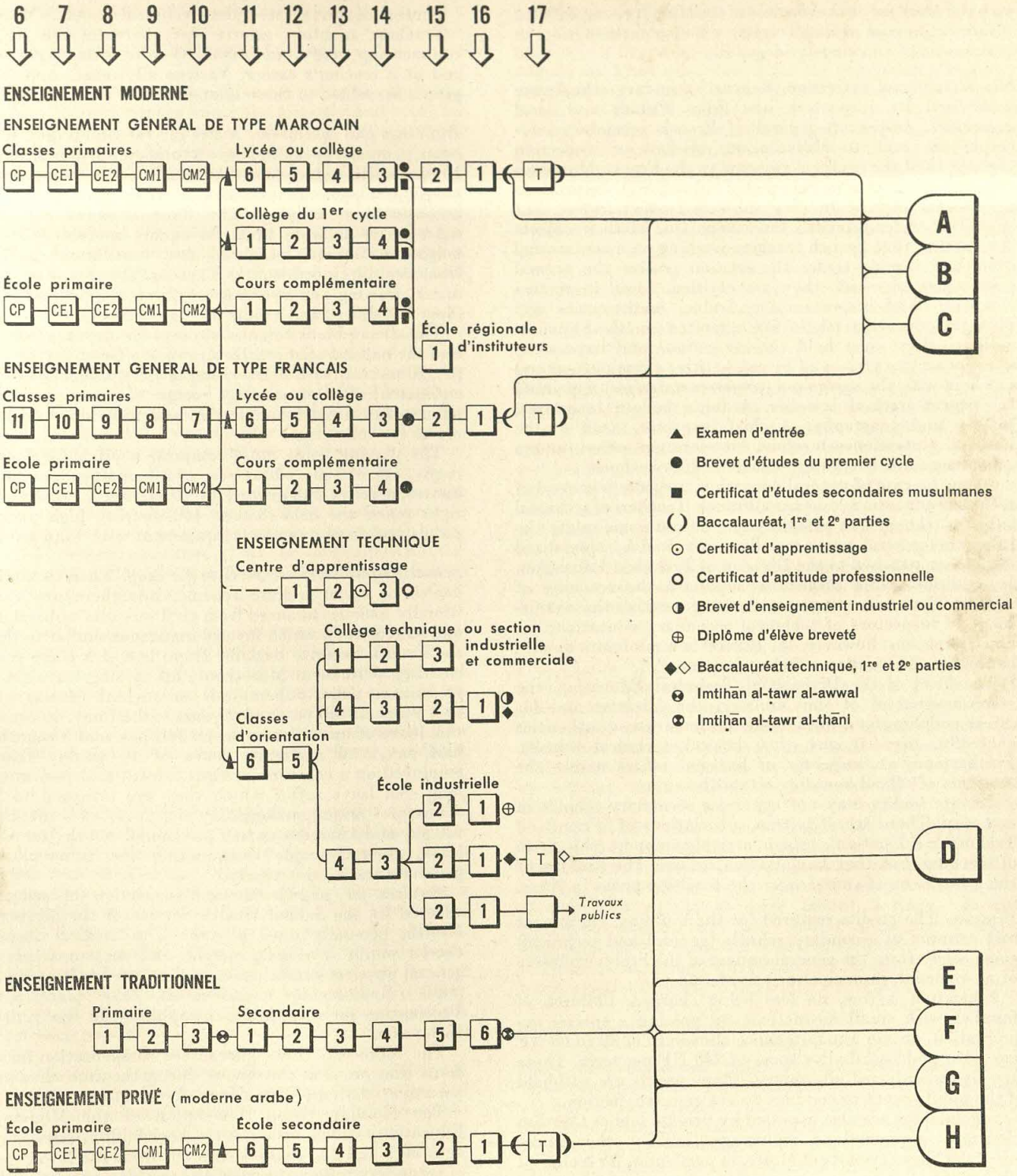
centre d'apprentissage: vocational training school for apprentices.
classes primaires: primary classes attached to a *lycée* or *collège.*
classes d'orientation (direction-finding classes): first 2 years in a *collège technique* or the *École Industrielle.*
collège: general secondary school.
collège du 1er cycle: lower general secondary school.
collège technique: vocational (technical) secondary school.
cours complémentaire: extended primary course with lower secondary curriculum.
École Industrielle: vocational secondary school with industrial and technical courses and a course preparing for entry to employment in Public Works Department (*Travaux publics*).
école primaire: primary school.
école régionale d'instituteurs: regional teacher training school.
enseignement général de type français: general education modelled on that provided in corresponding types of school in France.
enseignement général de type marocain: general education of Moroccan type.
enseignement moderne: education which is 'modern' in the sense that the curriculum emphasizes general, secular subjects as contrasted with the 'traditional' schools (see *enseignement traditionnel*).
enseignement privé (*moderne arabe*): private education with the 'modern Arabic' type of course.
enseignement technique: vocational and technical education.
enseignement traditionnel: traditional type of education, emphasizing classical Islamic studies.
lycée: general secondary school.
section industrielle et commerciale: industrial and commercial section attached to a *lycée* or *collège.*
travaux publics: see *École Industrielle:*

HIGHER EDUCATION

A. Institutions preparing for a Moroccan *licence.*
B. Institutions in Morocco or France preparing for a French *licence.*
C. Courses preparing for entrance examinations to the higher professional schools (*grandes écoles*) in France.
D. School of Engineers (Morocco).
E. Third cycle of traditional Islamic education; there are 2 courses, literature and law, each leading in 3 years to the al-'Ālemiya certificate.
F. School of Administration (Morocco).
G. Universities in the Middle East.
H. Secondary Teacher Training Institute.

EXAMINATIONS

baccalauréat, 1re et 2e parties: first and second parts of the *baccalauréat*, the basic qualification for university entrance.
baccalauréat technique, 1re et 2e parties: first and second parts of the technical *baccalauréat*, qualifying for engineering and technical education at higher level.
brevet d'études du premier cycle: lower secondary certificate, taken at the end of the first cycle (fourth year) of general secondary course.
brevet d'enseignement industriel ou commercial: vocational secondary certificate of industrial or commercial studies.
certificat d'apprentissage: apprenticeship certificate.
certificat d'aptitude professionnelle: vocational proficiency certificate.
certificat d'études secondaires musulmanes: lower secondary certificate for Moroccan type of course.
diplôme d'élève breveté (*industriel*): industrial technician's diploma.
examen d'entrée en sixième: secondary school entrance examination.
imtiḥān al ṭawr al-awwal: certificate of 1st level (primary) studies in traditional schools.
imtiḥān al ṭawr al-thāni: certificate of 2nd level (secondary) studies in traditional schools.


6 7 8 9 10 11 12 13 14 15 16 17
ENSEIGNEMENT MODERNE
ENSEIGNEMENT GÉNÉRAL DE TYPE MAROCAIN
Classes primaires
CP CE1 CE2 CM1 CM2
Lycée ou collège
6 5 4 3 2 1 T
Collège du 1er cycle
1 2 3 4
École primaire
CP CE1 CE2 CM1 CM2
Cours complémentaire
1 2 3 4
École régionale d'instituteurs
1
ENSEIGNEMENT GENERAL DE TYPE FRANCAIS
Classes primaires
11 10 9 8 7
Lycée ou collège
6 5 4 3 2 1 T
Ecole primaire
CP CE1 CE2 CM1 CM2
Cours complémentaire
1 2 3 4
ENSEIGNEMENT TECHNIQUE
Centre d'apprentissage
1 2 3
Collège technique ou section industrielle et commerciale
1 2 3
4 3 2 1
Classes d'orientation
6 5
École industrielle
2 1
4 3 2 1 T
2 1
Travaux publics
A
B
C
D
ENSEIGNEMENT TRADITIONNEL
Primaire
1 2 3
Secondaire
1 2 3 4 5 6
E
F
G
H
ENSEIGNEMENT PRIVÉ (moderne arabe)
École primaire
CP CE1 CE2 CM1 CM2
École secondaire
6 5 4 3 2 1 T
▲ Examen d'entrée
● Brevet d'études du premier cycle
■ Certificat d'études secondaires musulmanes
( ) Baccalauréat, 1re et 2e parties
⊙ Certificat d'apprentissage
○ Certificat d'aptitude professionnelle
◑ Brevet d'enseignement industriel ou commercial
⊕ Diplôme d'élève breveté
◆◇ Baccalauréat technique, 1re et 2e parties
Imtiḥān al-ṭawr al-awwal
Imtiḥān al-ṭawr al-thānī

with the Minister or the services of the Ministry, suggestions, wishes expressed through trade unions, participation in examinations and prize-givings, etc.

Supervision and inspection. General secondary schools are supervised by inspectors sent from France and local inspectors. Inspectors-general of French secondary education are sent to Morocco on missions of inspection (Article 14 of the protocol annexed to the Franco-Moroccan cultural convention initialled on 30 May 1957). Inspections are annual for the literary subjects (*section lettres*), but spaced at wider intervals for others. One of their objects is to ensure that French teachers working on a contractual basis and coming under the mission receive the normal promotions to which they are entitled. Local inspectors comprise chief inspectors for Arabic, mathematics and physical education (these are recruited on their qualifications—they must hold the *agrégation*[1] and have some years of service etc.—and by competitive examination) and teachers with the *agrégation* (*professeurs agrégés*) appointed to inspect natural sciences, Arabic, modern languages, history and geography. A chief inspector, head of the bursars' (intendances) school co-operation office, audits school accounts (boarding schools and day schools).

As in the case of general education, inspectors-general of technical education come from France. Teachers of technical subjects (theory and practice) who do not come under the inspectors-general are normally supervised by specialized inspectors attached to the Division of Technical Education. In addition, chief inspectors supervise the teaching of Arabic. There is as yet no legislation governing the recruitment of inspectors of technical secondary education; for non-Moroccans, however, the *licence*[1] is a minimum qualification for the position of 'chief inspector'.

The head of the Division of Technical Education, the secretary-general of the Ministry, the Minister and his direct collaborators, in fact the administrative authorities generally, may at any time inspect technical schools. Furthermore an inspector of bursars' offices audits the accounts of school boarding establishments.

Private bodies may not supervise secondary schools in any way. There are, it is true, associations of 'Friends of Technical Education', which actively support this form of teaching, but they have no control over the running of the schools, or of course over the teaching given in them.

Finance. The credits required for the building, equipment and running of secondary schools (general and technical) come solely from the general budget of the State, exclusive of all regional, municipal or private aid.

Education is free, no fees being charged. Children of families with small means can, on passing a special examination, obtain a maintenance allowance of 30 to 60 NF per term and board allowances of 240 NF per term. There are also semi-board allowances. These grants are withheld if the pupil's work or conduct do not give satisfaction.

Scholarships are also awarded by private bodies (Muslim charitable organizations, orphanages) and by other ministries (the Ministry of Agriculture, in particular, for technical education).

There are no private secondary technical schools in Morocco.

Teachers' monthly salaries vary between 630 NF, the commencing salary, and 1,538 NF, the salary paid at the end of a teacher's career. Various allowances and family grants are added to these salaries.

Buildings and equipment. A site for the building of a *lycée* must, generally speaking, have a total area of approximately 10 acres. Allowance must be made for a day school, a boarding school, administrative services, playing fields and administrative housing. The dimensions of classrooms must be as follows: area, 56 square metres (8.5 × 6.5); height, 3.25 metres. Lighting and ventilation should be from two sides (north-south). There are also special rooms for music, drawing, history and geography (equipped for showing films and slides), and a room for maps and collections.

The science block comprises rooms for physics, chemistry and the natural sciences, lecture rooms for about 40 pupils (8 × 10 metres) with desks rising in tiers, a blackboard and equipment for projection, rooms for practical work, laboratories fitted for collective and individual work and rooms for collections.

The playing fields must comprise a pitch for football, rugby, etc. of 100 × 60 metres, a basketball ground 26 × 14 metres, a volley-ball ground 18 × 9 metres, a running track right round the field (350 to 400 metres), high and long jumps and fixed gymnastic equipment with sand beneath.

School welfare services. Services for staff. There is no state health or social welfare scheme, but there are various friendly societies financed from civil servants' subscriptions and state grants, which furnish assistance similar to that of the French Securité Sociale. There is a sick-leave scheme entitling permanent Moroccan staff to long leave (in case of cancer, polio, tuberculosis or mental illness) of up to 3 years on full pay and 2 years on half pay, to ordinary sick leave of up to 3 months on full pay and 3 months on half pay, and maternity leave of 10 weeks. Teachers employed on a contractual basis are entitled to 6 months' long sick leave (after which they are returned to their country of origin), to ordinary sick leave of 3 months on full pay and 3 months on half pay, and 2 months' maternity leave. A radioscopic examination for tuberculosis is generally carried out yearly.

Services for pupils. Medical inspection of schools is effected by the School Health Service of the Ministry of Health, generally once a year. The medical inspector checks pupils' eyesight, weight and measurements and general physical condition. A medical card is kept for each pupil. Radioscopic examinations take place yearly. Vaccination for smallpox is compulsory in the 12th and 18th years.

The Moroccan State guarantees compensation for accidents that occur at the schools during the time when pupils are under the care of teachers. Accident insurance is free.

The Holiday Camp Association of the Ministry of Education, which caters for schoolchildren between the ages of 7 and 14, enables children from the lower grades of secondary schools to go to the seaside or the mountains during the long vacation. Funds come from state subsidies and donations, from collections and school fêtes, as also from parents' contributions.

1. For an explanation of the terms *agrégation* and *licence*, see chapter on France. The Moroccan *licence* is patterned on the French equivalent.

TYPES OF SECONDARY EDUCATION

State education is of the following four types:

General secondary education. This is given in the full-time secondary schools coming under the Ministry and is of two types: (a) *Moroccan national education.* Mention has already been made of the educational reform of 1957, and the trend towards 'Moroccanization' and unification of curricula, syllabuses and time-tables in all sectors of education. At present the teaching is bilingual (Arabic and French or Spanish), French or Spanish being used for the teaching of special subjects. A second modern language is also taught—English, French or Spanish—but Latin and Greek are not included in the curriculum.

Since the reform the course has been of 6 years' duration, comprising two cycles of 3 years each. The first cycle, which is the same for all pupils, is devoted to general education, with the possibility of branching off into technical subjects in the first year. The second cycle is specialized and comprises five sections with a literary or scientific slant. The first cycle leads to the *brevet d'études du premier cycle* or the certificate of Moroccan secondary education (*certificat d'études secondaires marocaines*), and the second cycle to the Moroccan *baccalauréat.* But pupils can also prepare for the French *baccalauréat* (7-year course), modern section (philosophy, elementary mathematics, experimental sciences). (b) *French education.* This is identical with the secondary education given in France with the addition of the rudiments of Arabic.

Islamic education. Following on from Islamic primary education, this course is for children of about 12 years of age. The curriculum includes both general education and Islamic disciplines (Muslim law and theology), all of which is taught in Arabic. It is a 6-year course, divided into two cycles, the first being devoted to general education, the second allowing for specialization with literary, scientific and theological and legal sections.

Technical education. On completing their primary education pupils may enter schools for apprentices *(centres d'apprentissage)*, technical secondary schools (*collèges techniques*) or the national vocational school (*école national professionnelle*) as long as they comply with the age qualifications. A school and vocational guidance service within the Division of Technical Education is available to pupils and parents. This service, by means of knowledge and aptitude tests, organizes standardized entrance examinations for the apprentices' schools. During the first year of the secondary course, which is particularly important, it keeps in constant contact with pupils.

Extended primary course. This consists of 2 years following on from the primary school. It provides further general education and prepares pupils for various careers—subordinate posts in the civil service, clerical positions, etc.

In the private schools curricula are similar to those of the state schools, but all subjects are taught in Arabic. French is learnt as a modern language.

On completing their general secondary education (Moroccan or French), pupils with the *baccalauréat* may enter universities in Morocco (faculties of law, arts and science), in France, and also in other countries on certain conditions. They may also sit for the competitive entrance examinations to the *grandes écoles* in France (École Polytechnique, École Centrale) as privileged foreigners. With the *baccalauréat* they are automatically accepted in certain French technical institutions for the training of veterinary surgeons, engineers, agronomists, etc. Finally, during their secondary schooling and without the *baccalauréat*, they may enter regional teacher training schools (1-year course), without passing a competitive examination, or the Moroccan school of administration (two sections, Arab and French), on passing a competitive examination. (Candidates with the *baccalauréat* do not have to sit for this examination.) The above schools are restricted to Moroccans.

Pupils who have completed their technical secondary education find many openings. They may continue their studies at the higher level (a) in schools of engineering, at the higher training school for technical teachers or the merchant navy school, if they have the technical *baccalauréat* or if they have gone through the vocational teacher training school section; (b) at the Cap Matifon vocational teacher training school or at the Air Force and Navy School at Rochefort, France; (c) at the Institute of Commerce at the University of Grenoble, at the High Schools of Commerce or at the higher training school for technical teachers, after a probationary period at the Rue Abbeville Collège in Paris, if they hold the higher teaching certificate in commerce; and (d) at the Meknès School of Practical Agriculture if they hold the teacher's certificate in agriculture.

Organization of the school year. The schools reassemble on 1 October. The summer holidays run from 30 June (15 June in the hottest parts of the country) to 30 September. The school year is divided into three terms (October to December, January to March, and April to June).

Fixed holidays common to all schools are as follows: the holidays at the end of the first term (23 December to 2 January), All Saints Day (1 November), the royal national holiday (16, 17 and 18 November), Labour Day (1 May) and the holiday at the end of the second term (20 March to 1 April). In the Moroccan schools the mobile holidays are al-'Eīd al-Ṣaghīr (about 3 days), Ascension day (1 day) and al-'Eīd al-Kabīr (about 4 days). In the European schools they are al-'Eīd al-Ṣaghīr (1 day), Ascension day (1 day) and Whitsun (2 days).

There is no school on Friday or Sunday. The school hours are from 8 a.m. to noon and 2 to 5 p.m.

General secondary schools

From the educational point of view, secondary schools under the Ministry of Education belong to one of two broad categories: the national type, which are in general reserved for Moroccans and children of Islamic origin, and the French-type schools which are open to all French, Moroccan or foreign children who wish to have the benefit of a French education. Both types of school are subject to the same administrative rules and are run internally on similar lines. The national origins of the teaching staff are the

same and they are recruited in the same manner. The only differences are in the curricula and in certain examinations peculiar to one or the other type of education.

Types of schools include *lycées*, *collèges*, first-cycle *collèges* and *cours complémentaires* (extended primary courses). Some schools include technical sections.

Lycées can be of either Moroccan or French type. Until the reform is fully implemented courses will last for 7 years, covering two complete 'cycles'. The *lycées* prepare candidates for the following examinations: lower certificate of secondary education (*brevet d'études du 1er cycle*); certificate of Moroccan secondary education (*certificat d'études secondaires marocaines*) (Moroccan schools only); entrance examination to the Regional School for Primary Teachers (École Régionale d'Instituteurs); entrance examination to the Moroccan Civil Service School (École Marocaine d'Administration); *baccalauréat*, parts I and II, classical and modern (classical in French schools only).

Collèges can also be either Moroccan or French. Courses run for 6 years, in two cycles, and lead to part I of the baccalauréat (part II can be taken from a *lycée*).

The *collèges du premier cycle* are Moroccan only. The main purpose of these schools is to decentralize secondary education.

Lastly, the *cours complémentaires* (1, 2 or 3 years) although belonging administratively to primary education, follow secondary curricula and may if necessary prepare students for the same examinations as the *collèges du premier cycle*.

Staffing of secondary schools. The school administrative staff consists of a principal, who is a *proviseur* (*agrégé* or *licencié*) in *lycées*, or a *directeur* (*licencié*) in *collèges;* a vice-principal (*licencié*), known as the *censeur*, who is mainly in charge of discipline and administration, and assists the *proviseur*, and *surveillants généraux* (boarding school and day school) mainly responsible for general supervision; an assistant principal (*répétiteur*) in *collèges du 1er cycle*, who assists the principal by carrying out general supervision; assistant masters (*répétiteurs*), whose qualification is a *baccalauréat* and who supervise the pupils; and lastly, in every *lycée* or *collège*, a bursar (*intendant* or *économe*) who is in charge of school finances and supplies and who is assisted by under bursars (*sous-intendants*) or house assistants (*adjoints des services économiques*). Ushers (*maîtres d'internat*) are responsible for the boarders while the children are in the dining halls or the dormitory.

Teaching staff includes *agrégés*, *licenciés* and *certifiés* teachers, semi-qualified teachers (those who hold three certificates but not a full *licence*), general instructors, teachers of Arabic, and *oustades* (who also teach Arabic). Teachers in secondary schools are specialists in a particular subject. A literature teacher is as a rule qualified only to teach literature, a mathematics teacher teaches only mathematics and so forth. Specialization is less rigid in the *collèges du 1er cycle*, where the teaching is mainly by non-specialists. The number of teaching hours required from teachers of arts and science subjects is as follows: *professeurs agrégés*, 15; *professeurs certifiés* and *licenciés*, 16; teachers of Arabic and *oustades*, 16; semi-qualified teachers, 18; non-specialist supply teachers for secondary classes, 18; non-specialist teachers in *collèges du 1er cycle*, 20. Additional remuneration is given for overtime. The number of teaching hours per week required from each teacher is so calculated as to leave him time to prepare his classes, correct exercises and keep abreast of literary and scientific developments.

A school board, made up partly of *ex officio* members and partly of elected members (all are members of the school staff) meets from time to time or as circumstances require, in order to deal with matters affecting the running of the school.

Recruitment of pupils. For all schools except *cours complémentaires* there is an entrance examination in the first secondary year. For the Moroccan-type schools these examinations test French and Arabic; for the French-type schools the examination is similar to the entrance examination for the sixth class of a secondary school in France. Pupils taking the modern sections are grouped according to age in the first secondary year and subsequently according to their standard of achievement, in order to make the classes as homogeneous as possible.

Curricula. Subjects taught in Arabic in the Moroccan-type schools include classical Arabic, ethics and civics, Islamic history and religious instruction (Koran and *hadith*). Subjects taught in French or Spanish include French, history and geography, mathematics and physical and natural sciences. The modern languages studied in these schools are English, Spanish or French; finally, the curriculum includes a number of subsidiary subjects—drawing, music and physical education.

In the former northern zone, teaching is also bilingual but greater stress is laid on Arabic. In the first cycle, all subjects are taught in Arabic; the second cycle is at present bilingual (Arabic/Spanish) with French as a compulsory modern language.

Since 1 October 1958 the number of teaching hours per week for the various subjects in the first and second years of Moroccan secondary education has been fixed as follows: Arabic 10; French or Spanish 6 (including 1 hour's supervised study); mathematics 6 (including 1 hour's supervised study); natural sciences 2; history $2\frac{1}{2}$; geography $1\frac{1}{2}$; physical education 2; total 30 hours.

The French schools have the same curricula and timetables as secondary schools in France, with the addition of 3 hours per week classical Arabic.

Achievement testing. Educational attainment is tested by means of oral and written tests and by end-of-term examinations; the latter are often replaced by less formal written tests. The results are entered as averages in the pupil's record book and in the end-of-term report sent to the parents. Pupils are placed for each separate test, for their general performance (all subjects) each term and, lastly, for the whole school year (*classement général*).

A staff meeting is held each term, when the teachers discuss each pupil in turn and state their opinion of his work and abilities. These assessments find concrete expression in a system of rewards (entry on a scroll of honour, encouragement, congratulations) and punishments (exclusion from the scroll, warning, censure, suspension).

At the end of the school year the teachers' council decides which pupils shall be promoted. Promotion is usually

automatic for those who have reached the average standard in all subjects. Pupils who have not reached the average standard are promoted only after passing an examination in certain subjects or a general examination. Those whose work has not been satisfactory must stay in the same class for another year or are expelled as unsatisfactory after being examined by the director of studies (*orienteur*).

A disciplinary board meets when necessary to deal with and punish cases of serious misdemeanour, and can finally expel a pupil provided the head of the Secondary Education Division agrees.

Vocational and technical schools

The main types of these schools have already been mentioned: apprenticeship schools, and the two types of vocational secondary schools (*collèges techniques* and *école nationale professionnelle*). The vocational secondary schools prepare students for the technical *baccalauréat* and for the various teaching certificates in industry and commerce (primary).

The Lycée Moulay Slimane at Fez started a course in preparation for the *baccalauréat* in economics in 1959.

In schools where there are French-type sections the same curricula are followed as in the *collèges techniques* in France. Moroccan sections have been instituted, which will follow special curricula.

Agricultural secondary education comes under the Ministry of Agriculture (a section preparing students for the École Nationale d'Agriculture has been opened at the Kénitra Lycée).

Education in domestic studies or in preparation for women's careers is given in the *collèges techniques*, as is commercial and industrial education. Only the building schools (*écoles du bâtiment*), which are in fact apprenticeship schools, are completely specialized. The other schools include several sections (industrial, commercial, women's).

A school was opened in October 1958 which in a 2-year course prepares students for the School of Engineering (of the type of the École d'Ingénieurs in Strasbourg). The latter will receive its first students on 1 October 1960 and in 3 years will train engineers for work in planning or operational offices.

Finally, it may be of interest to give details of two pilot schools: the École Industrielle (for boys) and the Collège Mers Sultan (for girls) both at Casablanca.

The École Industrielle includes: a section of the *école nationale professionnelle* type, which prepares students for the *diplôme d'élève breveté d'école nationale professionnelle;* classes which prepare students for the engineering schools at Aix, Strasbourg and Clichy (France); a technical section preparing students for the technical *baccalauréat;* an educational theory and practice section for training teachers of handwork; a Public Works section, preparing pupils for the examination for *adjoints de travaux publics* and for the entrance examination to the École des Travaux Publics at Cachan, France; a laboratory technician section for which there is a choice between chemistry and biology; an industrial section preparing students for the industrial certificate (*brevet d'enseignement industriel*); and a section preparing students for the technical teacher's proficiency certificate (specialized instructors).

The Collège Mers Sultan (girls) at Casablanca includes an educational theory and practice section for training handwork teachers; a section preparing students for positions as instructors in domestic economy; an applied arts section, which offers specially gifted pupils an opportunity of entering either the Collège de la rue du petit Thouars or the Collège Elisa Lemonnier; a commercial section (commercial teacher's certificate, part II); and an industrial section (industrial teacher's certificate).

Out-of-class activities

'Boarders' councils' act as intermediaries between the school authorities and the children. They are made up of delegates elected by their schoolfellows.

School clubs for educational, cultural or sports purposes are run by the children themselves under the guidance of the teachers. Some of these clubs assist in the running of the school. They include a committee of pupils elected by their schoolfellows, in charge of the management, running and discipline of the clubs, and of individuals running a wide variety of special activity groups (film clubs, reading circles, photographic, correspondence and inter-school exchange groups, drama, painting and drawing groups and so forth).

Most schools organize educational outings, lectures and art appreciation sessions. In addition, schoolchildren can receive free or reduced-price tickets for various cultural events (lectures, plays, and so forth).

The Physical Education Service organizes school sports events on holidays (inter-school football, basket-ball, volley-ball and other matches).

In some population centres there are cultural and recreational clubs for young people, run by the Youth Activities and Sports Service, which admit secondary school children.

TRENDS AND PROBLEMS

Technical education. Technical education is flourishing and 6,525 children are at present receiving secondary education of this type. The current problem is to develop to the full and get the maximum use out of the facilities that already exist and to establish new schools to meet the country's growing needs. When the 5-year school building plan is put into operation the situation will become clearer, and it will be possible to lay down precise objectives. The first of these will be a plan for primary education such as to produce a plentiful supply of good students for technical education; other objectives will be the provision of one year's secondary education for all children, and greater emphasis on direction finding, so as to sort out those children who will be directed towards a general education and those who will be advised to choose technical education.

It is already possible to distinguish certain main trends.

The provision of school facilities in the northern zone has been speeded up by the opening of more apprenticeship schools and of technical secondary schools (*collèges*) at Tetouan and Alhucemas.

Attention is being paid to the necessity of constantly

adapting technical education to the country's new needs. With this in view the number of commercial sections is being steadily increased, so as to produce skilled staff for the state and private sectors of the economy; an engineering school has been established, and it is planned to open a technical teacher training school.

More 'practical sections' (*sections pratiques*) are being started and their quality improved. These include a growing number of 2-year practical courses for Moroccan girls, including those in rural districts, who have completed a primary education. The courses provide a further general education while at the same time preparing the girls directly for family and social life. Similarly, practical courses in agriculture and rural crafts give boys in the rural areas an opportunity to pursue their trade without being uprooted from their environment.

Lastly, an increasing number of Moroccan (as distinct from French) vocational courses in industry and commerce is being provided. It has been found necessary to establish courses in line with the primary and secondary training which the non-French children receive before admission to technical education. These courses, which prepare pupils for the technical *baccalauréat*, the industrial certificate (*brevet d'enseignement industriel*) and the Moroccan commercial certificate (*brevet d'enseignement commercial marocain*) will follow time-tables and curricula of their own, so that the necessary technical standards may be maintained while at the same time a type of general education is provided which accords with the spirit of Moroccan education as a whole.

General education. The rapid growth of secondary education (54 schools with 32,079 pupils) has made decentralization a necessity, and in 1959 *collèges du 1er cycle* were set up in the medium-sized towns. Moreover, those secondary schools which already existed were expanded, and a number of boarding schools were opened. The opening of the new girls' secondary school at Meknès is one of many examples showing what is being done to cope with the increased intake of primary school leavers.

Although the provision and equipment of new school buildings is undoubtedly an urgent problem, the most important task is to work out a basic philosophy of Moroccan education. This is what the Ministry of Education is now trying to do, taking as its three guiding principles a uniform educational system, 'Moroccanization', 'Arabization'.

The existence of three types of state education (national, French, Islamic) has made the problem of providing school and university education so complicated that it has become imperative to establish a uniform system. The ultimate aim must be to give all citizens a common outlook so that there is no longer any difference between the Karawiyīn 'traditionalist' and the 'modern' student.

Curricula must be 'Moroccanized' so as to allow Moroccans to become conscious of their own individuality, based on a balance and harmony between two complementary worlds, East and West. The establishment of uniform curricula of a Moroccan type depends on the availability of textbooks which reflect these two aims of Moroccan education. The production of such textbooks is the subject of one of the plans of the Educational Research Centre. The Ministry of Education also aims to produce national textbooks which can be bought by all children whatever their social status.

Lastly, 'Arabization' is essential in a country whose religion, everyday language and traditions are based on the Arabic tongue. Nevertheless, while it is natural that Arabic should be the cultural vehicle for Morocco, Arabization must not lose sight of facts. French will be regarded as a second language, and will therefore be taught, starting at secondary level, as a tool for studying foreign cultures. Arabization, of course, is bound up with the staffing question. The problem is to recruit and train Moroccan teachers, and for this purpose it seems essential that the status of the teaching profession should be revised. The Institute of Secondary Education (Institut Pédagogique de l'Enseignement Secondaire) has been founded to train Moroccans for a teaching career; the future of the country depends on young people who will thus be equipped with a specifically Moroccan training.

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STATISTICS

Population (mid-year 1958 estimate): 10,330,000.
Area: 171,305 square miles; 443,680 square kilometres.
Population density: 60 per square mile; 23 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment[1] (not including 12,584 pupils in vocational schools at the primary level, an unknown number of students of higher Islamic studies, and some 2,000 persons in adult education classes) was about 660,000 pupils, representing some 6.5 per cent of the total population. Over 92 per cent of these pupils were in various types of primary schools. The proportion of girl pupils was 31 per cent in primary school, 29 per cent in general secondary schools and 36 per cent in vocational schools. Between 1953 and 1957, the primary school enrolment more than doubled while the secondary school enrolment increased by 45 per cent. (See Table 1.)

Enrolment trends in secondary education, 1930–57. In 1957, general secondary school enrolment was 9 times as high

1. It is not stated, though probable, that the statistics presented in the accompanying tables refer only to the southern zone (former French zone). For the northern (former Spanish) zone, data presented in the previous edition give a total enrolment, in 1953/54, of over 102,000 pupils at all levels of education.

as in 1930 and vocational school enrolment was 3 times as high as in 1945. The enrolment ratio has steadily gone up, but for the period 1955–57 the average total enrolment still represented only a little more than 5 per cent of the estimated population 15–19 years old. (See Table 2.)

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public						
	Total	**1957/58**	...	...	...	...	...
	"	1956/57	...	...	...	9 277	4 047
	"	1955/56	...	...	...	10 507	4 752
	"	1954/55	[1]255	...	...	9 052	4 345
	"	1953/54	[1]244	...	...	8 570	4 125
Primary[2]	Muslim primary schools, public	1957/58	...	...	...	481 368	132 726
	European primary schools, public	1957/58	...	...	...	26 042	12 651
	Franco-Jewish primary schools, public	1957/58	...	...	...	2 357	1 303
	Jewish schools, "Alliance Israélite Universelle", public	1957/58	...	...	...	26 326	13 411
	Muslim primary schools, private	1957/58	...	...	...	72 350	30 220
	Total	**1957/58**	...	...	...	**608 443**	**190 311**
	"	1956/57	[3]2 132	[3]11 291	[3]2 963	438 918	149 516
	" [3]	1955/56	1 974	10 701	2 828	306 213	95 758
	" [3]	1954/55	1 849	9 966	2 660	299 299	92 212
	" [3]	1953/54	1 674	9 316	2 869	271 294	82 016
Secondary *General*	Muslim secondary schools, public	1957/58	...	...	...	23 204	3 498
	European secondary schools, public	1957/58	...	...	...	8 522	5 553
	Total	**1957/58**	...	...	...	**31 726**	**9 051**
	"	1956/57	29	1 243	...	30 065	9 291
	"	1955/56	26	1 147	...	23 940	9 075
	"	1954/55	25	1 119	...	22 514	8 725
	"	1953/54	24	1 093	...	21 288	...
Vocationa	Technical schools, public						
	Total	**1957/58**	**24**	...	...	**6 059**	**2 168**
	"	1956/57	20	545	...	7 619	2 880
	"	1955/56	19	478	...	7 318	2 763
	"	1954/55	18	421	...	6 156	2 181
	"	1953/54	17	381	...	5 082	1 704
Teacher training[4]	Teacher training schools, public						
	Total	**1957/58**	...	...	...	...	...
	"	1956/57	2	...	...	43	...
	"	1955/56	2	...	...	109	...
	"	1954/55	2	6	3	143	49
	"	1953/54	2	...	...	147	...
Higher[5] *General and technical*	Higher modern education						
	Total	**1957/58**	...	...	...	**1 883**	...
	"	1956/57	...	...	...	1 723	...
	"	1955/56	...	...	...	...	...
	"	1954/55	...	...	...	1 788	...
	"	1953/54	...	...	...	1 530	...
Adult	Adult education						
	Total	**1957/58**	**25**	**41**	**17**	**1 980**	**585**
	"	1956/57	8	14	6	498	146

1. Number of classes.
2. Not including vocational schools.
3. Public schools only.
4. Not including Muslim teacher training.
5. Not including students of higher Islamic studies.

2. TRENDS IN GENERAL AND VOCATIONAL SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education				Average total enrollment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational				
	Total	Per cent female	Total	Per cent female			
1930	3 632	...	...	...	[1]4	...	...
1931	3 837	...	...	...			
1932	3 975	...	...	...			
1933	4 133	...	...	...			
1934	4 193	...	...	...			
1935	4 331	...	...	...	[1]5	...	...
1936	4 447	37	...	...			
1937	5 163	38	...	...			
1938	5 817	38	...	...			
1939	6 370	36	...	...			
1940	6 837	37	...	...	[1]8	547	[1]*1.5*
1941	6 859	37	...	...			
1942	6 799	37	...	...			
1943	9 427	41	...	...			
1944	10 347	43	...	...			
1945	10 364	43	1 912	32	18	589	*3.1*
1946	10 442	41	2 006	35			
1947	17 511	24	2 600	...			
1948	18 610	23	2 783	...			
1949	19 511	22	3 106	...			
1950	14 391	30	3 500	33	24	639	*3.8*
1951	17 350	28	3 711	36			
1952	19 268	38	4 375	35			
1953	21 288	...	5 082	34			
1954	22 514	398	6 156	35			
1955	23 940	38	7 318	38	36	682	*5.3*
1956	30 065	31	7 619	38			
1957	31 726	29	6 059	36			

1. General secondary education only.

3. EDUCATIONAL FINANCE, 1957 (in thousand francs)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts	**17 731 565**
Central Government	17 717 785
Tuition fees	1 600
Other receipts from parents (for holiday camps)	2 180
Repayments	10 000

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent
Total recurring expenditure		**[2]17 731 565**	**100.0**
Administration		473 565	2.7
Instruction		16 038 000	90.4
Primary education	9 070 000		51.2
Secondary education	3 742 000		21.1
General	1 720 000		9.7
Vocational	1 840 000		10.4
Teacher training	182 000		1.0
Higher education	2 040 000		11.5
Adult education	326 000		1.8
Other education	860 000		4.8
For private schools	250 000		1.4
For Jewish schools	610 000		3.4
Other recurring expenditure (school meals, scholarships, subsidies to private schools)		1 220 000	6.9

1. Official exchange rate (1957): 100 francs = 0.24 U.S. dollar (approx.)

2. Of this sum, 15,718 million francs were spent on salaries to teachers, etc.

A modern school system is now developing in the Sultanate. There are two good primary schools for boys, catering for about 300 pupils each, in Muscat and Salalah, and a third has just been opened in Muttrah. In the villages throughout the country there are numerous little mullah's schools which teach the Koran, writing and arithmetic.

In Gwandur, Muttrah and Muscat, the Ismaïlis, the Khojas and Hindus have their own day schools for the children of their communities. The standard is from kindergarten to something less than matriculation. English is taught in the higher classes.

[*Text prepared by the Unesco Secretariat in January 1960.*]

STATISTICS

Population (mid-year 1958 estimate): 550,000.
Area: 82,000 square miles; 212,380 square kilometres.
Population density: 7 per square mile; 3 per square kilometre.

NEPAL

Nepal consists geographically of three distinct zones. In the south and bordering on India is the Terai, a strip of land cultivated in parts, the remainder consisting of dense forests. In the centre is the Nepal Valley which, although containing less than a tenth of the population, is of overwhelming importance in the economic life of the country. The third zone is the great mountainous tract stretching northward to Tibet, a region of hills and valleys with innumerable small villages. The population is a medley of different races, with three main languages and many dialects. These languages are Nepali, Newari and Hindi—Nepali being much the most important and the official language of the country.

THE EDUCATIONAL SYSTEM

Apart from the traditional Buddhist institutions, three types of school exist side by side in Nepal: the so-called English schools, originally patterned on the similar schools in India; the 'basic' schools where the curriculum follows the Gandhian pattern; and the *pathshalas* or Sanskrit schools which are not rigidly graded and in which much time is devoted to memorizing Sanskrit religious writings. Nepali is compulsory at all levels, but the mother tongue is the medium of instruction in the lower grades. English is introduced in the third grade of the 'English' schools. Most primary schools are village schools serving a local community. The full primary course in graded schools of English or basic type lasts 5 years. High schools, which generally have upper primary grades attached to them, are found in the towns and tend to serve a large area or region, but they do not represent a large proportion of primary level enrolments. For the present there is no question of universal compulsory education; a national plan drawn up in 1955 foresees the achievement of this goal in 1985.

Administration

The Ministry of Education is responsible to the Cabinet, the Prime Minister and the King, who jointly exercise both the legislative and executive functions of government. Educational policies, rules, regulations and orders, as promulgated, are published in the *Nepal Gazette*, the official organ of the Government, and become part of the School Code. Officials of the Ministry are members of such groups as the University Commission, the Textbook Commission and others, and the Ministry from time to time consults educational advisers under the foreign aid programme.

From the point of view of administration, three categories of schools may be distinguished: government schools, supported and administered entirely by the Central Government; government-aided schools which meet certain standards and receive varying amounts of financial aid; and independent schools. The control exercised by the Central Government depends on the amount of financial aid extended. Thus, the Ministry has only nominal control over unaided private schools, but as most of them desire

government grants they conform to established government patterns. The Ministry of Education, through the Director of Public Instruction, is directly responsible for all government schools and colleges. Government schools are headed by a headmaster, and colleges by a principal; private and government-aided schools are controlled by managing committees. Supervision, through inspectors and sub-inspectors, under the Director of Public Instruction, is compulsory for government and government-aided schools but is optional for private schools, who usually invite inspection when applying for a government grant. Curriculum matters in both primary and secondary schools come under an examinations board responsible to the Director of Public Instruction. There are also two Roman Catholic missionary schools which prepare for the Cambridge Oversea Certificate examination, and three 'basic education' schools which follow the curriculum prescribed by the Gandhi Memorial Trust Fund of India.

SECONDARY EDUCATION

There was no public provision for education in Nepal before 1877. In that year a school called the Durbar High School was established but its purpose was to educate the élite. In 1918 an intermediate college was established to bridge the gap between secondary and higher education and was affiliated to the Calcutta University.

In 1934 Nepali became the medium of instruction as well as of examination for the school leaving certificate (upper secondary) conducted by the Government School Leaving Certificate Board.

After the advent of democracy in 1951, the number of high schools rose rapidly to nearly a hundred and the total is steadily increasing. Some are privately endowed and managed while others receive aid from the Government. A few are boarding schools, but the standards of accommodation and teaching provided by these institutions vary greatly.

In 1954–55 the Ministry of Education appointed a National Education Planning Commission which drew up an educational plan for the succeeding period of 25 years. They recommended the development of multi-purpose high schools serving every district in Nepal and providing 5 years of free secondary education for as many boys and girls as possible. A new curriculum was prepared and tried out in 1958 in the Pokhara multi-purpose high school. It changed the old 'English' type of curriculum into one catering for a much wider range of abilities and interests: students take five basic subjects—social studies, science, Nepali, mathematics, and physical education—and two other vocational subjects, e.g., preparatory training for teaching, medicine, nursing, law, engineering, politics; commercial training for future secretaries, accountants, clerks and government office workers; agricultural courses covering all aspects of agriculture and forestry; industrial occupations; and home making. These various courses can lead to higher education.

Since 1956 the College of Education has offered a 4-year course, and, in addition, a 1-year course for secondary school graduates leading to the degree of Bachelor of Education. Both courses include the training needed for teaching in the multi-purpose high schools. At present there are 170 prospective secondary teachers enrolled in these courses.

TRENDS AND PROBLEMS

The main emphasis in secondary education is on the extension of the multi-purpose high schools. With their diversified courses these schools are intended to develop the skills and leadership so greatly needed for the social and economic improvement of the country. The satisfactory development of these high schools and of a practical system of education adapted to the needs of the students and the community will depend in the first place on the effective training of secondary school teachers.

[*Text prepared by the Unesco Secretariat from official sources, in May 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 8,910,000.
Area: 54,362 square miles; 140,798 square kilometres.
Population density: 164 per square mile; 63 per square kilometre.

In 1958/59 there were approximately 110,000 primary school pupils with 4,500 teachers; the average pupil-teacher ratio was thus about 24 and primary school enrolment represented about 1 per cent of the total population.

Source. Nepal: Ministry of Foreign Affairs, reply to Unesco questionnaire on the Provision of Universal Compulsory and Free Primary Education in Asian countries (1960).

THE EDUCATIONAL SYSTEM

The Netherlands educational system as a whole, and hence continued education,[1] has its juridical basis in Article 192 (at present 208) of the 1917 Constitution.

This article was the outcome, incidentally, of a political conflict which lasted for many years. The Netherlands educational system can only be properly understood if account is taken of the predominant feature of that conflict and of the national character—love of freedom.

Thus the passage in the Constitution to the effect that education is free relates not only to freedom as far as the provision of education is concerned but also to instruction itself, in the sense that parents can obtain the type of education for their children that they wish. The Government has translated this freedom into fact by providing private educational establishments with the necessary means to that end.

At the same time, the Constitution defines the state's own task by stressing that education is a constant concern of the Government. This stipulation, as well as the Government's obligation to present an annual report on education to the States-General, applies not only to public education in all forms but also to private education.

As far as public general elementary education is concerned, the Constitution specifies that it shall be provided by the authorities in each municipality in an adequate number of schools. For the other sectors of public education, the only other stipulation—which also applies to private education—is that the efficiency standards of education financed wholly or partly from public funds shall be regulated by law, with due regard to religious convictions. As far as private education is concerned, the Constitution lays down the general principle that education shall be free, except for supervision by the Government and, in so far as general education, primary and secondary, is concerned, except for examination of the ability and morality of teachers, the whole to be regulated by law.

Of very far-reaching significance is the passage in the article where it states that the cost of private general primary education fulfilling conditions to be imposed by law shall be defrayed from public funds in the same measure as public education. The conditions must guarantee the same standards as those stipulated for public education but must particularly respect the freedom of private education with regard to the choice of means of instruction and the appointment of teachers.

As far as private secondary education and preparatory university education is concerned, the Constitution says only that the conditions under which private education shall be granted contributions from public funds shall be laid down by law.

A typical feature of Netherlands education therefore is that the establishment or maintenance of private schools is encouraged by substantial subsidies, in many cases the whole of the personnel and material operational costs being defrayed. The fact that the conditions governing the teaching programme, school buildings and intellectual and moral fitness of the teaching staff are identical for public and private education ensures uniformity of standards.

Factors affecting the provision of education

Social factors. The Netherlands is a very densely populated country. The population figure has doubled since 1900 and this is one of the reasons for the increase in the number of pupils in every branch of education. Another is the growing demand for further education, due among other things to greater prosperity, increased subsidization, the lengthening of the period of compulsory education and the democratization of the educational system. The Netherlands is passing through a stage of rapid social and economic structural change which makes it essential for all intellectual forces to be used to the best advantage.

A shift is clearly perceptible in economic activities ranging from the agricultural and industrial sectors to the service sector. These changes, which are the concomitant of mechanization and automation, call for a rise in the level of technical knowledge and understanding all along the line. The shifts resulting from economic progress have already led to a marked expansion in post-primary education, the scope of which has nearly doubled during the past 20 years. The aim is to extend it in one form or another to all children within the near future.

Religious factors. To obtain a clear understanding of the specific legislation and the main principles of the reorganization plans, account must be taken of the religious situation in addition to the social factors. The bitter struggle for freedom of education, culminating in the equal status of public and private education in respect of financing, makes it easy to understand why many parents have made use of their freedom to choose a school for their children in harmony with their own convictions. The result is that about 72 per cent of the total number of primary schools are private (28 per cent Protestant, 42 per cent

1. Secondary education in the broad sense, in which it is used in the sub-title of the present *World Survey of Education*, meaning all types of post-primary education, is referred to in Dutch as *voortgezet onderwijs*, or continued education. This covers: (a) *voorbereidend hoger onderwijs* (VHO) or preparatory university education provided in the grammar schools (*gymnasien*); (b) *middelbaar onderwijs* (MO) or secondary education, referring specifically to the education provided by the modern secondary schools (*hogere burgerscholen*), lyceums (*lycea*), girls' secondary schools (*middelbare scholen voor meisjes*), and commercial schools (*handelscholen*); (c) *uitgebreid lager onderwijs* (ULO) or advanced primary education; (d) *voortgezet gewoon lager onderwijs* (VGLO) or complementary primary education; (e) teacher training for primary and pre-primary teachers; (f) vocational education below university level. Administratively types (a) and (b) are usually grouped as *voorbereidend hoger en middelbaar onderwijs* (VHMO).

Catholic and 2 per cent other groups) while about two-thirds of the schools providing continued primary education (VGLO schools) or advanced primary education (ULO schools) are private.

As to schools providing vocational training, over 90 per cent are private, while the corresponding percentage for preparatory university and secondary education (VHMO schools) is well over 60 per cent.

The public schools are open to all children without distinction as regards religious belief; individual religious convictions are respected and the ministers of the various churches are given the opportunity of conducting services for pupils whose parents so desire.

Role of public authorities

The role of the public authorities is clearly defined in the Constitution, which expressly recognizes the right of parents to choose the type of education they want for their children. Both the terms of legislation and the broad lines of the possibilities offered, as indicated for example in the Second Education Note to the States-General, emphasize clearly that such freedom of choice is a paramount consideration in view of the fact that education should form an integral part of upbringing, and that the upbringing of children is in the last resort the right and duty of their parents. This premise entails the imposition, in the general interest, of severe restrictions on official intervention.

The second principle is the positive task of the authorities to indicate the broad lines along which education should be developed, thus ensuring the necessary basic correlation between all the educational facilities provided, and the cohesion of the entire structure of education.

As the provision of education cannot be dissociated from many other aspects of social life, educational policy in its broad lines is regarded as a matter of general importance to the country, and efforts are made to maintain permanent contact with various departments. The Bill regulating continued education, based on the ideas expressed in the Second Education Note, proceeds explicitly from the two principles set out above and from the provisions of the Constitution.

Role of private agencies

The role of private agencies also reflects the government policy of freedom of education, whereby the guarantees for sound development are primarily sought from those initially responsible for it. In consequence, the Government has repeatedly stated its view that the prerequisite for sound development is increasingly intensive activity on the part of educational and school organizations, parents and education experts, until they are ultimately capable of effectively supervising and representing the whole of the field of education entrusted to them. A large measure of freedom and authority is delegated to school management boards, whether controlled by local authorities or by private associations. The Ministry, while exercising close supervision over the fulfilment of subsidy requirements, refrains from direct intervention. Private schools appoint their own teaching staff, the Government having no voice except with regard to the requirements of intellectual and moral fitness referred to above. Furthermore, school authorities are entirely free in the choice of educational equipment; and finally, if, in the opinion of the school inspector, the curriculum at any primary school (including VGLO and ULO schools) falls short of requirements, the case is judged not by the Ministry but by the Educational Council, a body fully independent of the Government (see page 850).

THE DEVELOPMENT OF SECONDARY EDUCATION

Before a clear picture of the origin and history of the various types of school and of legislation dealing with continued education can be obtained, a few further observations on the evolution of Dutch educational legislation in general will be necessary.

Educational freedom first came into existence after a hard-fought intellectual struggle which influenced political life over a long period and was reflected in legislation. In the early nineteenth century the Government, influenced by the rationalism predominant at the time, viewed private schools with scant approval, for they were considered sectarian. In the second half of the century the spread of liberal ideas brought about a changed attitude towards the needs of those who could find no satisfaction in the national unitary school. The Constitution which followed the triumph of liberalism in 1848 contained the principle of educational freedom, and the legislation governing primary education was to a certain extent brought into harmony with it in 1857. However, many amendments were still necessary before further consequences of the accepted principle were drawn in the 1917 revision of the Constitution.

Advanced primary education (ULO), originally owed its growth to private initiative, and though already referred to in the 1857 Act, no subsequent mention appeared in the 1878 Act. In spite of the unsatisfactory legal position, however, this type of education gradually expanded and, between 1902 and 1914, private Protestant, undenominational and Catholic associations were established to provide it.

In 1907 the first examinations were held, after which a strong tendency developed towards standardization of programmes and curricula. Economic progress led to a heavy demand for manpower with a modicum of education. Improved subsidies led to the further expansion of this type of school, more particularly after it had reached the stage of full development, through its inclusion among the schools participating in the system of automatic equalization introduced under the 1920 Primary Education Act.

Complementary primary education (VGLO) came into being as the lowest step in continuation education after the second world war. VGLO schools are designed for children who will begin work as soon as they have completed their compulsory education.

The modern secondary school (*hogere burgerschool*) (HBS) was, originally, also intended as a final stage in education. A few secondary schools were indeed in existence at the beginning of the nineteenth century, alongside the Latin schools and *gymnasia*, but the period of greatest expansion came immediately after 1863, when the

Secondary Education Act (*Middelbaar onderwijswet*) established the HBS, whose 5-year course was designed to provide a general education as well as a foundation for specific purposes but was not intended as a preparation for university study. In fact, however, it was used for that purpose, and under the Limburg proposal (Act of 7 November 1917), holders of the final HBS diploma who had completed a 5-year section B course were allowed to sit for examinations in the faculties of medicine, mathematics and physics. Pupils completing their course in the literary and economics section—the HBS-A, which was regulated by law in 1937 (Law of 22 April 1937)—receive a diploma which admits them to another limited group of fields of study.

The *gymnasium* was granted legal recognition as a preparatory school for higher education under the Higher Education Act of 1876, which, like the Secondary Education Act of 1863 already referred to, is still in force, though extensively amended. Since 1900, private *gymnasia* have had the right to conduct university entrance examinations (the *jus promovendi*), and have been receiving government subsidies since 1905. The *lyceum*, which may be regarded as a combination of the *gymnasium* and HBS, has not yet obtained legal recognition as an independent type of school and is therefore governed, as far as the combined lower forms are concerned, by a variety of legal provisions.

The girls' secondary schools (*middelbare scholen voor meisjes*) were regulated by the law of 2 April 1948.

Commercial schools, notwithstanding the expansion of Netherlands trade in the nineteenth century, had difficulty in obtaining their own status and form. The Secondary Education Act of 1853 was designed to meet the demand for a type of school closely adopted to social requirements and bearing in mind the importance of trade. In practice, the HBS developed rather in the direction of preparation for university study. The situation was improved by the introduction of the HBS-A course which, like the commercial day and evening schools, is governed by the Secondary Education Act.

Primary school teacher training was regulated in 1952 by separate legislation (law of 23 June 1952, and decision of 9 December 1953 regarding the implementation of certain articles in the Training Colleges Act). It had previously been governed by the Primary Education Act.

Technical schools were first established in the middle of the nineteenth century as a result of private initiative, and were first regulated as such by law under the Technical Education Act of 4 October 1919. This law also concerns home economics schools for girls.

As regards agricultural and horticultural schools, the oldest institutions date from well back in the last century, but it is only in the past 50 years that this branch has shown a marked degree of expansion, thanks to private initiative. The schools come under the control of the Minister for Agriculture, and apart from certain provisions in the Secondary Education Act have not yet been regulated by law. They are, however, being regulated in the Bill on Continued Education now in the course of preparation.

The co-ordination of the various laws was already considered as urgent at the beginning of this century. In 1903 a Co-ordination Committee was established for the purpose of drafting a new form of organizational structure for education, but while the substance of the commission's report was made use of, no coherent plan for the whole was established.

Attempts made in 1934 and in 1946 had just as little success. In 1951 a Note dealing with educational facilities was issued by the then Minister, Mr. Rutten, setting out guiding principles for the gradual reorganization of education from the instructional standpoint. The Second Education Note, issued in 1955 by Mr. Cals, the Minister, and Mr. de Waal, the Secretary of State, took up and developed the first Note by dealing with the legislative problems also.

The principles set out in the second Note were developed, *inter alia*, in the Bill regulating all post-primary education (*voortgezet onderwijs*) (29 October 1958), after many experts and organizations had been given an opportunity of expressing their views on the matter.

Administration

The foundation of VGLO and ULO schools is regulated by the Primary Education Act and is to some extent automatic. Provided certain conditions are fulfilled, a private school of either type can be founded without any prior need for its inclusion within the framework of a school planning project. However, the estimated number of pupils must be above a certain minimum. This minimum is not high for ULO schools, being fixed at 61 in towns with more than 100,000 inhabitants and 24 in smaller communities. For VGLO schools the totals are fixed at 91 and 31 respectively. In the case of schools which can be expected to fulfil these conditions satisfactorily—this is assessed on the basis of parents' signatures—the association wishing to establish the school can, on payment of a surety, automatically obtain the money required for its establishment from the local authority, this surety is repaid after 20 years if the number of pupils appears to have remained consistently at the level fixed. This partly explains why the number of ULO schools in particular has risen very quickly. In the case of *gymnasia* or HB schools, on the other hand, the Minister decides whether a school applying for a subsidy is necessary or not; and only when he has decided in favour and the relevant budget item has been approved by Parliament can the subsidy be paid, while before a technical or home economics school can be established, a recommendation is required from the local authority specifying that the establishment of a school of this type is necessary.

Although the Ministry in no way wishes to act as a central body administering and controlling educational affairs at will, a certain degree of planning for education at secondary level appears essential and hence the Bill on secondary education also makes provision for specific planning procedure, involving the annual establishment by the Minister of a list of schools he wishes to be considered for the receipt of financial aid during the next three years, a proportion of those listed to be included in the budget estimates each year. In principle, the Minister's list will be established on the basis of partial lists received from school and local authorities throughout the country, to which

the Minister will add the state schools considered necessary. For most of the school types mentioned, the Bill lays down standards fixing the minimum pupil strength of schools, and if it can be proved, on the basis of statistical data, that the size of the schools to be established may reasonably be expected to comply with these standards, the Minister is bound to include them in his list. In addition, he may include other schools, even though not complying with the standards, if in his judgement the need for them exists. The system outlined must therefore be regarded as a combination of planning and the objective application of minimum enrolment standards (automatism).

Advisory boards. The Educational Council, whose independence of the Ministry has already been stressed, is established by law and its members appointed by the Crown. Its function is to advise the Minister of Education, Arts and Sciences, either at his request or on its own initiative, on general problems relating to education (curricula, proposed legislation, reorganization plans, etc.). The Council has four departments—for higher education, pre-university and secondary (*middelbaar*) education, general primary education (including also continued primary education, teacher training schools and pre-primary schools), and vocational training. The various laws require the Minister to seek the Educational Council's advice concerning the organization of schools of the various types and in most cases it is followed. Moreover, he usually seeks the advice of government inspectors as well as of various organizations active in the educational sphere. Particular mention should be made of the Pedagogical Centres, of which four now exist (1 Roman Catholic, 1 Protestant and 2 general).

Suggested curricula are generally prepared by the government inspectors. The opinion and advice of the Educational Council, and possibly of one or more of the above-mentioned advisory bodies, is then obtained, after which they are finally fixed by the Minister.

GLOSSARY

NOTE. Literal or conventional English translations of Dutch terms are placed before the definitions.

algemene landbouw- of tuinbouwschool (secondary agricultural or horticultural school): vocational secondary school for property administrators and managers; sometimes specialized on one subject (e.g. dairying) then known as *landbouwvakschool.*

avondnijverheidsschool (technical evening school): part-time vocational training school for boys.

bedrijfsschool (industrial school): vocational training school usually attached to a factory.

gewoon lager onderwijs (elementary education): primary school, often with attached continuation classes (*voortgezet*).

gymnasium (grammar school): general secondary school of academic type, with two streams, A (languages) and B (science).

handelsonderwijs (commercial training): vocational training schools of commerce of various kinds, including the *handelsdagschool* (day school), *handelsavondschool* (evening school) and *school voor winkelpersoneel* (school for shop assistants).

hogere burgerschool (modern secondary school): general secondary school with two streams, A (languages) and B (science).

huishoudschool: vocational training school of home economics.

klein-seminarium (junior seminary): general secondary school of academic type providing initial training for intending Roman Catholic priests.

kleuterschool (infant school): pre-primary school.

kunst-, kunstnijverheid- en bouwkunstonderricht (instruction in arts and crafts): vocational secondary school of fine arts and crafts.

kweekschool: teacher-training school for primary teachers.

lagere land- of tuinbouwschool (elementary agricultural or horticultural school): part-time vocational training school of agriculture or horticulture.

lagere technische dagschool (elementary technical day school): vocational training school.

middelbaar technisch onderwijs (intermediate technical education): vocational secondary school.

middelbare school voor meisjes (intermediate school for girls): general secondary school of non-academic type for girls.

opleiding voor nijverheidsonderwijs: training classes for intending teachers in vocational schools for boys (*jongens*) or girls (*meisjes*).

scholen voor buitengewoon onderwijs: special schools for physically and mentally defective children.

uitgebreid lager onderwijs u.l.o. of m.u.l.o. (advanced primary education): lower general secondary school.

uitgebreid lager nijverheidsonderwijs (advanced vocational training): vocational training school for boys or for girls (*voor meisjes*).

voortgezet gewoon lager onderwijs (complementary primary education): upper two years of eight-year primary school, with practical bias, sometimes a separate institution.

zee- en luchtvaartschool (navigation and naval and aircraft mechanics school): vocational training school.

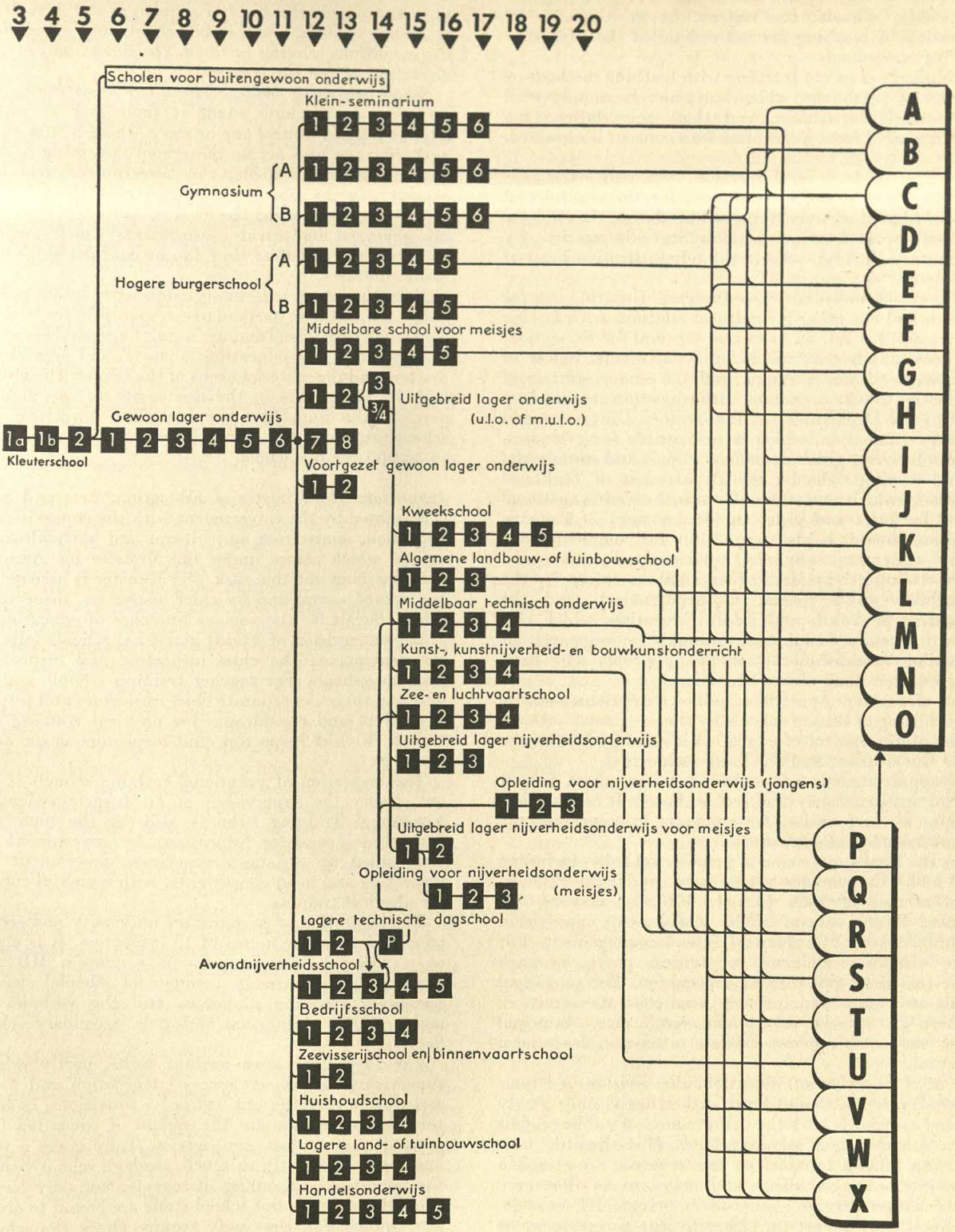
zeevisserijschool en binnenvaartschool (seafishery and inland navigation school): vocational training school.

DEGREE-GRANTING INSTITUTIONS OF HIGHER EDUCATION

A. Theology (Protestant).
B. Law.
C. Sociology.
D. Medicine.
E. Dental surgery.
F. Science.
G. Psychology and social geography.
H. Physical geography.
I. Literature.
J. Economics.
K. Political and social science.
L. Veterinary.
M. Engineering.
N. Agriculture.
O. Theology (Roman Catholic).

NON-DEGREE GRANTING INSTITUTIONS OF HIGHER EDUCATION

P. Senior seminary (Roman Catholic).
Q. Social work.
R. Teacher training for secondary education.
S. Notary.
T. Tax administration academy.
U. Academy of arts.
V. Military academy.
W. Actuary.
X. Training for foreign trade and diplomacy.


3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Scholen voor buitengewoon onderwijs
Klein-seminarium
1 2 3 4 5 6
Gymnasium
A
1 2 3 4 5 6
B
1 2 3 4 5 6
Hogere burgerschool
A
1 2 3 4 5
B
1 2 3 4 5
Middelbare school voor meisjes
1 2 3 4 5
1 2 3 3/4
Uitgebreid lager onderwijs
(u.l.o. of m.u.l.o.)
Gewoon lager onderwijs
1a 1b 2 1 2 3 4 5 6 7 8
Kleuterschool
Voortgezet gewoon lager onderwijs
1 2
Kweekschool
1 2 3 4 5
Algemene landbouw- of tuinbouwschool
1 2 3
Middelbaar technisch onderwijs
1 2 3 4
Kunst-, kunstnijverheid- en bouwkunstonderricht
1 2 3 4
Zee- en luchtvaartschool
1 2 3 4
Uitgebreid lager nijverheidsonderwijs
1 2 3
Opleiding voor nijverheidsonderwijs (jongens)
1 2 3
Uitgebreid lager nijverheidsonderwijs voor meisjes
1 2
Opleiding voor nijverheidsonderwijs
(meisjes)
1 2 3
Lagere technische dagschool
1 2 P
Avondnijverheidsschool
1 2 3 4 5
Bedrijfsschool
1 2 3 4
Zeevisserijschool en binnenvaartschool
1 2
Huishoudschool
1 2 3 4
Lagere land- of tuinbouwschool
1 2 3 4
Handelsonderwijs
1 2 3 4 5
A
B
C
D
E
F
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For public schools, the instructions relating to the organization of teaching are more detailed than for subsidized private schools.

The Ministry does not interfere with teaching methods or the choice of textbooks, which must merely comply with the prescribed curriculum, and these prescriptions too may be departed from if the Minister's consent is obtained.

Control. The Minister for Education, Arts and Sciences is responsible, within the Government, for the control and quality of education. In carrying out his duties, the Minister is assisted—apart from one or more State Secretaries—by the Secretary-General, who is the administrative head of the Ministry.

Under the Minister are two Directors-General, one for education and the other for cultural relations with foreign countries and for art, an Inspector-General for Education, three general advisers, heads of departments, chiefs of sub-departments and services, and the senior officials of the Ministry. Chiefly concerned with education at secondary level are: the Department of Preparatory University and Secondary Education, which is responsible for *gymnasia*, HB schools, *lycea*, girls' secondary schools and commercial day and evening schools; the Department of Technical Education, which controls all branches of vocational training for boys and girls; the Department of Primary Education, since it is also responsible for complementary primary education, advanced primary education and teacher training (welfare educational training is the responsibility of a special sub-department); and the Department of Youth and Adult Education, which also deals with secondary education through its sub-department for training establishments for young people who have completed their compulsory education.

Local authorities. Apart from minor exceptions, such as the subsidizing of certain schools by the provincial authorities, the public control of education is shared between the Central Government and the local authorities.

The apportionment of control between them is not based on any general system but is the result of historical development, and varies, for example, in respect of the different branches of education.

Thus the local supervision of primary schools—including VGLO and ULO schools—is entrusted, under the Primary Education Act of 1920 (Article 176), to mayors and aldermen. In the case of public schools, this supervision is combined with the duty of school management. For private schools, municipal supervision plays a much smaller role than government supervision. The municipal councils are competent to set up local control committees but these are of relatively minor significance. Municipal councils may also appoint officials to ensure closer local supervision.

For most branches of education, the division of labour between Government and local authorities is only partly regulated as regards both the maintenance of public schools and the subsidizing of private schools. Municipalities with more than 20,000 inhabitants are required to establish and maintain a *gymnasium* and may not in that case subsidize either private *gymnasia* or private HB schools. HB schools may be set up either by the Government or by the local authorities. Both the amount of State contributions towards the costs of municipal HB schools, girls' secondary schools, commercial schools and *gymnasia*, and the conditions relating to them, are almost entirely at the discretion of the Government.

School governing bodies. These are institutions or associations which have made it their task to establish, administer and control one or more schools. Thus the local authority can also act as the school governing body. For government HB schools, the Government acts in this capacity. In the case of public *gymnasia*, there is a board of trustees representing the local authority. Private schools are governed by private associations which must have corporate status before they can be considered for government subsidies.

Since the school is formally established by its governing body, the latter is particularly responsible for everything connected with school maintenance, the general organization of instruction and education, financial and administrative matters and the material needs of the school. The governing body is responsible in the last resort to the pupils and parents, the immediate responsibility devolving on the school principal, who is appointed by the governing body to administer the school.

Inspection. The Minister of Education, Arts and Sciences is delegated by the Government with the supervision of all education, apart from agricultural and horticultural education, which comes under the Minister for Agriculture.

In carrying out this task, the Minister is assisted by an Inspector-General and by chief inspectors, inspectors and other officials for the various branches of education.

The supervision of VGLO and ULO schools falls within the province of the chief inspectors and inspectors for primary schools. For teacher training schools and school building there are separate chief inspectors and inspectors. Inspectors and consultants for physical training are attached to chief inspectors and inspectors in an advisory capacity.

The inspection of vocational training schools is carried out, under the supervision of an Inspector-General for Vocational Training (who is also, at the moment, the Inspector-General for Education), by government inspectors, aided by assistant inspectors, government women inspectors and head consultants, with a special consultant for physical training.

The inspection of preparatory university and secondary education is in the hands of 15 inspectors. It is organized on a regional basis and covers *gymnasia*, HB schools, girls' secondary schools, commercial schools, courses for secondary teaching diplomas, and the various departments (HBS, *gymnasium* and girls' secondary school) of *licea*.

The inspectors have various tasks, partly related to supervising the observance of legislation and partly to assisting in carrying out legislative provisions. In addition, they strive to promote the spread of education through mutual consultation and advice. They make a point of keeping permanently in touch, through school visits, with the conditions prevailing in schools; not only have they the right of entry, but school staffs are bound to give them any information they may require about the school and the tuition given.

The inspectors co-operate in establishing the curricula for public schools. Although they do not co-operate with private schools for this purpose, the latter's curricula must be submitted to the public education authorities and checked by the inspectors annually.

With regard to local supervision, details concerning control by local authorities have been given above.

Catholic and Protestant schools have organized a form of school supervision within their own spheres.

Finance. Except for higher education, where private schools are only partially subsidized, it can be said that both public and private education in the Netherlands are fully supported by the authorities.

VGLO and ULO schools. The Government meets the whole of the cost of teachers' salaries in both public and private schools of these types. In both types of school, the operational costs in respect of the buildings, teaching aids, furniture, etc., are charged to the local authority, as are also the capital expenditures.

The annual indemnity for operational costs is worked out on the basis of the corresponding cost per pupil at public schools, and is just as high for private schools as for public schools with an equivalent number of pupils.

Preparatory university (VHO) and secondary (MO) schools. Teachers' salaries and operational costs are paid in full by the Government for state schools, and by the local authority for municipal schools. On their request, however, the State allocates municipalities maintaining HB schools, *gymnasia* and girls' secondary schools a small subsidy towards covering such costs. In the case of municipal commercial day and evening schools, the State grants a 50 per cent subsidy. The establishment costs for buildings are met on the basis of a 100 per cent annuity. The annual operational costs in respect of equipment are reimbursed on the basis of the comparable costs per school, per class and per pupil at public schools.

Teachers' salaries in VHMO schools are fixed by the Government in the same way as those of primary schoolteachers. The basis is the number of teaching periods, but any lessons over and above 32 a week are not paid by the State. A total of 26 periods a week ranks as full occupation. A graduate teacher receives more than a non-graduate. The maximum salary is roughly 60 per cent higher than that for primary schoolteachers.

Vocational training. To institutions and associations having corporate status and to municipal services (thus covering both private and public schools), the State grants a subsidy of either 70 per cent or 75 per cent of the net costs. The remaining 25 or 30 per cent is the responsibility of the local authority, which can recover it in part from other local authorities involved.

Teacher training schools. The State pays the whole of the salaries for both public and private schools. The operational costs in respect of buildings, teaching equipment, furniture, etc., are fully met by the State on the understanding that the reimbursement of costs to private (including municipal) schools is calculated on the basis of the costs of public teacher training schools of comparable size.

School fees. During the 6 years of primary school and the first 2 years of the VGLO school until the pupil is 15, no fees are payable except for a possible extra charge on behalf of the school. For other schools, fees are determined in the light of the income tax assessment of the parents.

Scholarships. During the past few years, the system of scholarships and interest-free loans has become very widespread. As a result, students have greater facilities for engaging in studies matching their capacities than was formerly the case.

The facilities cover study at preparatory university and secondary schools, vocational schools, teacher training schools, nursery teachers' training courses, art and music academies, ballet schools, drama schools and universities and university colleges. Some 20 million guilders were made available by the Government in 1958 for scholarships and interest-free loans.

School buildings. Under the Primary Education Act of 1920, a decree on building, applying equally to public and private schools supported entirely or partly out of public funds, was issued on 3 March 1924 (*Official Gazette* No. 95, recently amended by Royal Decree of 15 September 1950, *Official Gazette* No. K 404). This decree contains the minimal educational and health requirements relating to the building and installation of school premises and grounds.

Aesthetic and other considerations connected with the relation of the school buildings to their surroundings are not dealt with, but the chief building inspector can indirectly exert influence in this direction by advising the school and local authorities. The plans and buildings for *gymnasia* are, under the terms of the Higher Education Act, subject to the Minister's approval and to the supervision of the Government Building Service. The Secondary Education (MO) and Vocational Education Acts contain similar provisions.

School welfare services. The supervision and control of pupils' health is ensured by 140 school medical services, which in large communities are usually sub-departments of the local medical and health service. Smaller communities usually combine to set up joint school medical services.

Apart from ensuring that the buildings are hygienic, it is the task of these services to examine pupils individually. In so doing, the mental health of the child is kept in mind as far as possible. For specific difficulties connected with teaching or upbringing, the advice of medico-pedagogical bureaux is generally called in. A law of 9 July 1953 protects pupils against the risk of infectious diseases among the teaching staff: anyone connected with a teaching institution must be in possession of a valid certificate to the effect that he is not suffering from tuberculosis of the respiratory organs. Supervision is exercised by the medical inspector of public health. Teachers on first appointment must undergo a general medical examination. School dentists visit the schools and in many cases treat any defects they discover.

The schools provide milk at cost price to children wanting it. Free school meals and clothing are provided with the co-operation of a number of private associations. These services, on which local authorities spent 1.6 million guilders in a single year, are run on a charitable basis.

TYPES OF SECONDARY EDUCATION

The ordinary primary school has 6 grades. When children reach the age of 12 they must usually choose another school, about 35 per cent going on to ULO schools and 15 per cent to preparatory university and secondary schools.

After the seventh year of primary schooling, about 40 per cent of boys transfer to a vocational training school or an elementary agricultural or horticultural school. About 35 per cent of girls transfer to a home economics school after 6 years of primary schooling. There remains a group which may either remain in primary school for the seventh and eighth year or transfer to 2-year VGLO schools or classes.

Lessons designed to serve as a preparation for entry into various vocations are sometimes given in the top grade of the primary school. In addition, parents may obtain advice from the school principal or from a vocational guidance bureau. As a *lyceum* has one or two classes devoted to preparation for adult community life, pupils may postpone their decision for a short time.

The school year usually runs from September to September, with holidays at Christmas and Easter and a long summer holiday from mid-July to September. The school week normally has 6 days, of which 1 or 2 are usually half holidays. However, there are a number of variations to the rule, which is also true for the school day, which although usually divided into morning and afternoon periods, sometimes continues with breaks until early afternoon.

General secondary schools

Gymnasium. It has already been explained that this type of school is governed by the Higher Education Act and serves as a preparation for the university. While no entrance examination is prescribed, one is usually set, especially in Dutch, arithmetic, geography and history. Sometimes the new method is followed of having 2 to 4-week trial classes.

The *gymnasium* course lasts 6 years, following on the 6 years of primary school. In their fifth year pupils are divided between section A, with emphasis on Greek and Latin, and section B, with emphasis on the exact sciences. For the public *gymnasia*, the general curriculum and detailed time-table are established by Royal Decree (of 7 June 1919, *Official Gazette* No. 313, as amended). The time-table is given below.

Curricular prescriptions are less detailed for private *gymnasia*, but must provide for a fixed minimum number of lessons per subject, and the maximum total number of periods per class must be completed.

At the end of the study course, an examination is held under the supervision of a panel appointed by the Government.

Diploma A entitles the holder to sit for examinations in the faculties of divinity, arts and philosophy, and in the faculty of medicine also under specific conditions. Diploma B allows entry to the faculties of medicine, mathematics and physics, veterinary science, arts and philosophy (in so far as the study of classical languages is concerned), engineering and other fields of study. Both diplomas A and B allow entry to the faculties of law, agriculture, economics, political and social sciences and several other fields of study.

Those who have studied at an evening *gymnasium* or otherwise may also sit for a government examination qualifying them for a diploma with the same rights. This also applies to HBS pupils.

TIME-TABLE FOR GYMNASIA A AND B
(in periods per week)

Subject	Year of study										Total	
	1	2	3	4	5			6				
					A	All pupils	B	A	All pupils	B	A	B
Greek	–	5	5	5	3	3	–	5	3	–	29	21
Latin	7	5	5	5	4	3	–	5	3	–	37	28
Dutch	4	3	3	3	–	2	–	–	3	–	18	18
French	4	3	3	2	–	2	–	–	2	–	16	16
German	–	–	3	2	–	2	–	–	2	–	9	9
English	–	3	2	2	–	2	–	–	2	–	11	11
History	4	3	2	2	1	3	–	2	2	–	19	16
Geography	3	2	1	2	–	1	–	–	–	–	9	9
Mathematics	4	3	3	3	2	–	5	2	–	5	17	23
Physics	–	–	2	2	3	–	3	–	–	3	5	10
Chemistry	–	–	–	2		–	3	–	–	4	3	9
Biology	2	2	–	–		–	2	–	–	2	5	8
Physical training	3	3	3	2	–	2	–	–	2	–	15	15
Drawing	2	1	1	1	–	–	–	–	–	–	5	5
Total	33	33	33	33	33	–	33	33	–	33	198	192
Hebrew (optional)	–	–	–	–	–	2	–	–	2	–	–	–

Hogere burgerschool. The HBS course covers 5—and sometimes 6—years. Originally intended as general educational schools preparing pupils for earning a livelihood, HB schools have also provided preparatory university education since 1917. An entrance examination is compulsory. The same subjects are taught as in a *gymnasium*. Where the results of the written entrance examination do not tally with the opinion given by the principal of the primary school, an oral examination is held. There are two types of HB schools, A and B, which have the same curriculum for the first 3 years. In type A schools, more attention is paid to social subjects and languages. For public HB schools, the curricula and time-tables are fixed by Royal Decree of 28 May 1954, *Official Gazette* No. 291. The time-table is reproduced on the following page.

As in the case of private *gymnasia*, the prescriptions for private schools of this type are less detailed. At the end of the 5 or 6-year course a final examination is given by a panel consisting of the teachers of the top classes and experts annually appointed by the Minister.

The HBS-B diploma entitles the holder to sit for examinations in the faculties of medecine, mathematics and physics, veterinary science, engineering, agriculture and in certain other fields. Both A and B diplomas entitle their holders to sit for examinations in the faculties of law (notarial studies), economics, political and social science, and in several other fields (social science, social geography, psychology and education).

Lyceum. The *lyceum* as such is not regulated by law. It is a combination of gymnasium and HB school and gives

TIME-TABLE FOR HB SCHOOLS A AND B
(in periods per week)

Subject	Year of study							Total		
	1	2	3	4		5				
				A	B	A	B	A	B	
Dutch	4	4	4	4	3	4	3	20	18	
French	5	3	3	4	3	4	2	19	16	
English	3	3	3	4	2	4	2	17	13	
German	–	3	3	4	2	4	2	14	10	
Commercial subjects	–	–	1	7	–	6	(2)	14	3	(1)
Political economy	–	–	–	2	–	2	1	4	1	
Geography	3	3	2	2	2	2	1	12	11	
History	4	2	2	2	2	3	2	13	12	
Constitution	–	–	1	1	–	1	–	3	1	
Mathematics	5	5	5	–	5	–	5	15	25	
Mechanics	–	–	–	–	2	–	2	–	4	
Physics	–	2	3	–	3	–	3	5	11	
Chemistry	–	–	2	2	4	2	4	6	10	
Botany and zoology	2	2	–	–	2	–	2	4	8	
Cosmography	–	–	–	–	–	–	1	–	1	
Freehand drawing	3	2	1	–	1	–	(1)	6	8	(7)
Line drawing	–	–	–	–	1	–	(1)	–	2	(1)
Physical training	3	3	3	2	2	2	2	13	13	
Total	32	32	33	34	34	34	34	165	167	(163)

5- or 6-year courses and a 1- or 2-year course as preparation for community life. It does not issue its own diploma. *Lycea* sometimes have a girls' secondary school attached.

Girls' secondary school. This is also an independent type of school, with 5-year courses. Prescriptions for the minimum and maximum number of lessons are laid down by the Royal Decree of 21 June 1955, *Official Gazette* No. 291.

A specimen time-table for a public school of this type is shown below.

TIME-TABLE FOR GIRLS' SECONDARY SCHOOL
(in periods per week)

Subject	Year of study				
	1	2	3	4	5
Dutch language and literature	4	4	4	4	4
French language and literature	5	3	3	3	4
English language and literature	3	3	3	3	4
German language and literature	–	3	4	3	4
Geography	3	2	2	2	2
History	4	2	2	2 (4)	2 (3)
Mathematics	5	2	1	–	–
Physics	–	–	3	3	–
Chemistry	–	–			–
Botany and zoology	2	2	–	1	1
Freehand drawing	3	2	2	4 (2)	3 (2)
Handicrafts	–	2	2	2	2
Music	–	1	1	1	1
Physical training	3	3	2	2	2
Total	32	29	29	30	29

The final examination is taken under the supervision of a panel appointed by the Minister.

The final diploma allows entry to a number of schools for advanced vocational education but not to universities or university colleges.

Commercial schools. Day schools generally give 4-year courses, although there are a few which run a 3-year course. Subjects taught include: Dutch, French, English, German, commercial subjects, geography, history, political institutions, political economics, mathematics, physics, chemistry, writing, drawing, physical training. The syllabus is regulated by the Royal Decree of 21 June 1955, *Official Gazette* No. 292. The final diploma gives no right of entry to universities. A large proportion of the diploma-holders find a place in the economic and administrative branches of business life. In addition to the commercial day schools there are commercial evening schools with courses ranging from 3 to 5 years, all of which prepare pupils for the diploma.

Advanced primary (ULO) schools. Although regulated by the Primary Education Act of 1920, ULO schools have since that date become administratively separate from the primary schools proper and are in their own way a type of secondary school. They have a dual purpose as final classes and as a bridge to more advanced schools. Entry is usually dependent on the report of the principal of the primary school.

Apart from the primary school subjects of reading, writing, arithmetic, Dutch, nature study, geography, Dutch history, singing, drawing, physical training—and handicrafts for girls—at least three out of the following group of subjects must also be taught: French, German, English, mathematics, commerce. Further optional subjects are general history, handicrafts, agriculture, horticulture, needlework and home economics.

Below is a time-table based on the draft curriculum for public ULO schools at The Hague in 1959.

The teacher-pupil ratio must be at least 1:30. As a rule, the specific ULO subjects are given by the same teacher in all forms. He must have a special diploma for the subject taught.

In general, the ULO school course is 4 years, but is sometimes 3. The examination, for which there are no legal regulations, is arranged by two special examining bodies and includes written and oral sections. About 50 per cent of all pupils at ULO schools obtain the diploma, which is in great demand both for entry to other types of school and for appointment to posts in various public services.

Complementary primary (VGLO) schools. VGLO schools are specially designed for pupils who, while wishing to attend day schools for some time after completing the normal 6 years at primary schools, will usually begin earning their living immediately after completing the compulsory period. This type of school has at least two grades and is usually a separate institution, i.e., only in exceptional cases are VGLO departments attached to ordinary primary schools.

Special attention is paid in these schools to the development of manual skills with emphasis on manual training for boys and needlework and home economics for girls. The pupils are usually of normal but poorly developed intelligence, most of them coming from the socially and culturally less privileged sections of the population. Unlike the ordinary primary schools, where education can be classified in the order head-heart-hand, the order in these

schools is rather hand-heart-head. Apart from the subjects taught in the primary school, instruction may be given in two modern languages and one or more of the following: mathematics, commercial practice, agriculture and horticulture.

ULO TIME-TABLE
(in periods per week)

Subject	Year					
	1	2	3	4a	4b	4c
Reading	1	1	1	2	2	2
Writing	1	–	–	–	–	–
Arithmetic	2	–	–	–	–	–
Dutch	5	3	4	3	3	3
Dutch history	1	1	1	1	1	1
Geography	2	2	2	2	2	2
Nature study	2	2	2	2	4	2
Singing and music	1	1	1	1	1	1
Drawing	2	2	2	2	2	2
Physical training	3	3	3	3	3	3
French	5	4	4	4	4	4
German	5	4	4	4	4	4
English	–	4	4	4	4	4
Mathematics	2	4	4	5	6	–
Commerce	–	2	4	–	–	5
General history	1	1	1	1	1	1
Boys' handicrafts	2	2	2	2	–	2
Needlework (girls)	2	2	2	(2)	–	(2)
Chemistry	–	–	–	1	–	1
Home economics for girls	–	–	2⅔ (2×60 min.)	2⅔ (2×60 min.)	2⅔ (2×60 min.)	2⅔ (2×60 min.)
Breaks	2	2	2	2	2	2
Total	37	38	37 (39⅔)	39 (⅔)	39 (41⅔)	39 (⅔)

Notes

1. In the first year, one of the two arithmetic lessons may be replaced by a lesson in commercial arithmetic, and in the second year one of the commercial periods may be devoted to arithmetic.
2. In the third and fourth years, pupils may attend either the mathematics or commerce classes. In the first year only algebra is taught in the mathematics classes.
3. If there are no facilities for chemistry lessons, the classes set aside for such lessons are devoted to other subjects.
4. Home economics is optional in the third year and compulsory in the fourth. If there are no facilities for teaching it in the fourth year, needlework lessons are given in its place.
5. The periods set aside for religious teaching—one weekly per class—are given during normal school hours by an instructor who may be assigned by the parish authorities.
6. In any class, there may be two periods a week which deviate from the set time-table provided the teacher concerned has previously consulted the principal on the matter.
7. There are three fourth-year classes—4a, leading to the A diploma with mathematics, 4b, leading to the B diploma, and 4c, leading to the A diploma with commercial subjects.
8. Subject to approval, English lessons may be begun before German in the first year, in which case the time-table must be adjusted accordingly.

Educational institutions for children who have completed compulsory schooling. This type of activity, which originated after the second world war and developed rapidly, covers both education and youth work. The aim is to assist young people (usually boys 14 to 17, and girls over 17) who are beginning to earn their living by providing them with an educational environment adapted to their new situation and their phase of growth, and so helping to shape their personality. These training establishments come under one of the following three national institutions: the National Foundation for Mater Amabilis Schools and other institutions providing part-time education for girls; the National Board of Catholic Life Schools for Boys and Young Men; and the National Centre for the Training of Young Workers.

At the end of 1957 these institutions were catering for about 34,000 young people, including 5,000 boys. Twenty-five per cent of the girls and 85 per cent of the boys attend day classes. The 1958 national budget estimates set aside about 3 million guilders for this purpose. Of the total subsidy provided by the public authorities, amounting to a maximum of 80 per cent of the operational costs, the State shoulders 40 per cent. There are also subsidies by the provincial and local authorities, while about 25 per cent is obtained from private sources.

Teachers in general secondary schools. Prospective secondary school teachers (*gymnasium*, HB school, *lyceum*, girls' secondary school, commercial day school or evening school) may either study at a university or university college or qualify for secondary school teacher's certificates.

After successfully completing a degree examination (*doctoraal examen*) at a university or university college, a certificate is issued listing the subjects which the holder is qualified to teach at a secondary school. To obtain an appointment as teacher, the holder, apart from his university studies, must furnish proof that he has had a complete pedagogical training in general, and training in the subjects, or one of the subjects, for which the certificate is requested, in particular. This can be issued before or after his final degree examination. In addition, the candidate must have attended classes at a secondary school as an observer. The course takes 5 to 6 years.

Teachers in VGLO and ULO schools are trained at primary teacher training schools (*kweekscholen*), which are described below.

Vocational and technical schools

Agricultural and horticultural schools. Elementary agricultural schools (*lagere landbouwscholen*) give a 4-year course. Five days a week are set aside for classes in the first 2 years, 4 in the third year and 3 in the fourth. The arrangements are much the same in the horticultural schools.

The specialized agricultural schools (*landbouwvakscholen*) aim at giving thorough specialized instruction in such subjects as dairying, poultry farming, stock breeding, flaxgrowing and agricultural mechanization. Entrance qualifications vary. For specialized horticultural schools, a diploma from an elementary horticultural school or a general horticultural course is required.

General agricultural courses (*algemene landbouwcursussen*) give instruction on the principles of agriculture, taking into account the local type of farming. The classes are held on winter evenings, with 300 periods spread over two winters. Following the general course, special courses can be taken on such subjects as farm management, agricultural accountancy, fertilizers, plant diseases, management theory and cattle feeding. The number of periods varies with the nature of the course.

Secondary agricultural schools (*middelbare landbouwscholen*) give an 18-month course covering two winter

terms consisting mainly of classroom instruction and one summer term which is mainly practical. They are primarily intended for prospective farmers. Candidates must be about 16 years of age, and have some years of secondary school and practical experience behind them.

Agricultural colleges (*hogere landbouwscholen*) give a 3-year course in which theoretical instruction is interspersed with extensive practice. The ULO diploma or its equivalent in general education is required, and there are entrance and final examinations. The course is designed for persons who will occupy positions of responsibility in large agricultural undertakings. Completion of the course qualifies for admission to the Agricultural University (*Landbouwhogeschool*) at Wageningen and the Faculty of Veterinary Science at the University of Utrecht.

At the same level are four other specialized schools (for forestry and dairying) and a number of agricultural and horticultural teacher training courses, and courses on co-operative management, poultry farming etc.

Elementary horticultural schools and courses give elementary instruction in such subjects as fruit, vegetable, flower, bulb, seed and potato growing, arboriculture, flower arrangement, horticultural techniques and garden lay-out and maintenance, while the specialized schools place the emphasis on practical training in one or more specialized fields.

Secondary horticultural education is given at the two horticultural high schools (*hogere tuinbouwscholen*), the eight secondary horticultural schools (*middelbare tuinbouwscholen*), at advanced classes for landscape gardeners and at the horticultural teacher training courses.

The responsible authority for agricultural and horticultural education is the Director of Agricultural Education at the Ministry of Agriculture.

Vocational schools for girls

Elementary vocational schools for girls (*lagere nijverheidsscholen voor meisjes*) are open to pupils who have completed 6 years' primary schooling. The basic tuition comprises general subjects (which may occupy over one-third of the curriculum) together with elementary instruction in cooking, sewing and housekeeping.

Agricultural housekeeping schools (*landbouwhuishoudscholen*) teach girls the special home economics needed for farm housekeeping. The schools are also designed for instruction in the improved facilities which are an important factor in giving rural life a wider meaning.

Advanced vocational schools for girls (*uitgebreid lager nijverheidsonderwijs voor meisjes*) are intended for girls wishing to make a further study of the various feminine vocations (home economics, etc.). Courses vary from 1 to 3 years, depending on the subjects chosen. Admission requirements also vary accordingly.

Secondary vocational schools for girls (*middelbaar nijverheidsonderwijs voor meisjes*) offer an opportunity for further specialization. Admission is open to holders of certificates from advanced vocational schools and HB schools, *gymnasia* or girls' secondary schools, and to holders of ULO diplomas.

Some of the vocational schools combine their instruction with secondary education so as to provide full training qualifying the trainee for employment as a vocational school teacher. The examinations for vocational aptitude certificates are conducted by a government commission.

Vocational schools for boys

Elementary technical schools (*lagere technische scholen*), of which there are about 200 in the Netherlands, with an average of 300 pupils each, give 2- or 3-year—or, in a few instances, 4-year—courses. Admission to a 2-year course is available to pupils who have completed grade 6 at primary school and have reached the age of 12 years and 8 months. This requirement does not apply to the courses lasting 3 years or over, where vocational or specialized education begins only in the second year. For some special trades, e.g., motor mechanics, precision engineers, trainees may remain at the school for a further year. The school may have attached departments for woodworking (carpenters, cabinet makers), metal working (fitters, smiths, brass, lead and zinc workers, electricians), house-painting; and also, as is often the case, for cycle repairing, motor and automobile repairing and for training bricklayers, tailors, shoemakers, printers, bakers and textile workers. Local needs dictate the type of departments established, but every school normally has at least a woodwork department and a metalwork department.

The apprentice system (*leerlingstelsel*) and other forms of training supplement the instruction provided by elementary technical schools, which by their nature cannot offer a complete all-round specialized education.

Under the apprenticeship system (as under the old guild system), the boys, many of whom have already attended elementary technical schools, are placed as apprentices in a workshop, where they are further initiated into the craft or speciality, and a teaching agreement, legally binding on all parties, is contracted between the apprentice, the employer and the apprenticeship board. The apprenticeship examination and the award of diplomas is governed by the Vocational Education Act. For the period of the agreement the apprentice is bound—in the evenings, if not during the day—to attend courses relating to his speciality.

This additional education is also given at elementary technical schools (evening classes covering from 6 to 9 months a year). The recent trend has been for evening classes to be replaced—thanks to the co-operation of employers—by day classes, sometimes one day a week throughout the year, and sometimes one half-day and one evening a week.

Advanced technical schools (*uitgebreid technische scholen* —UTS) are a comparatively new phenomenon, and are still at the experimental stage. The usual admission requirement is 3 years at a ULO school or 2 years at an HB school. In addition, pupils holding an elementary technical school certificate may be admitted to an advanced school after attending a 1-year preparatory class. The duration of the course is 2 years, after which 1 year's practical instruction is given under school supervision. These courses open the way to junior posts in industry.

Navigation schools train pilots and telegraphists. Admission is open to anyone with a ULO-A or B diploma.

Schools for ship and aircraft mechanics require applicants

to be in possession of a ULO-A or B diploma, or to have attended an elementary technical school and passed the entrance examination.

Sea fishery and inland navigation schools admit pupils who have completed the primary school course.

Industrial schools (*bedrijfsscholen*), based on particular branches of industry, train specialized workers. The length of courses depends on the previous education of the participants and the nature of the speciality.

Technical colleges (*hogere technische scholen*—HTS) are designed to train personnel for intermediate posts in industry, while persons holding diplomas from such schools may teach at elementary vocational schools.

HT schools contain departments for building, road and waterway construction, machine construction and electrotechnics. Some of them also have departments for shipbuilding, aircraft construction, industrial chemistry and physics, industrial economics, machine technology, metal working, and surveying.

Courses last 4 years, the third year being devoted to practical work in industry; part of this year is spent abroad in some cases, and pupils must then submit a monthly report to the school describing their activities. A teacher visits them at their work from time to time. These schools are open to pupils with a ULO-B diploma, pupils who have completed the third form of a secondary school (HB school, etc.) and have obtained good marks for the relevant subjects, and those holding an HB school B diploma or a *gymnasium*-B diploma. The latter are usually admitted to the second form of the higher technical schools. Pupils holding a diploma from an elementary technical school may be admitted after completion of a preparatory course.

Apart from the technical colleges there are other secondary technical schools, including mining schools, textile schools and schools specializing in the leather and footwear industries. The instruction given (to 2,000 pupils in 1957) is both theoretical and practical.

Higher technical education is given at technical universities (*technische hogescholen*). Apart from the teaching of further skills, the preparatory class gives general training courses.

Teachers for elementary technical schools and advanced technical schools for boys largely obtain their training at evening classes. A certificate of general education is required for admission. The course consists of a 2-year basic course, with an additional course of 1 year for teachers of practical subjects and 2 years for teachers of theoretical subjects, while a final course, lasting 2 years for evening students and 1 year for day students (with boarding facilities), may be attended in Rotterdam.

The examinations are controlled by a government commission, and a certificate of four years' actual teaching work must be submitted. The teacher employed for giving instruction in general subjects at elementary and advanced technical schools and in the corresponding subjects at elementary and the various advanced vocational schools for girls are usually holders of primary school teachers' certificates. In addition they often hold a special primary or secondary teacher's certificate.

Teachers of general subjects and mathematics, physics and mechanics at technical high schools must be in possession of the relevant degree diploma or secondary school teacher's certificate. Teachers qualified to give instruction in practical subjects may be issued with certificates giving them the right to teach at elementary or advanced technical schools. They must also have a teacher's certificate. Holders of an engineer's diploma may teach the theory of technical subjects and drawing provided they have worked as technicians in commerce and industry for a period of three years.

Full training for teachers at girls' secondary vocational schools is given at various schools of this type. Examinations for vocational diplomas are controlled by a government commission.

Teacher training schools

The training of infant school teachers and principals in public and private teachers' institutions is governed by the Infant Education Act. Admission is open to persons holding ULO diplomas, while those wishing to be principals must obtain the ordinary teacher certificate first. The course is for 2 or 4 years, depending on whether it is for the teacher or head teacher certificate, or both.

The minimum curriculum includes pedagogics and psychology, reading and story telling, Dutch language, sociology, history, biology, hygiene and child care, music, drawing, manual instruction, physical training and games.

Teachers for primary schools, including VGLO and ULO schools, are trained at public or private teacher training colleges. The courses are subdivided into three cycles, which together cover a 5-year period.

The first cycle (2 years) is intended mostly for students from ULO schools. Admission to this section may also be granted to persons successfully completing 3 years at an advanced technical school or passing an entrance examination.

The course comprises general instruction in Dutch language and literature, history, geography, physics, chemistry, biology, mathematics, French, German, English, music, drawing, handicrafts, physical training and, for girls, needlework.

The second cycle (2 years) is open to students who have successfully completed the first cycle and to anyone holding a secondary school diploma. The first cycle will probably be abolished should there be a full supply of candidates from secondary schools at some future date.

In this cycle students begin to receive teacher training proper. The course includes pedagogics and related sciences, Dutch language and literature, courses on social and cultural life in the Netherlands, reading, writing, music, drawing, handicrafts, physical training (and, for girls, needlework), teaching methods in general and specialized methods for the teaching of Dutch, history, geography, nature study, arithmetic, reading, writing, music, drawing, handicrafts, physical training and, for girls, needlework.

At the end of this second cycle, candidates sit for an examination qualifying them for a certificate of aptitude for teaching, which entitles them to teach at ordinary primary schools. But their education is not considered as being completed by the acquisition of this certificate: they are not fully qualified, and their salaries are lower than those of fully qualified staff.

The third cycle (1 year) is designed to qualify teachers fully. Only persons holding a teacher's certificate are

eligible to take the course, which includes a more advanced study of pedagogics, Dutch language and literature, and the social and cultural life of the Netherlands. Students are required to write theses on at least two educational subjects, selected with the approval of the principal. Successful completion of the final examination opens the way to appointment as teachers at advanced primary schools, special primary schools or complementary primary schools, and as principals of any type of elementary school.

Special certificates may be obtained for a number of subjects taught at primary schools. These qualify their holders to give instruction at a primary school in the relevant subject. Study for these 'sub-certificates' has been strongly encouraged by the Government and, in principle, the State pays half the fees. In addition, a bonus is granted on the award of a so-called ULO certificate.

Other specialized schools

Social welfare schools. Under this type of training comes that given to household helps and companions for aged people, training for group leaders in youth work, child welfare and educational work with children who have completed their compulsory schooling, etc. The minimum age for admission to schools of this type is 18. Courses vary in length and some of them are part-time.

Fine art, arts and crafts schools, etc. Under the heading of secondary vocational schools come the art and/or craft schools. They are usually independent, although they are sometimes housed in the same institution as a technical high school. The subjects taught include drawing, painting, modelling, sculpture, textile design, fashion drawing, commercial art, pottery, precious metal work, industrial design, etc. Admission is normally restricted to candidates holding ULO diplomas.

Out-of-class activities

At almost every secondary school a number of activities are conducted which come outside the scope of the school programme although they are closely linked with the school community. The schools often organize sporting events, for example, and form clubs for sports, theatricals, music, etc. In some cases, scout troops are attached to particular schools, although youth work of this kind is generally organized independently of the schools. This also applies to most forms of club work.

TRENDS AND PROBLEMS

The Bill on secondary education now under consideration includes a plan for the structural organization of education at this level. Once it has been passed, the intention is to follow up this legislation—and also the Infant Education Act (1955)— by similar laws covering primary and higher education. These laws, taken together, should form a comprehensive body of educational legislation for all levels.

To bring about this correlation of educational legislation, increased activity on the part of the social organizations will be essential. With strong support and recognition from the governmental authorities, these organizations should be able to work out the structural details of the new system within the framework of current legislation.

[*Text prepared by the Ministry of Education, Arts and Sciences, The Hague, in August 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 11,186,000.
Land area: 12,529 square miles; 32,450 square kilometres.
Density: 893 per square mile; 345 per square kilometre.

Summary of school statistics, 1953–57. In the school year 1957/58, enrolment at all levels was over 2.7 million, which represented a school-going population equal to a fourth of the total population. Enrolment was distributed as follows: pre-primary education, 13 per cent; primary education, 54 per cent; general secondary education, 14 per cent; vocational secondary education, 15 per cent; all other levels: 4 per cent. From 1953 to 1957 total school enrolment increased by 14 per cent, enrolment in general secondary education by 35 per cent; in vocational education, by 30 per cent (female enrolment by almost 40 per cent); in training schools for kindergarten teachers, by 19 per cent.

In pre-primary, primary and general secondary education the proportion of girls remained fairly constant during the five school years under review (49 per cent in pre-primary education, 48 per cent in primary, and 47 per cent in general secondary education), whereas the proportion increased slightly in vocational education (49 per cent in 1957/58 as compared with 46 per cent in 1953/54) and in institutions of higher education except teacher-training colleges (16 per cent as against 14 per cent). On the other hand, the proportion of girls decreased in teacher training colleges (44 per cent in 1957/58 as against 49 per cent in 1953/57). (See Table 1.)

Enrolment trends in secondary education 1930–57. Table 2 gives time series, from 1930 to 1957, concerning enrolment in secondary education by type: general, vocational and teacher training. The average total enrolment for 1955–57 was almost three times that of 1930–34. In the last column total enrolment averaged over 5-year periods is related to the estimated population 15–19 years old.

It will be noted that the rate of increase of this ratio is higher during the second half of the period.

Examination results in secondary education, 1953–57. From 1953 to 1957 the increase in the number of certificates granted was less than the increase in the number of pupils enrolled, except in teacher training colleges. In the latter, enrolment increased by 19 per cent between 1953 and 1957, and by 26 per cent between 1950 and 1957, but the number of teacher training certificates granted increased by 49 per cent between 1953 and 1957. A slight increase may be seen in the number of certificates of secondary vocational schools granted to girls. In 1957 they were 45 per cent as against 42 per cent in 1953. (See Table 3.)

Educational finance, 1957. Table 4 shows that total expenditure on education for 1957 (fiscal year beginning in January) amounted to 1,577 million guilders. This represents an average of 143 guilders per inhabitant as against 62 guilders in 1952 (see *World Survey of Education II*). Funds contributed by the Central Government covered 68 per cent of the total amount; local authorities contributed 31 per cent. The total amount spent on education was distributed as follows: recurring expenditure, 78 per cent; capital expenditure, 17 per cent; debt service, 5 per cent.

Source. Netherlands: Central Bureau of Statistics, replies to Unesco questionnaires.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1957/58	699	2 079	2 079	71 695	34 661
	Kindergartens, private	1957/58	3 243	8 395	8 395	290 241	142 096
	Total	**1957/58**	**3 942**	**10 474**	**10 474**	**361 936**	**176 757**
	,,	1956/57	3 793	10 153	10 153	349 075	170 973
	,,	1955/56	3 706	10 052	10 052	370 222	180 979
	,,	1954/55	3 563	9 540	9 540	371 424	181 343
	,,	1953/54	3 429	9 215	9 215	368 218	179 541

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary[1]	Primary schools, public	1957/58	2 472	12 176	5 759	417 447	201 058
	Primary schools, private	1957/58	5 081	29 771	14 834	1 061 678	515 248
	Total	**1957/58**	**7 553**	**41 947**	**20 593**	**1 479 125**	**716 306**
	,,	1956/57	7 489	41 459	20 015	1 469 567	710 809
	,,	1955/56	7 410	40 650	19 400	1 452 246	702 642
	,,	1954/55	7 312	39 440	18 578	1 413 402	683 060
	,,	1953/54	7 182	37 619	17 867	1 356 715	655 150
Secondary *General*[1]	Complementary primary schools, public	1957/58	87	331	90	8 787	3 427
	Advanced primary schools, public	1957/58	281	2 289	299	65 830	32 553
	Secondary schools, public	1957/58	164	3 802	803	46 385	18 925
	Complementary primary schools, private	1957/58	514	1 335	826	32 040	21 439
	Advanced primary schools, private	1957/58	763	4 908	1 167	137 328	69 274
	Secondary schools, private	1957/58	263	6 205	1 311	82 497	31 290
	Total	**1957/58**	**2 072**	**18 870**	**4 496**	**372 867**	**176 908**
	,,	1956/57	2 029	17 626	4 256	346 011	164 115
	,,	1955/56	1 977	16 336	3 976	316 880	150 028
	,,	1954/55	1 949	15 258	3 772	294 154	149 482
	,,	1953/54	1 913	[2]6 917	[2]1 953	276 463	130 486
Vocational	Secondary vocational schools, public	1957/58	90	...	...	[3]21 428	[3]6 767
	Agricultural and horticultural schools, public	1957/58	46	...	...	[3]2 888	—
	Commercial evening schools, public	1957/58	55	...	...	[4]6 985	[4]2 966
	Secondary vocational schools, private	1957/58	1 081	...	...	[3]332 965	[3]181 964
	Agricultural and horticultural schools, private	1957/58	407	...	...	[3]23 588	—
	Commercial evening schools, private	1957/58	92	...	...	[4]12 163	[4]5 045
	Total	**1957/58**	**1 771**	**...**	**...**	**[3]400 017**	**[3]196 742**
	,,	1956/57	1 734	[5]3 618	[5]56	[3]369 868	[3]181 809
	,,	1955/56	1 679	...	...	[3]346 824	[3]165 437
	,,	1954/55	1 618	...	...	[3]323 380	[3]149 536
	,,	1953/54	1 562	...	...	[3]308 214	[3]141 840
Teacher training	Training schools for kindergarten teachers, public	1957/58	12	...	...	1 305	1 305
	Training schools for kindergarten teachers, private	1957/58	71	...	...	5 499	5 499
	Total	**1957/58**	**83**	**...**	**...**	**6 804**	**6 804**
	,,	1956/57	100	1 153	601	7 434	7 434
	,,	1955/56	104	...	...	7 205	7 205
	,,	1954/55	107	...	...	5 954	5 954
	,,	1953/54	111	1 048	576	5 713	5 713
Higher *Teacher training*	Teacher training colleges, public	1957/58	26	...	...	5 173	2 395
	Teacher training colleges, private	1957/58	127	...	...	25 100	10 908
	Total	**1957/58**	**153**	**...**	**...**	**30 273**	**13 303**
	,,	1956/57	147	...	...	27 455	12 555
	,,	1955/56	147	...	...	23 330	11 178
	,,	1954/55	146	...	...	20 535	9 919
	,,	1953/54	143	...	...	18 247	8 888
General and technical	Universities and colleges, public	1957/58	7	...	...	25 765	4 974
	Technical colleges, public	1957/58	19	...	...	3 328	4
	Universities and colleges, private	1957/58	4	...	...	6 800	872
	Technical colleges, private	1957/58	60	...	...	14 236	1 929
	Total	**1957/58**	**90**	**...**	**...**	**50 129**	**7 779**
	,,	1956/57	88	[6]1 856	[6]154	47 341	7 197
	,,	1955/56	87	[7]1 407	[7]54	45 305	6 552
	,,	1954/55	86	...	...	44 158	6 240
	,,	1953/54	84	...	...	42 890	5 943
Special	Schools for mentally handicapped children	1957/58	284	2 108	1 165	34 643	13 881
	Other special schools	1957/58	183	1 195	593	12 404	3 976
	Total	**1957/58**	**467**	**3 303**	**1 758**	**47 047**	**17 857**
	,,	1956/57	449	3 174	1 672	45 722	17 597
	,,	1955/56	421	3 019	1 566	43 532	16 834
	,,	1954/55	388	2 800	1 422	41 236	15 968
	,,	1953/54	366	2 643	1 337	39 079	15 096

1. Data on complementary primary schools, *voortgezet gewoon lager onderwijs*, previously included under primary education, are now included under general secondary education.
2. Teachers in continued and advanced primary schools only.
3. Including part-time students.
4. Part-time students only.
5. Not including teachers in secondary vocational schools.
6. Technical colleges only.
7. Not including technical colleges.

2. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	106 374	41	138 654	40	...	100			
1931	114 165	41	146 026	41	2 412	100			
1932	124 520	41	143 468	41	2 425	100	269	763	*35*
1933	134 392	41	143 962	41	2 133	100			
1934	140 680	41	143 833	41	1 626	100			
1935	145 860	40	149 295	41	1 342	100			
1936	151 182	40	154 069	42	1 162	100			
1937	156 305	40	164 923	41	1 106	100	322	803	*40*
1938	161 275	40	176 039	41	1 104	100			
1939	162 133	40	184 584	43	1 118	100			
1940	163 657	40	174 733	41	1 169	100			
1941	164 720	40	188 083	42	...	100			
1942	171 394	41	185 462	45	...	100	[1]*355	814	[1]*44*
1943	184 897	42	179 908	49	...	100			
1944	...	...	...	...	...	...			
1945	192 556	41	172 411	42	1 235	100			
1946	208 723	42	205 801	46	1 395	100			
1947	212 892	42	221 263	44	2 035	100	432	813	*53*
1948	212 497	42	241 916	44	2 771	100			
1949	222 717	44	259 047	43	3 954	100			
1950	236 034	45	282 124	44	5 415	100			
1951	247 146	46	291 537	45	5 811	100			
1952	261 196	47	299 519	45	5 981	100	570	803	*71*
1953	276 463	47	308 182	46	5 713	100			
1954	294 154	47	323 345	46	5 954	100			
1955	316 880	47	346 824	48	7 205	100			
1956	346 011	47	369 868	49	7 434	100	725	832	*87*
1957	372 867	47	400 017	49	6 804	100			

1. Not including enrolment in teacher training institutions.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Advanced primary school certificates	20 459	10 171	21 156	10 556	22 019	11 137	23 019	11 431	24 542	12 284
Secondary school certificates	10 094	3 375	10 300	3 598	10 390	3 625	11 000	3 913	11 506	4 300
Vocational secondary school certificates	69 544	29 322	71 943	30 468	74 079	31 486	77 311	33 118	78 615	35 208
Agricultural and horticultural school certificates	6 376	—	6 465	—	6 691	—	7 200	—	7 259	—
Training certificate for kindergarten teachers	1 974	1 974	2 067	2 067	1 851	1 851	2 133	2 133	2 940	2 940

4. EDUCATIONAL FINANCE, 1957 (in thousand guilders)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**1 576 889**
Central Government	1 065 287
Provincial governments	2 736
Local authorities	490 644
Tuition fees	6 469
Rents	11 753

B. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**1 576 889**
Recurring expenditure		1 230 048
For central administration	15 087	
For instruction		
Salaries to teachers, etc.	907 119	
Other instructional expenditure	255 854	
Other recurring expenditure	51 988	
Capital expenditure: educational facilities		270 369
Debt service		76 472

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**1 230 048**		**100.0**
Central administration		15 087		1.2
Instruction		1 162 975		94.6
Pre-primary education	58 409		4.7	
Primary education	501 230		40.8	
Secondary education	460 940		37.5	
General	239 260		19.4	
Vocational	198 969		16.2	
Teacher training	22 711		1.9	
Higher education	118 894		9.7	
Special education	8 682		0.7	
Adult education	11 816		1.0	
Other education, not specified	3 004		0.2	
Other recurring expenditure		51 986		4.2
Grants to students	26 533		2.16	
Examination costs	3 766		0.30	
Other	21 687		1.76	

1. Official exchange rate: 1 guilder = 0.263 U.S. dollar.

2. Closed accounts.

NETHERLANDS ANTILLES

The Netherlands Antilles consist of the islands of Curaçao, Aruba and Bonaire, situated off the coast of Venezuela and known as the Leeward group, and three much smaller islands, the Windward group, lying to the east of Puerto Rico. The Netherlands Antilles, the Netherlands and Surinam are united on an equal basis in the Kingdom of the Netherlands. In the Netherlands Antilles, which enjoy full internal autonomy, the Government is constituted by the Governor and the Council of Ministers; the former represents the Sovereign of the Kingdom of the Netherlands while the Ministers are responsible to the elected legislature.

THE EDUCATIONAL SYSTEM

Articles 139 and 140 of the 1955 Constitution of the Netherlands Antilles refer to education, as follows:

'The dissemination of enlightenment and culture and the promotion of the arts and science are of vital interest to the Government.'

'Education is a matter of constant concern to the Government.'

'Anyone has the right to provide educational services, subject to government inspection and investigation into the efficiency and morality of the teacher.'

'Public and private schools, in so far as the latter adhere to the provisions of government legislation, are subsidized in accordance with the same scale of assessment.'

Education is regulated by the Ordinance of 1935, amended in 1944, 1951 and 1953. Under the last-mentioned amendment the Government of the Netherlands Antilles delegated responsibility for implementing educational policy to the authorities of the individual islands. It retained, however, the control of school inspection and the organization of examinations; and is jointly responsible, with the elected assembly, for educational legislation.

The supervision of both public and private schools is entrusted to an inspector, helped where necessary by assistant inspectors and school supervisors (*schoolopzieners*). All these are appointed by the Government. The inspector now acts as head of the Department of Education and is assisted by two supervisors attached to the Department. Further educational supervision on the various islands is conducted by a government board, while, in the case of the Roman Catholic schools, additional supervision is the responsibility of two diocesan inspectors. Moreover, all public schools have a committee elected by the parents, the duties and powers of which are regulated by law.

School medical services have been in existence on all the islands for many years, but no school doctors are attached to the Department of Education.

Pupils exhibiting deficiency symptoms can obtain school meals at primary schools and the attached nursery schools. Such meals, which are free, consist of bread, butter, milk and fruit.

The structure of the educational system closely resembles that of the Netherlands. Dutch is the language of instruction in the Leeward Islands, and English in the Windward Islands of St. Martin, Saba and St. Eustace; the latter, however, account for barely 3 per cent of the total school population.

TYPES OF SECONDARY EDUCATION

Secondary education, in the sense of education for young people from 12 to 18 years of age, is provided in the upper classes of continued primary and advanced primary schools, and in secondary and technical schools. These follow on from the 6 years of primary schooling proper.

Teacher training is given in special departments of the secondary schools.

Diplomas and certificates are awarded to successful candidates in the Education Department; examinations are recognized in the Netherlands, in the schools and higher institutions of which students from the Antilles may continue their studies.

[*Text prepared by the Unesco Secretariat in June 1960.*]

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Verslag van bestuur en staat van de Nederlandse Antillen over het kalenderjaar.... Gouvernments-Secretarie.

STATISTICS

Population (mid-year 1958 estimate): 193,000.
Area: 371 square miles; 961 square kilometres.
Population density: 520 per square mile; 201 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total school enrolment (not including special education and adult education) was about 49,500, or 26 per cent of the total population. Of these pupils, 15 per cent were receiving pre-primary education, about 81 per cent were enrolled in primary schools, and 3.6 per cent in secondary schools. It should be noted that several thousand pupils actually receiving secondary education in higher (continued or advanced) primary schools were included in the figures under primary education. In the primary schools, the proportion of girls remained at about 50 per cent, and the pupil teacher ratio at 35. Between 1953 and 1957 total pupil enrolment increased 29 per cent. (See Table 1.)

Enrolment trends in secondary education, 1950–57. In 1950 there were 358 pupils enrolled in secondary and teacher training courses, excluding those receiving secondary education in primary schools. The number had risen to 801 in 1957. The number of pupils in vocational schools tripled during this period, rising from 317 in 1950 to 1,017 in 1957. Taking into consideration the pupils enrolled in continued or advanced primary schools who were actually receiving secondary education, it may be estimated that the secondary school enrolment ratio (as related to the population 15–19 years old) was about 30 for the period 1955–57.

Examination results in secondary education, 1953–57. Table 2 shows a rapid increase in the number of vocational school diplomas granted during this period, a rise from 81 in 1953 to 169 in 1957. As regards secondary school leaving certificates and diplomas of teacher training schools, some increase is noted in the last two or three years.

Educational finance, 1957. Total expenditure for the fiscal year beginning in January 1957 amounted to 16,682,627 Netherlands Antilles guilders, which represents about 88 guilders per inhabitant. Of this amount, 91 per cent was for recurring expenditure, and nearly 9 per cent for capital expenditure. (See Table 3.)

Sources. Netherlands Antilles: Department of Education, reply to Unesco questionnaire.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Preparatory schools, public	1957/58	16	50	50	1 228	589
	Preparatory schools, private	1957/58	50	181	181	6 193	3 084
	Total	**1957/58**	**66**	**231**	**231**	**7 421**	**3 673**
	,,	1956/57	62	223	223	6 729	3 303
	,,	1955/56	59	218	218	6 425	3 114
	,,	1954/55	56	207	207	5 713	2 814
	,,	1953/54	50	194	194	4 633	2 322
Primary	Primary schools, public[1]	1957/58	11	[2]79	[2]33	2 509	1 061
	Higher primary schools, public[3]	1957/58	11	[4]132	[4]44	3 852	2 016
	Primary schools, private[1]	1957/58	51	[5]471	[5]154	17 476	9 435
	Higher primary schools, private[3]	1957/58	40	[6]459	[6]165	16 370	7 436
	Total	**1957/58**	**113**	**[7]1 141**	**[7]396**	**40 207**	**19 948**
	,,	1956/57	109	[7]1 106	[7]379	37 797	18 802
	,,	1955/56	104	[7]1 061	[7]378	35 527	17 651
	,,	1954/55	99	[7]1 039	[7]386	33 829	16 753
	,,	1953/54	94	[7]999	[7]373	32 482	16 062
Secondary							
General	Secondary schools, public	1957/58	[8]1	[8]24	[8]3	246	99
	Secondary schools, private	1957/58	[8]2	[8]51	[8]10	401	194
	Total	**1957/58**	**[8]3**	**[8]75**	**[8]13**	**647**	**293**
	,,	1956/57	[8]3	[8]70	[8]11	551	252
	,,	1955/56	[8]3	[8]61	[8]10	484	225
	,,	1954/55	[8]3	[8]57	[8]10	[9]469	[9]219
	,,	1953/54	[8]3	[8]51	[8]10	[9]438	[9]205
Vocational	Vocational schools, public	1957/58	2	24	—	452	—
	Vocational schools, private	1957/58	1	18	—	565	—
	Total	**1957/58**	**3**	**42**	—	**1 017**	—
	,,	1956/57	3	40	—	936	—
	,,	1955/56	2	34	—	799	—
	,,	1954/55	2	33	—	684	—
	,,	1953/54	2	29	—	602	—
Teacher training	Teacher training schools, public	1957/58	[10] ...	[10] ...	[10] ...	42	40
	Teacher training schools, private	1957/58	[10] ...	[10] ...	[10] ...	112	78
	Total	**1957/58**	**[10] ...**	**[10] ...**	**[10] ...**	**154**	**118**
	,,	1956/57	[10] ...	[10] ...	[10] ...	147	112
	,,	1955/56	[10] ...	[10] ...	[10] ...	127	94
	,,	1954/55	[10] ...	[10] ...	[10] ...	107	80
	,,	1953/54	[10] ...	[10] ...	[10] ...	101	78
Special	Schools for mentally handicapped children						
	Total[11]	**1956/57**	**3**	**7**	**3**	**108**	**26**
	,, [11]	1955/56	2	6	3	85	29
	,,	1954/55	7	19	...	247	...
	,,	1953/54	4	16	...	174	9
Adult	Commercial and public administration courses	1957/58	...	...	...	524	...
	Other vocational courses	1957/58	...	...	...	179	...
	Total	**1957/58**	**...**	**...**	**...**	**703**	**...**
	,,	1956/57	...	...	...	734	...
	,,	1955/56	...	...	...	604	...
	,,	1954/55	...	...	...	565	...
	,,	1953/54	...	...	...	396	...

1. Of which some schools with primary vocational courses.
2. Not including 13 (F.11) part-time teachers.
3. Several thousand pupils receiving secondary education (from 1 to 4 years) are included under primary education.
4. Not including 5 (F.3) part-time teachers.
5. Not including 26 (F.19) part-time teachers.
6. Not including 14 (F.8) part-time teachers.
7. Not including part-time teachers, as follows: 1957/58, 58 (F.41); 1956/57, 56 (F.38); 1955/56, 57 (F.40); 1954/55, 45 (F.29); 1953/54, 45 (F.30).
8. Including teacher training.
9. In the previous edition data for general education included teacher training.
10. Included with secondary general education.
11. Not including schools for physically handicapped children and for delinquent children.

2. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Secondary leaving certificate	45	...	45	...	46	...	45	...	56	...
Diploma of vocational schools	81	—	94	—	137	—	131	—	169	—
Diploma of teacher training schools:										
Secondary level	16	...	21	...	23	...	14	...	7	...
Higher grade A 1	...	...	9	...	14	...	24	...	10	...
Higher grade B 1	...	...	7	...	17	...	10	...	33	...

3. EDUCATIONAL FINANCE, 1957
(in Netherlands Antilles guilders)[1]

A. EXPENDITURE BY PURPOSE

	Amount
Total expenditure[2]	**16 682 627**
Recurring expenditure	15 213 141
For central administration	340 698
For instruction	
Salaries to teachers, etc.	12 024 344
Other instructional expenditure	213 682
Other recurring expenditure	2 634 417
Capital expenditure	1 469 486

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent
Total recurring expenditure		**15 213 141**	**100.0**
Central administration		340 698	2.2
Instruction		13 583 436	89.3
Pre-primary education	350 089		2.3
Primary education	5 412 701		35.6
Secondary education	7 624 809		50.1
General	5 856 346		38.5
Vocational	809 131		5.3
Teacher training	959 332		6.3
Special education	95 536		0.6
Adult education	100 301		0.7
Other recurring expenditure		1 289 007	8.5
Scholarships	1 075 364		7.1
Other expenditure, not specified	213 643		1.4

1. Official exchange rate: 1 Netherlands Antilles guilder = 0.53 U.S. dollar.

2. Closed account.

NETHERLANDS NEW GUINEA

THE EDUCATIONAL SYSTEM

The educational system in Netherlands New Guinea corresponds to the country's present stage of development. At the secondary level the emphasis is on professional and vocational training rather than on general education. The geographical expanse of the country, coupled with the low population density, makes it necessary for nearly all secondary schools to be provided with boarding accommodation.

The Protestant and Catholic missions play a prominent role in the provision of education. Funds for organizing training are also forthcoming from private undertakings or special foundations. All private schools qualify for government subsidies provided they comply with the regulations.

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary education in Netherlands New Guinea began just after the second world war, and has recently been expanding at a quickened pace.

The planning of secondary education is in the hands of the Cultural Affairs Board, with the Council for Popular Education and the education experts of the Protestant and Catholic missions acting in an advisory capacity. There is also a Teaching Materials Commission which deals with special teaching methods and the preparation of special manuals for Netherlands New Guinea.

The training of administrative officials is under the supervision of the Internal Affairs Board and is conducted by the various departments concerned. Other forms of training are in the hands of the mission bodies and inspected by the Cultural Affairs Board, or both administered and inspected by the Board.

All recognized schools are either financed entirely or subsidized by government funds. Apart from the school subsidy, the mission bodies administering schools receive a supplementary amount for administrative expenses and are responsible for paying teachers' salaries from the subsidy given. In the case of modern secondary schools (*hogere burgerscholen*) and advanced primary schools (*uitgebreid lager onderwijs* or ULO) school fees are charged on the basis of parents' incomes.

TYPES OF SECONDARY EDUCATION

Pupils completing their primary education have a choice between general secondary schools, vocational training or enrolment in a work-group giving them the possibility of further preparation through part-time instruction.

General secondary education covers the junior secondary schools (*primaire middelbare scholen*), the modern secondary schools and the ULO schools, and gives access to advanced professional training.

General secondary schools

The modern secondary and ULO schools are identical with the similarly-styled establishments in the Netherlands and have the same curricula. The curriculum for the junior secondary schools is adapted to Netherlands New Guinea's special needs, and comprises Dutch, English, mathematics, commerce, physics, biology, geography, history, drawing, physical training, handicrafts, singing.

A special class provides intensive instruction in Dutch for pupils who wish to study at a modern secondary school or an ULO school but lack sufficient mastery of the language.

Vocational and technical schools

Schools of administration. Two schools provide training for junior and senior officials respectively.

The OSIBA (for junior officials) consists of two sections: 'A' Section, with 2 years' school instruction and 1 year's practical work under the supervision of an experienced administrator; and 'B' Section, with a 2-year course. The curriculum for 'A' Section includes Dutch, English, arithmetic, geography, history, nature study, administration, typewriting and physical training, while that for 'B' Section includes Dutch, arithmetic, criminal law, State organization, political economy, ethnology, hygiene, special subjects for police officers, administration and physical training.

The Administration Institute (for senior officials), for which the condition for admission is a completed course at a secondary school, has the following curriculum: political science, public law, criminal law, civil law, ethnology, Malay, administration, typewriting, book-keeping, public health and first aid, and other selected subjects. The lessons are given by government officials.

Technical education. This is provided at elementary technical schools (metalwork and woodwork) and by part-time courses (metalwork and building) under the so-called apprenticeship system. The curriculum for the elementary technical schools comprises general education, theory of the subject, and practical work (in the proportion of 5:6:10). The curriculum for the part-time courses varies according to the form of apprenticeship and covers from 2 to 4 years, depending on the type of training, with 9 hours' instruction a week.

Training for employment in government service. This includes training for agriculture, sylviculture, medical services, navigation, meteorology, posts and telegraphs, fiscal services and accountancy. Some of these courses are full-time and others part-time. In the full-time courses, half of the available school time is usually devoted to practical exercises. The teaching staff consists mainly of officials of the government services concerned.

Teacher training schools

The 3-year training schools (*opleidingsscholen*) are designed to meet the ever-growing demand for teachers for the village schools.

The curriculum comprises education, Dutch, arithmetic, geography, history, civics, nature study, hygiene, music, drawing, writing, Malay, handicrafts, gardening and physical training.

Teacher training courses (*normalisten cursus*) train teachers for urban and continuation schools (*vervolgscholen*), the course lasting 3 years for pupils holding village teacher's diplomas and 2 years for pupils who have completed their education at junior secondary schools. The curriculum for these courses includes education, Dutch, arithmetic, geography, civics, history, State organization, natural history, hygiene, Malay and English.

TRENDS AND PROBLEMS

A superstructure of secondary education adapted to Netherlands New Guinea is to be created within the not too distant future. In consequence, a training college is to be opened as soon as possible to train teachers capable of replacing the European teaching staff.

The continued absence of a university and of a sufficient number of vocational schools is at present met by sending

qualified trainees to the Netherlands at the expense of the Government and other bodies.

[*Text prepared by the Netherlands Commission for International Co-operation, in August 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 700,000.
Area: 159,375 square miles; 412,781 square kilometres.
Population density: 4 per square mile; 2 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment was over 50,000 which represented about 7 per cent of the total population. This does not include persons attending adult education courses. (See Table 1.)

Educational finance, 1957. Central Government funds covered almost the total expenditure on education; recurring expenditure made up 98 per cent of the total. The cost per pupil (recurring expenditure only) was 170 guilders in 1957/58 as against 150 in 1954/55. (See Table 2.)

Sources. Government of Netherlands New Guinea: replies to Unesco questionnaires.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Infant schools, aided private	1957/58	7	8	8	368	...
	Infant schools, unaided private	1957/58	5	5	5	264	...
	Total	**1957/58**	**12**	**13**	**13**	**632**	**...**
	"	1956/57	11	11	11	516	...
	"	1955/56	7	7	7	382	...
	"	1954/55	6	7	7	384	...
	"	1953/54	3	6	6	271	...
Primary	Village school, public	1957/58	1	1	1	22	6
	General primary schools, public	1957/58	...	...	...	1 083	518
	European primary schools, public	1957/58	9	31	18	976	493
	Continuation schools, private	1957/58	19	84	*30	2 340	858
	Village schools, aided private	1957/58	566	826	23	25 343	11 138
	General primary schools, aided private	1957/58	19	56	27	2 020	855
	European primary schools, aided private	1957/58	5	24	18	850	422
	Village schools, unaided private	1957/58	465	489	...	14 684	6 569
	European primary schools, unaided private	1957/58	2	6	...	151	62
	Chinese primary schools, unaided private	1957/58	6	9	...	317	125
	Malayan school, unaided private	1957/58	1	8	...	263	128
	Total	**1957/58**	**[1] 1 093**	**[1] 1 534**	**...**	**48 049**	**21 174**
	"	1956/57	[1] 1 026	[1] 1 430	...	45 441	...
	"	1955/56	[1] 886	[1] 1 272	...	40 512	...
	"	1954/55	[1] 773	[1] 1 087	...	38 084	...
	"	1953/54	[1] 661	[1] 948	...	34 014	...
Secondary *General*	European post-primary schools, public	1957/58	2	14	3	243	120
	General post-primary school, aided private	1957/58	1	6	4	117	10
	Secondary school, aided private	1957/58	1	...	...	63	26
	European post-primary schools, unaided private	1957/58	2	3	...	25	...
	Total	**1957/58**	**7**	**[2] 23**	**...**	**448**	**...**
	"	1956/57	6	[2] 22	...	417	...
	"	1955/56	5	[2] 17	...	371	...
	"	1954/55	5	17	...	340	...
	"	1953/54	4	23	...	306	...

1. Not including public general primary schools.
2. Not including teachers of secondary high school (3 in 1954/55) and part-time teachers: 10 (F.2) in 1957/58: 7 (F.1) in 1956/57; 6 (F.–) in 1955/56; 7 (F. –) in 1954/55 and 7 (F.–) in 1953/54.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Vocational	Junior technical school, public	1957/58	1	2	—	38	—
	Agricultural schools and courses, public	1957/58	...	[3]7	—	110	—
	Other technical schools or courses, public	1957/58	...	[3]67	—	222	—
	Junior technical schools, aided private	1957/58	6	[3]16	—	387	—
	Girls' housewifery schools, aided private	1957/58	5	[3]6	[3]6	165	165
	Part-time vocational courses, public and aided private	1957/58	...	97	...	630	...
	Total	**1957/58**	[4]17	[3]195	...	[5]1 552	...
	„	1956/57	[4]18	[3]214	...	[5]1 573	...
	„	1955/56	[4]17	[3]*170	...	[5]*1 300	...
	„	1954/55	[4]13	[3]*120	...	[5]945	...
	„	1953/54	[4]9	[3]*100	...	[5]823	...
Teacher training	Training schools for village teachers, private	1957/58	5	21	1	436	44
	Higher courses, private	1957/58	3	8	—	25	4
	Total	**1957/58**	**8**	**29**	**1**	**461**	**48**
	„	1956/57	6	23	1	368	40
	„	1955/56	6	19	—	284	24
	„	1954/55	4	9	1	220	21
	„	1953/54	4	11	3	186	18
Higher *Technical*	School of administration, public	1957/56	1	12	...	13	—
	Training courses for Treasury officers, public	1957/58	2	16	...	25	—
	Total	**1957/58**	**3**	**28**	...	**38**	—
	„	1956/57	2	20	...	33	—
	„	1955/56	1	12	...	15	—
	„	1954/55	1	14	...	24	—
Adult	Courses for illiterates	1957/58	8	9	...	*160	...
	Courses in Dutch	1957/58	14	16	...	*280	...
	Total	**1957/58**	**22**	**25**	...	***440**	...
	„	1956/57	20	23	...	*400	...
	„	1955/56	10	10	...	*200	...
	„	1954/55	...	4	—	99	—
	„	1953/54	...	3	—	76	—

3. Including part-time teaching staff.
4. Number of institutions.
5. Including part-time pupils: 630 in 1957/58; 620 in 1956/57; 456 in 1955/56; 304 in 1954/55 and 219 in 1953/54.

2. EDUCATIONAL FINANCE, 1957 (in Netherlands New Guinea guilders)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**9 840 345**
Central Government	9 762 646
Tuition fees	77 699

B. EXPENDITURE BY PURPOSE

		Amount
Total expenditure[2 3]		**9 840 345**
Recurring expenditure		8 645 250
For administration	438 106	
For instruction[4]		
Salaries to teachers, etc.	5 221 863	
Other instructional expenditure	2 985 281	
Capital expenditure[5]		1 195 095

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**8 645 250**		**100.0**
Central administration		438 106		5.1
Instruction		8 207 144		94.9
Primary education	6 574 530		76.05	
Secondary education	1 627 064		18.82	
General	458 240		5.30	
Vocational[3]	646 262		7.48	
Teacher training	522 562		6.04	
Adult education	5 550		0.06	

1. Official exchange rate: 1 Netherlands New Guinea guilder = 0.263 U.S. dollar.
2. Closed account. Expenditure for higher education is not included.
3. Excludes expenditure for public secondary vocational education except for the Junior Technical School.
4. Not including expenditure for pre-primary education.
5. Not including expenditure on public school buildings.

SURINAM

THE EDUCATIONAL SYSTEM

As regards education, Surinam is entirely independent of the Kingdom of the Netherlands, although there is still a close resemblance between the school systems of the two countries.

The Surinam system comprises three stages: kindergarten and primary education for children up to about 13 years of age; secondary, up to about 18; and semi-university, higher technical and adult education. Education is compulsory from 7 to 12 years of age. The primary school course is normally 6 years but may last 7 years in schools for children from a non-Dutch speaking environment. On completing this course, pupils have a choice between the 2-year continued elementary schools, the home economics school for girls, the 4-year advanced elementary schools (*meer uitgebreid lager onderwijs* or MULO) and the technical school; for each of the two last-named schools there is an entrance examination. Girls completing a continued elementary school may take the infant teachers' course at the Training College. There is also an elementary agricultural school for pupils aged 15 and over. After the third year in a MULO school pupils may enter the training college or, on their passing an entrance examination, the secondary school (*algemene middelbare school*—AMS). Beyond this level there are various vocational courses, as a rule part-time, two institutes of semi-university status, the Medical School and the Law School, and the possibility of study overseas. There is elaborate legislation on matters relating to primary education. For other levels and types and schools, which are mostly of recent date, provisional arrangements have often been made. The heterogeneity of the population —with the various groups speaking their own language, while the official medium is Dutch—is a complicating factor in teaching.

The Minister of Education and Popular Culture is assisted by the Director of Education, who is the head of the Department. The latter is responsible for supervising the quality of instruction and distributing the moneys made available for education, including subsidies to private schools.

THE DEVELOPMENT OF SECONDARY EDUCATION

Continued elementary education started in 1816 and advanced elementary in 1909. The technical school has been in existence for 75 years but was reorganized in 1950, the year in which the secondary school was opened. The training college started as a day school in 1949.

Legal measures are in preparation and have already been partly put into effect. No education at secondary level is at present covered by compulsory attendance requirements.

The curricula for the various types of school are laid down by the Department of Education in consultation with the staff of the schools in question. The technical and home economics schools have in addition a supervisory board and a committee, respectively, which act in an advisory capacity.

The primary school inspectors also inspect the continued and the advanced elementary schools. The Chief Inspector inspects the other schools with the exception of the secondary school (AMS), which is inspected by the Director of Education. There is no special inspectorate yet for secondary education but it is expected that some such provision will be made in the near future.

Financing is by means of government grants, which are paid directly to the public schools and indirectly to the private schools. Teachers' salaries are paid according to the Public Service scale.

The school year begins on 1 November and ends on 31 October. Holidays are given at Christmas, Easter and Whitsun, and the long vacation is from the middle of September to 1 November. Each class has about 23 hours' tuition a week (more in the technical school), usually distributed over 5 or 6 days.

General secondary schools

Continued elementary schools offer a 2-year course after the sixth class of the elementary school. Besides the elementary school subjects, simple book-keeping and commercial arithmetic are taught.

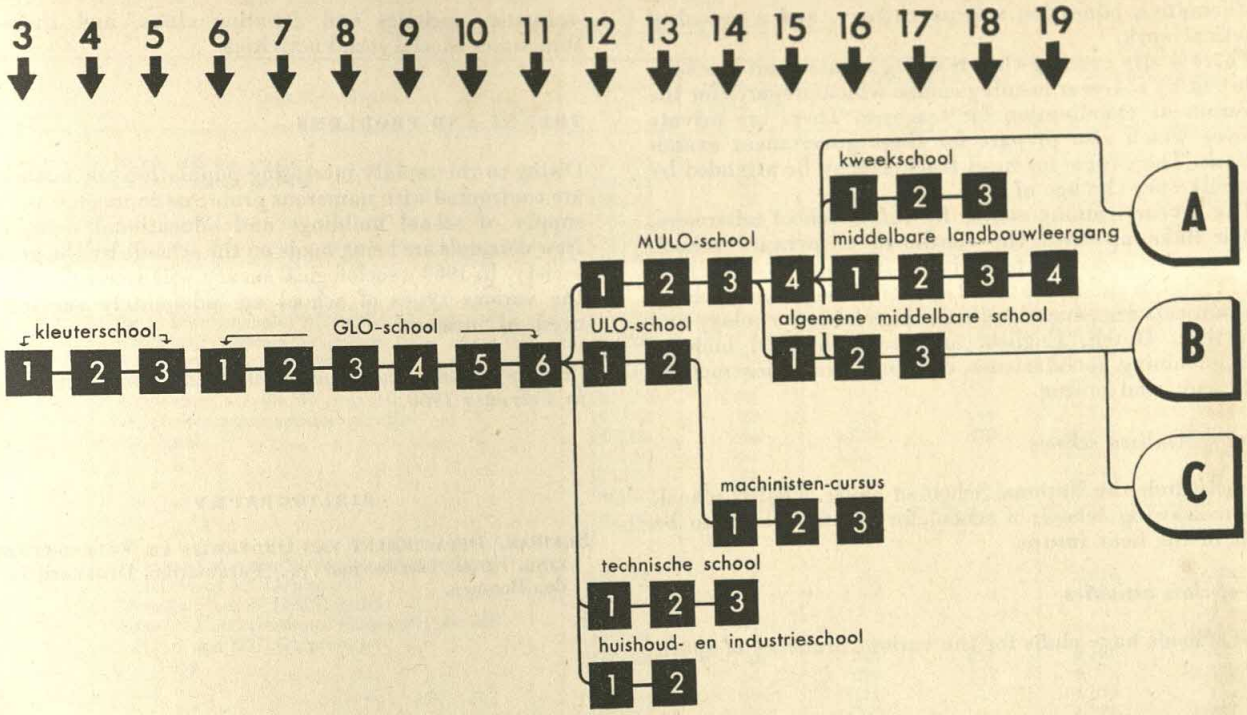
Advanced elementary schools have a 4-year course divided into two parallel sections, A and B. Pupils continue with the subjects taught in elementary school and take certain additional subjects; in the A section these are commercial science, English, French and Spanish, and in the B section mathematics, physics, English, French or Spanish, and German. The course leads to a final examination. Progress reports are sent to parents.

The secondary school (AMS) has four sections: A, B, C and D. Sections C and D are more in the nature of vocational training courses. Admission to A and B is by means of an entrance examination after at least 3 years of advanced elementary education. Both sections offer preparatory scientific training which gives admission to universities in the Netherlands. The A section has as its main subjects commercial science and foreign languages; the B section, mathematics, physics and other sciences.

Vocational and technical schools

The technical school gives 3 years' training. The sections are carpentry, brick-laying, painting, fitting, electricity, motor-repairing. In addition, pupils study general subjects. Evening classes are organized for those who are already working.

The home economics school offers a 2-year course in subjects such as cooking, sewing, laundry, child care, etc.



GLOSSARY

algemene middelbare school: upper general secondary school with two streams, one emphasizing modern languages and commercial subjects, the other mathematics and physical science.

GLO-school (elementary school): primary school of three kinds—GLO-A for Dutch-speaking children, GLO-B for non-Dutch-speaking children and District-GLO for rural children.

huishoud- en industrieschool: vocational training school of home economics.

kleuterschool: pre-primary school.

kweekschool: teacher-training school.

machinisten-cursus: vocational training course for machinists.

middelbare landbouwleergang: vocational training school of agriculture.

MULO-school (advanced elementary school): lower secondary school with two courses, general and commercial.

technische school: vocational training school for boys.

ULO-school (continued elementary school): two upper classes attached to primary school giving pre-vocational training.

HIGHER EDUCATION

A. *Rechtsschool:* law school.
B. *Geneeskundige school:* medical school.
C. University study abroad.

There are also special evening classes attached to this institution.

The elementary agricultural school admits pupils aged 15 and over and gives a mainly practical course in farming.

Sections C and D of the AMS school, which were begun only recently, provide courses emphasizing training for managerial and administrative careers. In the C section commercial science is preponderant. In the D section correspondence in foreign languages, typewriting and shorthand are the principal subjects.

In addition to these schools special classes are organized by the various government departments, for example: a 3-year course for training nurses, linking up with the continued elementary school, courses for laboratory workers and analysts, customs officers, policemen (lower and middle ranks), and supervisory staff of the Department of Public Works and Traffic. There is also a special course at the Law School based on the advanced elementary school, for certain administrative posts.

Evening classes are also conducted by private persons. Thus there is a private school for training in inland and coastal navigation, training courses for office staff, etc. Moreover there are a number of young people who study by means of correspondence courses most of which come from the Netherlands and the United States of America.

Teacher training schools

The Surinam Training College has a 3-year full-time course for primary teachers. The entrance requirement is 3 years of advanced elementary education. The programme comprises reading, writing, arithmetic, Dutch, history, geography, biology, singing, drawing, manual instruction, hygiene, gymnastics, English and another foreign language,

mathematics, education and psychology, and a period of practical work.

There is also evening-class training for assistant teachers, followed by a 4-year evening course which prepares for the government examination for teachers. There are private courses which also prepare for these government examinations. The course for head teachers may be attended by teachers over the age of 18.

The 4-year training course for infant-school mistresses, which links up with the continued elementary school, prepares for a certificate entitling its holder to teach at infant schools and in the first 2 classes of the primary school. The subjects are education (including child psychology and didactics), Dutch, English, arithmetic, history, biology, speech training, social science, drawing, manual instruction, child care, and sewing.

Other specialized schools

These include the National School of Music, a ballet school, and a drawing school; a school for plastic arts is to be built in the near future.

Out-of-class activities

Most schools have clubs for the various branches of sport, dramatics societies and debating clubs, and there are sometimes special social activities.

TRENDS AND PROBLEMS

Owing to the rapidly increasing population the authorities are confronted with numerous problems connected with the supply of school buildings and educational equipment. New demands are being made on the schools by the growing society. In 1960 a sociological survey will ascertain whether the various types of school are adequately serving the needs of Surinam.

[*Text prepared by the Department of Education, Paramaribo, in February 1960.*]

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STATISTICS

Population (mid-year 1958 estimate):[1] 267,000.
Area: 55,144 square miles; 142,822 square kilometres.
Population density: 4 per square mile; 2 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total school enrolment (not including vocational schools other than the public technical school) comprised 61,500 pupils, or 23 per cent of the total population. Of these pupils, 14 per cent were enrolled in infant schools, 74 per cent in primary schools, 9 per cent in general secondary education and the rest in teacher training and higher education. Except for the technical school attended only by boys, the numbers of boys and girls were about equal at each level of education from pre-primary through secondary. At the higher teacher training college, the proportion of girls was 43 per cent, in the medical and law schools together only 11 per cent. Women teachers made up 53 per cent of the teaching staff in primary schools, 47 per cent in secondary schools. The pupil-teacher ratio was 36 in primary schools, 22 in general secondary schools, 34 in the technical school and 12 in the teacher training school. Between 1953 and 1957, total school enrolment increased by about 20 per cent. (See Table 1.)

1. Including Indian and Negro populations living in tribes, estimated at 26,000 in 1950 and 1958.

Enrolment trends in secondary education, 1930–57. Between 1930 and 1954, enrolment in general secondary schools (MULO and AMS) increased threefold, though the proportion of girls showed some decline. For the period 1955–57, with further increasing enrolment, the proportion of girls again reached 45 and 47 per cent. Average total enrolment at the secondary level then amounted to about 29 per cent of the estimated population 15–19 years old. (See Table 2.)

Examination results in secondary education, 1956–57. In 1956 and 1957, the numbers of certificates granted were as follows:

Certificate	1956/57		1957/58	
	Total	Female	Total	Female
Final examination in continued elementary schools (ULO) . .	314	161	350	150
Final examination in advanced elementary schools (MULO) . .	346	148	300	120
Final examination in secondary schools	39	7	49	12
Technical school diploma . . .	68	–	124	–

Sources. Surinam: Department of Education and Statistics Bureau, Paramaribo, replies to Unesco questionnaires.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Infant schools, public	1957/58	13	36	...	1 457	714
	Infant schools, private	1957/58	61	188	...	7 274	3 545
	Total	**1957/58**	**74**	**224**	**...**	**8 731**	**4 259**
	,,	1956/57	72	218	...	8 253	4 103
	,,	1955/56	74	206	...	8 208	...
	,,	1954/55	65	187	...	7 560	3 865
	,,	1953/54	65	188	...	7 162	3 573
Primary[1]	Elementary schools, 'A', public	1957/58	6	84	58	2 991	1 291
	Elementary schools 'B', public	1957/58	5	50	19	1 912	852
	Rural elementary schools, public	1957/58	53	322	155	11 404	5 403
	Elementary schools 'A', private	1957/58	17	199	128	7 148	3 515
	Elementary schools 'B', private	1957/58	24	287	163	10 461	5 245
	Rural elementary schools, private	1957/58	48	331	149	11 747	5 638
	Total	**1957/58**	**153**	**1 273**	**672**	**45 663**	**21 944**
	,,	1956/57	151	1 217	...	43 381	20 863
	,,	1955/56	146	1 165	...	41 283	...
	,,	1954/55	140	1 031	...	39 302	18 810
	,,[2]	1953/54	171	1 081	*550	39 831	18 986
Secondary							
General	Advanced and continued elementary schools (ULO and MULO), public	1957/58	6	83	45	2 016	789
	Secondary school (AMS), public	1957/58	1	36	8	241	63
	Advanced and continued elementary schools (ULO and MULO), private	1957/58	8	123	61	3 131	1 685
	Total	**1957/58**	**15**	[3]**242**	[3]**114**	**5 388**	**2 537**
	,,	1956/57	14	[3]228	[3]107	4 936	2 201
	,,	1955/56	13	[3]211	...	4 613	...
	,,	1954/55	13	[3]204	...	4 380	1 940
	,,[2]	1953/54	9	151	55	2 978	1 237
Vocational	Technical school, public						
	Total	**1957/58**	**1**	[4]**21**	—	[5]**724**	—
	,,	1956/57	1	[4]25	—	[5]667	—
	,,	1955/56	1	[4]21	—	[5]529	—
	,,	1954/55	1	[4]21	—	[5]553	—
	,,	1953/54	[6]5	[6]87	[6]9	[6]805	[6]192
Teacher training	Teacher training school, public	1957/58	1	[7]56	...	488	254
	Teacher training school, private	1957/58	1	16	...	94	39
	Total	**1957/58**	**2**	[7]**72**	**...**	**582**	**293**
	,,	1956/57	2	[7]83	...	671	332
	,,	1955/56	2	[7]76	...	497	...
	,,	1954/55	2	[7]74	...	489	...
	,,	1953/54	2	[8]41	[8]8	[8]307	[8]187
Higher							
Teacher training	Teacher training college, public						
	Total	**1957/58**	**1**	[9]**...**	**...**	**217**	**94**
	,,	1956/57	1	[9]...	...	148	69
	,,	1955/56	1	[9]...	...	153	...
	,,	1954/55	1	[9]...	...	133	...
	,,	1953/54	1	[9]...	...	...	...
General and technical	Medical school, public	1957/58	1	16	...	44	3
	Law school, public	1957/58	1	19	...	88	11
	Total	**1957/58**	**2**	**35**	**...**	**132**	**14**
	,,	1956/57	2	33	...	161	10
	,,	1955/56	2	40	...	176	...
	,,	1954/55	2	40	...	258	20
	,,	1953/54	2	40	...	[10]220	[10]16

1. From 1954/55, not including private schools for restricted elementary education of Amerindians and bush Negroes ('Bushland schools') which provide education lower than that of the first level. Data are as follows: 1956: 1,220 pupils; 39 teachers. 1957: 1,324 pupils; 44 teachers.
2. In 1953/54, continued elementary schools (ULO) are included with 'primary'.
3. Including part-time teachers.
4. Including part-time teachers as follows: 1957/58, 7; 1956/57, 5; 1955/56, 8; 1954/55, 8.
5. Including part-time pupils as follows: 1957/58, 295; 1956/57, 326; 1955/56, 246; 1954/55, 315.
6. Including agricultural and domestic science schools.
7. Including higher teacher training.
8. Public schools only.
9. Included in secondary teacher training.
10. Law school only.

2. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	966	45	...	...	...	...			
1931	948	44	...	...	...	...			
1932	996	44	...	...	...	...	[2]1.0	13	[2]*7.7*
1933	985	43	...	...	...	...			
1934	975	45	...	...	...	...			
1935	949	45	...	...	...	...			
1936	939	46	...	...	...	...			
1937	931	47	...	...	...	...	[2]0.9	14	[2]*6.9*
1938	955	46	...	...	...	...			
1939	971	43	...	...	...	...			
1940	1 093	41	...	...	...	...			
1941	1 147	47	...	...	...	...			
1942	1 249	40	...	...	...	...	[2]1.3	15	[2]*9*
1943	1 442	40	...	...	...	...			
1944	1 708	40	...	...	...	...			
1945	1 978	41	...	...	...	...			
1946	2 229	40	...	...	...	...			
1947	2 435	40	...	...	...	...	[2]2.3	16	[2]*14*
1948	2 773	40	...	...	...	...			
1949	1 856	40	...	...	...	...			
1950	2 331	38	417	40	...	...			
1951	2 614	40	635	27	...	...			
1952	2 770	41	791	25	694	...	[2]2.8	19	[2]*15*
1953	2 978	42	805	24	[3]307	61			
1954	3 256	42	[4]553	—	489	...			
1955	4 613	...	[4]529	—	497	...			
1956	4 936	45	[4]667	—	671	49	6.2	21	*9*
1957	5 388	47	[4]724	—	582	50			

1. From 1930 to 1954, not including continued elementary schools (ULO).
2. General education only.
3. Public schools only.
4. Technical school only, not including agricultural and domestic science schools.

THE EDUCATIONAL SYSTEM

New Zealand was founded by settlers who, in the main, were British and to this day its people are predominantly of British stock; ethnic, linguistic and cultural ties with the United Kingdom have always been particularly strong. The educational pattern is thus basically British but has been modified, often radically, to fit the changed conditions of a new country. In recent years, too, American influence is clearly discernible. As a result of economic, social and historical factors New Zealand has been noted for fifty years for its egalitarian tendencies, for the high degree of democratic participation of its people in community affairs and for its widespread development of social services, foremost among which is a system of public schools that provide free primary and secondary education from 5 to 19 years of age for every child who wants it, and university education which is virtually free to every young person who possesses the entrance qualification.

Public education in New Zealand, exclusive of the universities, is administered centrally by the Department of Education and locally, for the primary schools, by the 10 regional Education Boards elected by the school committees of the various primary schools within the district. Historically the tendency has been for the final power and responsibility to shift from the school committees to the Education Boards, and from the Education Boards to the Department, but the whole of the machinery of local administration has been retained and local interest in education remains firmly entrenched.

Apart from a few technical schools which are under the control of Education Boards, secondary,[1] technical and combined schools are administered by local Boards of Governors or, in the case of technical schools, Boards of Managers, that are quite independent of the primary school Education Boards and deal directly with the Education Department. These Boards controlling post-primary schools (one or several schools in the same town) are made up of representatives of the parents of pupils, of local bodies and Education Boards, and, in the case of technical schools, of employers and employees in local industries. In some cases there are representatives appointed by the Government.

Approximately 12 per cent of primary pupils and 18 per cent of post-primary pupils attend private schools, the majority conducted by the Roman Catholic Church. These receive no grants from state funds but certain state services are available to them.

The University of New Zealand, although largely financed by the State through the Department of Education, is an autonomous body.

The structure of the school system is shown in the diagram on page 877.

Legally every child in New Zealand is required to attend school between the ages of 7 and 15 years, but, in fact, most begin their schooling at 5 and continue it beyond the permissible leaving age. Increasing numbers of children spend 1 or 2 years prior to entering primary school attending free kindergartens or nursery play centres controlled by voluntary associations but assisted by the State. Children normally spend 8 years in the state primary schools. The primary course covers a 2-year infant school (primers 1 to 4), followed by 4 classes known as standards 1 to 4, and a further 2 known as forms 1 and 2. The 2 upper classes (forms 1 and 2) are sometimes organized separately as an intermediate school.

Pupils leave the primary system at about the age of 13 without sitting any external examination, and go to either a secondary school, a technical high school, a combined school or, in the relatively isolated rural areas, a district high school. All technical schools, and many secondary schools, offer evening classes, particularly in practical and vocational subjects. Apprentices in many trades are required to attend certain evening classes as part of their training, and an increasing number are given leave from work to attend special day classes conducted by the technical schools. For pupils remote from school transport the Correspondence School, which has both primary and post-primary divisions, provides courses in all the usual school subjects.

After 3 years of post-primary education (forms 3 to 5) pupils may sit the School Certificate examination; if successful they pass into form 6 where they may be accredited for University Entrance by the principals of most post-primary schools. Those not accredited may sit the external University Entrance examination. Pupils who really intend to go on to university usually spend an additional year in the sixth form.

Special arrangements are made for the education of certain groups of children. Maori children may, and largely do, attend the ordinary public schools but in certain areas there are Maori schools specially designed to meet the needs of Maori pupils. Separate provision has also been made for handicapped children–those suffering from cerebral palsy, the blind, the deaf, the backward and the delinquent.

THE DEVELOPMENT OF SECONDARY EDUCATION

Educational policy in New Zealand, with its underlying philosophy, is best summed up in the official statement

1. In New Zealand, the three stages of education are usually known as primary, post-primary, and higher education. The word 'secondary' is also commonly used to describe everything pertaining to the second stage of education, so that 'post-primary' and 'secondary' used in this sense are synonymous. Through early historical associations the word 'secondary' is, however, often used in New Zealand in a narrower sense to describe the particular type of academic education given at the second stage. The context should make it clear when 'secondary' is being used in its generic and when in its restricted sense.

that 'The Government's objective, broadly expressed, is that every person, whatever his level of academic ability, whether he be rich or poor, whether he live in town or country, has a right, as a citizen, to a free education of the kind for which he is best fitted, and to the fullest extent of his powers'. The measures taken to achieve this objective provide the key to understanding the development of post-primary education in New Zealand.

The first secondary schools established in the middle of last century followed traditional English models of that period and catered only for the children of well-to-do parents. In 1900 they were still a privileged group. They were endowed from public funds, they charged fees and were completely free of state control. Only about 10 per cent of children leaving primary school attended secondary schools. The curriculum was based on that of the English grammar schools on which they were patterned—English, French, Latin, Greek, mathematics, a science and history or geography. It was basically preparatory for the university and the University Entrance examination was the admitted goal for all pupils.

The problem, then, was to bring the secondary schools within the orbit of the State, to increase the opportunities for attendance at secondary schools and to adapt the curriculum to the needs of a vastly augmented secondary school population. By various means progress was made.

In 1879 the first 'district high school' was established in Otago by adding a post-primary top to a primary school, and this type of institution proved very successful in bringing post-primary education to pupils in rural communities.

Technical high schools were established in 1914; before this they were day technical schools attached to the evening classes that had grown up to provide mechanics with training in their special skills. The day schools were intended to give the basic general training needed by the young tradesmen. They became very popular as they provided a general education of a non-academic character, something that could not be obtained at that time at a secondary school.

Combined schools were formed by the amalgamation of a technical and a secondary school in a provincial town.

Free places were instituted, and secondary schools induced by special capitation grants to provide them. By 1914 all state post-primary schools were obliged to give free places for 2 years at least to any pupil who had passed the Proficiency examination at the end of his primary school course. In 1936 the Proficiency examination was abolished, and free post-primary education to the end of the year in which he reached 19 years of age became available to every child.

A direct effect of this movement towards free post-primary education was that the Department began to exercise an increasing degree of control over the secondary schools. The Education Amendment Act 1920 authorized the establishment of New Zealand staffing and salary scales for post-primary schools, and instituted the system already operative in the case of the Education Boards of paying over to the schools the exact sum required for salaries plus a capitation grant for incidental expenses, less the amount received from local secondary-school endowments. This, in effect, nationalized these endowments, and spread more evenly the benefits resulting from the foresight of the early settlers. As from 1 April 1949 all revenue received by the schools was handed over to the Crown and the total cost of salaries and incidental expenses met from the Consolidated Fund. The endowment reserves themselves were vested in the Crown as from the beginning of 1950.

Thus by 1936 the first two objectives had been reached. A reasonable measure of state control of secondary schools had been achieved, while retaining the initiative of a considerable local control. Complete freedom of entry from the primary to the secondary schools had been established and in fact 60 per cent of those leaving primary schools now passed to secondary.

GLOSSARY

contributing school: primary school from which pupils of the senior division (usually forms 1 and 2) have been removed to an *intermediate school* or to the *intermediate department* of a secondary school.

correspondence school: an institution providing correspondence courses covering primary and secondary education for children living in isolated areas or invalid children.

dental nurses' school: vocational training school for staff in state dental clinics for school children.

district high school: complete rural primary school with secondary department attached, some of these schools being Maori district high schools.

full primary school: school providing complete primary course (*infant department*, followed by standards 1 to 4 and forms 1 and 2).

infant department: first two years of primary school course, usually comprising four primer classes.

intermediate department of secondary school: see *intermediate school.*

intermediate school: upper primary school existing either as a separate institution or as a department attached to a secondary school.

kindergarten: pre-primary school.

kindergarten teacher training centre: State-subsidized training course for teachers in pre-primary schools.

Maori school: primary school, chiefly for Maori children, controlled by Department of Education; may be either *full primary school*, *contributing school* or *district high school.*

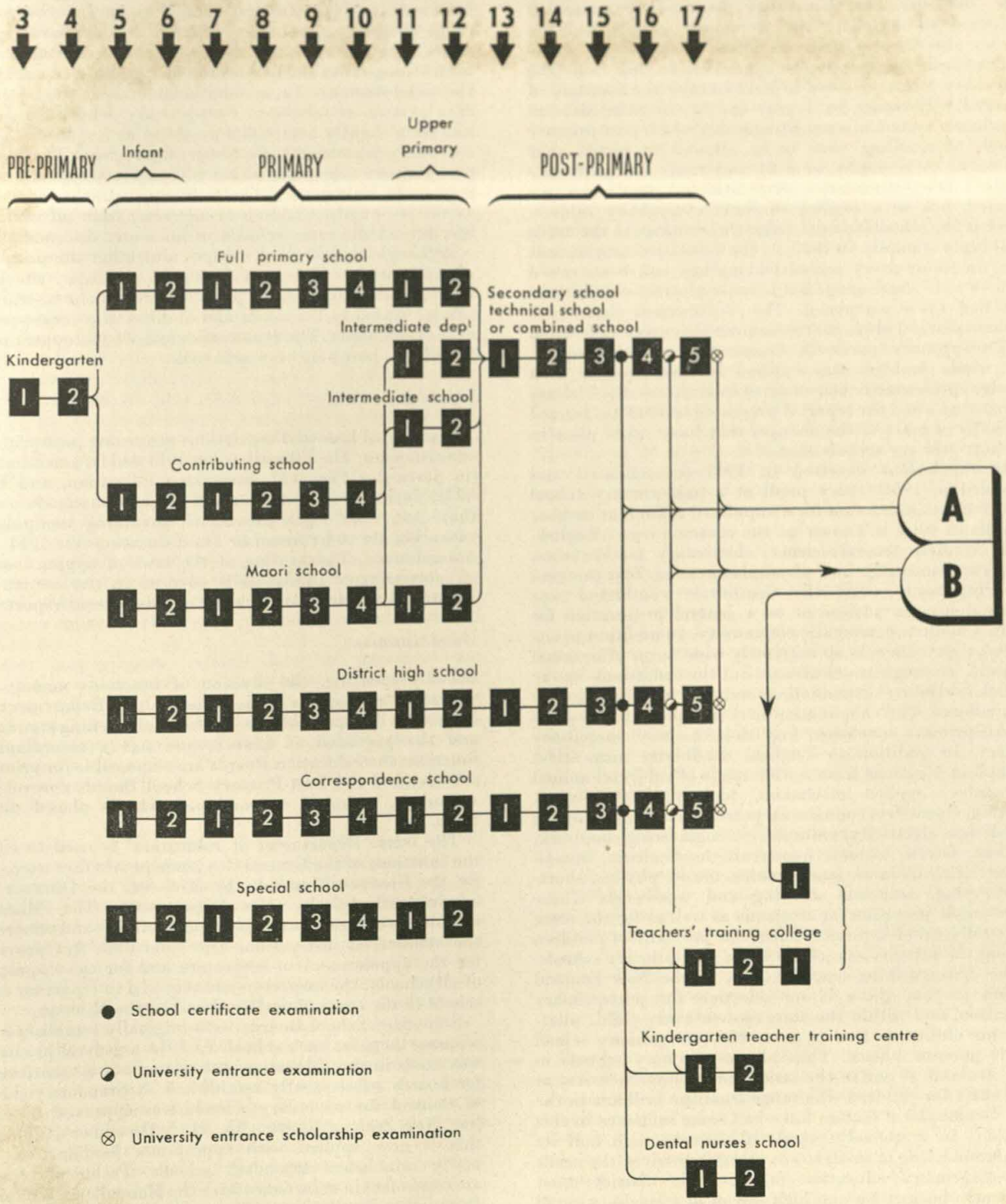
secondary school, *technical school* or *combined school:* secondary school offering general and vocational courses, the emphasis varying from school to school.

special school: either a separate institution or special classes attached to a primary school providing primary education for physically or mentally handicapped children.

teachers' training college: institution providing teacher training courses at two levels, post-secondary and post-graduate.

A. Post-secondary vocational and professional training at institutions other than universities.

B. Universities.


3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
PRE-PRIMARY
Infant
PRIMARY
Upper primary
POST-PRIMARY
Full primary school
Kindergarten
Intermediate dep[1]
Secondary school technical school or combined school
Intermediate school
Contributing school
Maori school
A
B
District high school
Correspondence school
Special school
Teachers' training college
Kindergarten teacher training centre
Dental nurses school
School certificate examination
University entrance examination
University entrance scholarship examination

The problem of reorganizing the curriculum was proving more difficult. The University Entrance examination continued to dominate the secondary schools and the courses offered were quite unsuited to the needs of the vast majority of the pupils. However, at this stage the University Senate decided in 1942 to raise the standard of University Entrance by 1 year and at the same time to introduce a system of accrediting under which post-primary schools of standing were to be allowed to certify that certain of their pupils were fit and ready for university studies. The examination remained for pupils not accredited, but with English the only compulsory subject. This left the schools freer to tailor their courses to the needs of all types of pupils. In 1920, by the Education Amendment Act, the compulsory school leaving age had been raised from 14 to 15 years of age but because of various difficulties this had been postponed. The Government desired to implement it in 1944 so that a comprehensive reconsideration of post-primary curricula became increasingly urgent. The whole problem was referred by the Minister to a widely representative consultative committee—the Thomas Committee—and the report it presented in 1943 has formed the basis of most of the changes that have taken place in the post-primary schools since.

By regulations gazetted in 1945 (consolidated and amended in 1954) every pupil at a post-primary school must receive instruction for a stipulated minimum number of units in what is known as the common core—English, social studies, general science, elementary mathematics, music, arts and crafts and physical education. This common core represents what the Committee considered was essential for the adolescent as a general preparation for life in a modern democratic community. In addition to the common core there is an extremely wide range of optional subjects. The regulations also set out the conditions for the School Certificate examination and the prescriptions for each subject. The examination may be taken after 3 years of post-primary education. English is the only compulsory subject. In addition to English, candidates may select either 3 or 4 options from a wide range of subjects: animal husbandry, applied mechanics, biology, book-keeping, clothing, chemistry, commercial practice, dairying, drawing and design, electricity, embroidery, engineering shopwork, German, Greek, history, homecraft, horticulture, human biology, Latin, Maori, mathematics, music, physics, shorthand-typing, technical drawing and woodwork. These make ample provision for academic as well as for the more practically minded pupils. Today 95 per cent of children leaving the primary schools go on to post-primary schools.

The distinguishing feature, then, of the New Zealand system is that there is no selection for post-primary education, and within the state system every child, whatever his ability, is free to go to the post-primary school of his parents' choice. Thus all post-primary schools in New Zealand, if not in the strict sense comprehensive, at least cater for children who range from the brilliant to the dull. Geographical factors have had some influence in this decision. In a sparsely populated country with half its population living in small towns or rural districts, the needs of post-primary education for a whole district must frequently be met by one high school or even by a small secondary department attached to a primary school, so that a comprehensive school is the inevitable solution. Moreover, in New Zealand there has never existed the range of social and economic differences that characterizes many older countries, and the conception of class has never been strong. Thus the democratic and egalitarian nature of the social structure was an additional factor in the rejection of a system of selection. Post-primary schools range in size from slightly over 1,000 pupils to as few as 25 in the secondary department of a district high school. The typical post-primary school has about 650 pupils. Great attention is given to making education as freely available to country as to city pupils. Children of all races, from all walks of life, attend the same schools without any discrimination.

Although New Zealand escapes altogether the problems of selection faced in most European countries, she does face difficulties inherent in providing within one institution courses suited to the needs and abilities of a cross-section of the community. The democratic ideal of equal opportunity for all has, however, been achieved.

Legal basis

The principal laws and regulations governing post-primary education are: The Education Act 1914 and its amendments (in particular Part VII, Secondary Education, and Part VIII, Technical Education); and Regulations made under that Act. The legal provisions governing compulsory education are to be found in The Education Act 1914 and Amendments. The bearing of the laws of apprenticeship on post-primary education is covered in the section on vocational and technical schools of this present report.

Administration

Broadly speaking, the division of functions among the education authorities is as follows: the Department of Education is responsible for professional teaching standards and the provision of finance, and has a co-ordinating function; the Education Boards are responsible for primary schools; and the Post-Primary School Boards control the secondary, technical or combined schools placed under them.

The term 'Department of Education' is used to cover the functions of the Central Government whether exercised by the Governor-General, the Minister, the Director or, administratively, by the Department. The Minister establishes or recognizes post-primary schools and prescribes the syllabus of instruction. The Education Act provides for the appointment of inspectors and for the inspection of all schools; the inspectors are required to report on each school to the controlling Board and to the Minister.

Secondary School Boards were originally established by separate Acts for each school. In 1914 a general provision was made in the Education Act setting out a constitution for boards subsequently established. A Standard Scheme of Control for secondary schools was approved in 1928 (see *New Zealand Gazette*, No. 91, 6 December 1928) and this is now applied with appropriate modifications to newly established secondary schools. Technical schools are controlled in accordance with the Manual and Technical Instruction Regulations 1925.

The Scheme of Control of the school defines the powers

of the governing body and of the principal. The most important relevant provision makes the controlling board fully responsible for control and management of the school and the supervision of all its concerns and property, subject to the provisions of the Education Act and of the Scheme itself. The board has full power to appoint, suspend and dismiss teachers subject to the provisions of the Education Act and Regulations, and may make Regulations to cover any matters not otherwise provided for.

Subject to the general direction of the board the principal is in charge of the buildings and premises of the school and the furniture and apparatus. He is the final authority with regard to the discipline of the pupils, and may suspend a pupil from attendance until the board comes to a decision in the matter. He makes regulations concerning textbooks, methods and organization, and has power to recommend the appointment or dismissal of teachers and to allot them their duties. He must be consulted before appointments are made and may suspend a teacher for grave neglect of duty, pending a decision by the board. All these powers of the principal are held subject to the general power of the board. The programme of each pupil is determined by the principal after consultation with his parents or guardians. The prescribed courses of study at post-primary schools are set out in regulations under The Education Act, namely, The Education (Post-Primary Instruction) Regulations 1954. Regarding matters not therein prescribed the controlling boards have the power to determine the courses of study of the pupils, although, in practice, this power is almost invariably delegated to the principal. The Board of Managers of a technical school has a status and powers similar to those of a secondary school Board of Governors.

Most post-primary schools have a parent-teacher association which raises funds and takes an interest in the general welfare of the school. Such associations have no legal status but by fund-raising and through discussion with the principal and staff they unofficially exert some influence on the school. They can also be of the greatest value in fostering local interest in and knowledge of the work done in the school.

Supervision and inspection. Today (1960) there are 38 inspectors of post-primary schools under the control of the Chief Inspector and working in four districts. They are recruited from among outstanding teachers in grade V, which is the top grade, and, with rare exceptions, they are university graduates with good degrees and sound teaching experience in post-primary schools. Their duties are many and varied. They grade annually all post-primary teachers. They inspect all post-primary schools at intervals of three or four years and submit reports designed to give a clear assessment of the whole work of the school, including information concerning the staff, organization, buildings and equipment, and grounds, as well as information about the work being done in the various subjects. The inspectors also act as an agency for collecting and disseminating new ideas and teaching methods among teachers throughout the country. They take an active part in the organization and work of refresher courses and give valuable advice and assistance in teacher training. They also visit private schools to ensure that satisfactory standards of work are maintained. The assessment of standards of work in form 6 in all post-primary schools is another of their important duties, particularly the work in the upper sixth in connexion with the award of Higher School Certificates. In addition several inspectors have been assigned special duties in connexion with teacher recruitment, technical classes and manual training, examinations and studentships, and the teaching of mathematics and science.

Finance. The Central Government provides all the funds required for the establishment, operation and maintenance of state secondary schools, and has also provided a considerable portion of the finance required to establish school hostels attached to some of the schools, although some part of the funds for these activities has been provided by the various controlling authorities of the schools, in the form of loans, bank overdrafts, etc. A certain amount of finance is raised by the schools themselves, from parents' contributions or school functions, to provide additional amenities such as swimming baths and sports pavilions. In some cases funds raised for these purposes attract a subsidy from the Central Government. In addition to the state secondary schools there are a number of denominational secondary schools run by various church organizations. These schools receive no direct financial assistance from the Government towards buildings, maintenance or operational costs.

Funds provided by the Government are appropriated by Parliament each year as part of its overall finances and are distributed to the schools by the Education Department in two ways: (a) by making grants to the schools for specified purposes; (b) by refunding to the schools the sums paid out for various purposes.

Types of expenditure covered by (a) comprise administrative costs, class materials, libraries, heating, lighting, cleaning, maintenance of grounds and general running expenses. Expenses covered on a refund basis, i.e., under (b), include salaries and allowances of teachers, erection of buildings, initial supply of equipment, maintenance of buildings, wages of caretakers and groundsmen, transport of pupils, boarding allowances for eligible children and cost of school textbooks.

The Central Government meets the full cost of new buildings and of the initial supply of equipment to schools. It also meets the cost of maintaining buildings and the cost of additional equipment required for new courses and extended syllabus requirements. The schools themselves have to provide, from the general grant given for running expenses, any sums required for the replacement of equipment. Post-primary teachers are employed and paid by the individual controlling boards, but their salaries and conditions of service are fixed on the national basis and the money spent for this purpose is refunded to the board by the Central Government.

Post-primary education is free to all pupils up to the age of 19 years and everyone, irrespective of age, is entitled to 5 years of free post-primary education. Broadly speaking, education is divided into two groups: (a) normal day classes, (b) evening or continuation classes. As a general rule no fees are payable for ordinary day classes. For evening and continuation classes a small registration fee of 5 to 10 shillings is charged, and most schools charge for materials used. Where pupils have exhausted their free

period of education a fee becomes payable; this begins at from 30 to 60 shillings for one evening per week and increases to from 70 to 180 shillings for five evenings per week. The board controlling the school attended by such pupils has power to remit these fees.

New Zealand is noted for its advanced social services, and considerable assistance is given to parents in connexion with post-primary education. The child allowance of 15 shillings per week is extended beyond the normal 16 years of age and paid to parents throughout the child's attendance at post-primary school. Free textbooks are provided, and free transport for all pupils living more than 3 miles from the nearest post-primary school. If there is no suitable transport a boarding bursary is available. Bursaries are also available to permit pupils in a district high school to take a sixth-form course in one of the larger post-primary schools approved as an accrediting school. Technical bursaries are available to allow country pupils to follow technical courses at schools in the larger centres. Free milk is distributed daily to all pupils who desire it and free dental service and medical inspection are available.

Buildings and equipment. Great attention is given to the buildings and grounds of post-primary schools in New Zealand, which are a matter for intense public pride. Regulations governing post-primary schools are laid down in the Post-Primary Buildings Manual, which also includes the Basic Equipment List, describing the equipment provided in newly established schools.

The typical modern co-educational post-primary school, to accommodate 800 pupils, is built in four blocks and comprises: administration offices, assembly hall, gymnasium, 15 general classrooms, 4 science laboratories, 2 art and craft rooms, commercial room, typing room, homecraft room, dressmaking room, woodwork shop, metalwork shop, drafting office, geography room and music room. Each general classroom to accommodate up to 35 pupils has a floor space of 600 square feet. The total area is just over 50,000 square feet, with teaching space occupying 60 per cent, administration 6 per cent, circulation 11 per cent, sanitary, storage and ancillary 18 per cent, and walls 5 per cent. Good bilateral lighting is provided and a steady temperature is maintained in all rooms, usually by means of central heating. High standards of sanitation are insisted upon.

School welfare services. Medical, dental and other forms of assistance have been referred to under 'Finance'.

Principals and senior teachers, because of their long experience, are well fitted to cope with most behaviour problems that arise. There are, however, supporting services of the Department of Education available to advise principals and their staffs and to supplement their work in unusual and complex cases. The services of 'visiting teachers' are available to post-primary principals particularly in the case of the junior forms, where the transition from primary to post-primary school is often a critical period. The Department's psychological service is also available for the examination of unusual cases and for advice on remedial action. There is also the Child Welfare Division of the Department, which deals with delinquent children and those brought to its notice as needing special care and attention. Since 1943 the Department has assumed full responsibility for the vocational guidance of pupils at post-primary schools. Centres have been set up in 6 towns and the Vocational Guidance Officers, acting in conjunction with the principal and the careers teachers in each school, offer their services at any point in the child's career where a choice has to be made, whether of school courses or vocation.

TYPES OF SECONDARY EDUCATION

Every child is free to go to the post-primary school of his choice, except that some measure of zoning has been necessary in the large cities. The basic pattern for New Zealand post-primary schools, no matter what the school is called, is the multilateral or comprehensive type. The nomenclature is rather confusing, but the terms 'high school', 'college', 'grammar school', etc., have no particular significance, the name of the school reflecting only its historical origin, or an accident of regulations or the whim of the local people. The selection of a post-primary school is therefore usually not a question of choosing the type of school but rather the course within the individual school. Ample help is given to the pupil or parents, firstly by the staff of the primary school, and, upon enrolment, by discussion with the principal. In the great majority of post-primary schools specially appointed careers advisers are also available to provide guidance.

The school year is organized in three terms. Schools must open for a minimum of 380 half-days each year. Actual dates for 1959 were: first term, 3 February to 8 May; second term, 26 May to 21 August; third term, 15 September to 15 December. Within these terms, Good Friday, Easter Monday, Easter Tuesday, Queen's Birthday, Anzac Day, Labour Day, and the Anniversary Day of the province in which the particular school is situated are public holidays. The teaching week is of 5 days, Monday to Friday, with a minimum teaching time of 25 hours, though in practice it varies from 25 to 27 hours.

General secondary schools

In New Zealand the post-primary schools are classified as follows in 1960: secondary schools, 102; technical schools, 41; combined schools, 7; district high schools, 98; total, 248. Over the years, this classification has lost a great deal of its significance. The difference between a secondary school and a technical school is much slighter in New Zealand than in the heavily industrialized countries. Except for their part-time classes, technical schools are pre-vocational in character and most of them now offer nearly all the courses available at a secondary school, in addition to their own courses leading to trades. On the other hand many secondary schools, particularly those in provincial towns, have developed pre-trade courses in order to meet local demands that could be met in no other way. In the metropolitan centres, however, there are real differences between technical and secondary schools, the technical school attracting a considerable proportion of the non-academic, short-course pupils.

The district high schools serve the needs of a country

district, but their courses are of necessity somewhat restricted because of their small enrolment. Use is made of the Correspondence School to provide additional subjects.

Combined schools are in actual fact multi-course schools, in no way different from the many other schools classified as technical or secondary.

The position would be greatly clarified if the term 'technical' were restricted to the few large city schools engaged wholly or at least largely in the more advanced technical work.

Apart from the type of work they do, schools can be classified as 'co-educational' or 'single-sex'. At the present time all technical schools and all district high schools are co-educational, 6 of the 7 combined schools are single-sex, while 64 secondary schools are co-educational and 38 are single-sex.

The Correspondence School provides educational facilities for children and adults who cannot obtain instruction locally. Of the school's 4,000 secondary pupils about three-quarters are part-time students; that is, they are in employment during the day and study at night-time, either to improve their academic status by gaining certificates and passing examinations, or to benefit themselves culturally. Because of the numbers, a wide variety of courses is available.

Post-primary schools do their best to ensure that all pupils, irrespective of their varying abilities and occupational ambitions, receive a comprehensive and well-balanced education, which aims firstly at the full development of the adolescent as a person, and secondly at preparing him for an active place in New Zealand society as worker, neighbour, homemaker and citizen.

As mentioned above, all post-primary schools are required to teach a common core of subjects, namely English, social studies, elementary mathematics, general science, music, art and craft and physical education. In addition, optional subjects may be chosen from a list containing over 30. This permits the greatest flexibility in courses. In a survey of this size it is impossible to give sample time-tables to cover all the types of post-primary schools. In general, the common core accounts for one-half to two-thirds of the teaching periods in the third and fourth forms but occupies a much smaller fraction in the fifth form, where the emphasis is on School Certificate subjects.

An infinite variety of grouping of School Certificate subjects is possible, but in practice certain fairly well-defined courses emerge:

Academic: (a) English, mathematics, physics, chemistry, biology, or (b) English, French, history, geography, and Latin or biology.

General (a much wider variety here): (a) English, French or mathematics, general science, history, geography, or (b) no foreign language and a range of varied major optional subjects.

Commercial, with some or all of the following: book-keeping, shorthand and typing, commercial practice.

Home-life, with homecraft and clothing as two of the subjects.

Boys' technical, with woodwork, engineering workshop and technical drawing.

Rural, with selections from agriculture or horticulture, animal husbandry and dairying.

Pupils are grouped in courses such as these, and are frequently 'streamed' according to ability.

A sample academic course for better than average pupils is as follows (hours per week in parentheses): third and fourth forms—English (4.67), social studies (3.33), music (1.33), art (0.67), physical education (2.67), mathematics (4.67), general science (3.33), woodwork or homecraft (2), French (3.33), military drill (boys) or drama (girls) (0.67), total, 26.67 hours.

In the fifth form this group of pupils might coalesce with other groups to take a variety of options and the time-table might be: English (4.67), core mathematics (1.33), music (0.67), art (0.67), physical education (2.67), French or physics (4), history or mathematics (4), geography or chemistry (4), biology or general science (4), military drill or drama (0.67), total, 26.68 hours per week.

The popularity of the various optional subjects is indicated by the percentage of candidates taking them in the School Certificate examination, 1959: geography, 66 per cent; mathematics, 49 per cent; history, 43 per cent; general science, 37 per cent; French, 33 per cent; biology, 25 per cent, chemistry, 17 per cent; book-keeping, 15 per cent; commercial practice, 15 per cent. The remaining 21 optional subjects were all under 10 per cent. English is compulsory for all candidates.

In the sixth form the emphasis is largely on University Entrance subjects and the options are arranged so that a suitable course for university emerges, though provision is also made for students who do not intend to go to university. The following is a typical time-table for a co-educational multi-lateral type school of average size: English (4.67 hours), Latin or biology or additional mathematics (4.67), French or physics or book-keeping or art (4.67), history or chemistry or technical drawing (4.67), geography or mathematics (4.67), physical education and games (2), music (0.67), military drill (boys), elective (girls) (0.67), total, 26.69 hours per week.

Responsibility for the teaching of various individual subjects, or groups of allied subjects, throughout a school is given to 'heads of departments'. In a large multilateral co-educational school there would probably be departments of English, social studies, languages, science, mathematics, homecraft, commercial studies, engineering, and building. Each head of department is responsible to the principal for the general organization and practical working of his department. He prepares schemes of work and has the general direction and guidance of the teaching in his department.

In the larger schools ability grouping is possible in most courses and is commonly practised. The greatest problem here, implicit in universal compulsory post-primary education, is in connexion with the 'slow learners', where a radical adjustment of teaching methods is necessary. In the district high schools generally and in some courses of most secondary schools, because of their 'comprehensive' type, the wide range of ability within individual classes presents teaching problems. This is being met by the development of 'group teaching' within each class, calling for a greater flexibility of teaching techniques and making heavier demands on teachers.

Promotion of pupils up to the fifth form is automatic to the extent that all pupils at the end of the first year

proceed to the fourth form and the next year to the fifth form. Adjustments within a yearly group are, however, made on the basis of internal examinations held in the middle and at the end of the school year. Written reports on each pupil are forwarded to parents twice a year.

Most pupils in the fifth form sit for the School Certificate examination, which is accepted throughout the community as evidence of the completion of a satisfactory secondary education for those pupils not going to university. Except in rare cases pupils do not go into the lower sixth until they have passed the School Certificate examination. There, after a satisfactory year of study, they qualify for an Endorsed School Certificate, and are either accredited or sit for the University Entrance examination. Those who qualify for University Entrance and really intend to go to university usually take a year in the upper sixth, where they may qualify for the Higher School Certificate, which entitles them to remission from university fees, and in the case of full-time students, to an allowance of £40 a year plus a further £50 per annum if they are required to board away from home. Pupils in the upper sixth may also, if they wish, sit for the University Entrance Scholarship examination.

Teaching staff. The raising of the school age to 15 in 1944 and the introduction in 1945 of a compulsory core of studies with a wide range of options has resulted in a material alteration in the structure of teaching staffs, necessitating a much greater number of teachers and in a much wider range of subjects. The majority of post-primary teachers are still university graduates, but schools now require more qualified and trained teachers of homecraft, of physical education, of woodwork and metalwork and of commercial subjects as well as of the traditional academic subjects.

One of the most urgent problems in New Zealand education today is the shortage of post-primary teachers. An Advisory Committee on Teacher Supply and Training has been set up and a recruitment officer appointed. The major move for improvement has been the establishment of post-primary studentships providing liberal allowances for up to 4 or 5 years of full-time university study, followed by a year at training college on the teachers' salary scale. Liberal bursaries are available to students in physical education and in homecraft at the schools attached to the University of Otago. Special sections of the teachers' training colleges are also devoted to training homecraft teachers. Teachers of technical subjects are recruited from industry and most of them receive a year's training in a teachers' college. Special training schemes, with liberal allowances, have been introduced to recruit and train men and women drawn from commerce. A modified course in mathematics and science for women teachers has been established. Efforts to attract graduates of an older age group through a 3-month trial period of teaching in post-primary schools is meeting with some success.

Post-primary teachers are in five grades. Those in grades 1, 2 and 3 are on a basic salary scale reaching its maximum after 12 annual increments. On reaching grade 4 a teacher automatically enters a new salary scale. Further increase is dependent upon appointment to a 'post of responsibility', e.g., head of department; these posts are in three grades and are usually held only by grade 4 and grade 5 teachers. The highest positions are those of post-primary inspector or principal; in normal circumstances only grade 5 teachers are eligible for these positions. The best teachers can reach grade 4 in about 12 years and grade 5 in about 17 years. The salary structure permits what is in effect a qualification allowance to be paid throughout a teacher's service. Because of the rapid increase in recent years in the number of pupils entering the post-primary schools, the prospects of promotion have been and continue to be very good.

Vocational and technical schools

It has already been noted that in New Zealand most of the so-called technical schools are really general and pre-vocational in character. The orthodox secondary schools of 50 years ago were unwilling to develop practical courses to suit the non-academic child, and so day classes at the technical schools, now known as technical high schools, were developed to give a general secondary education with a practical bias; the latter made no attempt to provide direct trade training of the type given by technical schools in other countries. All the technical schools and some of the secondary schools conducted evening classes of a definitely vocational type for young workers, but these evening classes were usually regarded as subsidiary to the full-time day school. While secondary industries played a minor part in the country's economy this did not seriously matter and, indeed, the pre-vocational courses in the technical day schools turned out a type of boy well fitted to take his place anywhere in a wide range of small, scattered, and relatively simple industries. All he needed after that was a period of training on the job. With the rapid growth of concentrated and complex industries the whole situation has changed, and the very virtues that have won the New Zealand technical schools their place as equal partners in secondary education now make it harder for them to meet the demand for senior courses directly preparing for work in industry and commerce.

The technical schools in the principal cities have worked under considerable difficulties. They have, in fact, grown rapidly, and recently the heavy additional burden of day release training of apprentices has been thrown on them. At the same time, too, there has been in a limited number of schools a development of really advanced courses.

But a type of institution that caters for pupils ranging from 13-year-olds to adults, and teaches everything from spelling to professional engineering, can scarcely be expected to meet the more complex needs of the future, though it has hitherto served New Zealand well.

Technical education is perhaps best dealt with under the three levels of training needed—tradesmen, technicians and technologists.

The education of tradesmen. In New Zealand one-third of the boys leaving post-primary schools enter apprenticeship. The Apprentices Act 1948 provided for orders governing apprenticeship to be made by the Court of Arbitration on the recommendation of the New Zealand Apprenticeship Committees. In the major trades these orders make provision for the attendance of apprentices at technical classes during working hours or in the evening or both. Technical

classes are mandatory for all apprentices during the first three years of their apprenticeship period. The first 'day-release' classes began in 1949, since when there has been a steady growth in their number and in the trades they cover. Apprentices generally attend for 4 hours a week or 8 hours a fortnight, although some trades show a growing preference for 'block' courses, involving continuous attendance at a school for 40 hours a week during one or more weeks a year. The technical and secondary schools have undertaken this work and the Education Department's Technical Correspondence School has provided correspondence tuition for those in centres where there are no appropriate classes. Parallel with these developments in day-release training there have occurred, since 1949, far-reaching changes in the examinations open to apprentices. In conjunction with the Education Department, the New Zealand Trades Certification Board, set up in 1949, has devised a system of examinations covering 24 trades. Arrangements have been made with two statutory bodies, the Plumbers' Registration Board and the Electricians' Registration Board, to avoid as far as possible duplication of examinations or administrative machinery. The Motor Trade Certification Board also works in the closest relation with the Trades Certification Board.

It can fairly be claimed that trades examinations now exist in all the main trades and in many of the lesser ones, and that the schools are well on the way towards providing a training commensurate with the needs of apprentices. Although there are obvious deficiencies to be made good, the pattern of apprentice training for some time yet has been established.

The education of technicians. For various reasons New Zealand has been rather slow in providing for the training of technicians and, indeed, in the very recognition of this most important category, in which the education required is of truly secondary technical standard. In recent years, however, there has been considerable development. In 1954 the establishment of the New Zealand Certificate in Engineering marked a systematic effort to secure recognition for a major group of technicians. The Government set up a Controlling Authority which is placed under the chairmanship of the Assistant Director of Education, and includes representatives of engineering associations, the Technical Education Association, the Department of Education and the University. There are two grades of certificate, the lower with emphasis on practical subjects of direct use to an engineer of the middle group and the senior requiring more mathematics and science and having less immediately practical value.

In view of the growing interest displayed by industry as a whole in more advanced technical education the Minister of Education decided in 1957 to call together a study group. This group, representing industry, commerce and education, recommended the establishment of a Council for Technical Education to advise the Government on the needs of industry and commerce. In 1958 a much larger group, representing industry, endorsed this recommendation and further recommended a new system for training technicians in all fields where a demand existed. In 1959 the Council for Technical Education was established, with broad representation from industry, commerce, the University, the Department of Education and the technical colleges. In 1958 an Act of Parliament providing for a system of national examinations for technicians had been passed, and this came into force on 1 February 1960. The Act provides for the establishment of the Technicians Certification Authority, charged with the responsibility of establishing and conducting examinations for technicians. This body will absorb the Controlling Authority for the New Zealand Certificates in Engineering. Arrangements are in hand for the introduction of examinations for technicians in industrial chemistry and in building. Other industries are becoming interested in this field of technical education. Indicative of this new outlook has been the establishment of the Central Technical College at Petone by separating completely the Technical High School from the Evening School and day-release classes, and so allowing the development of a college for senior technical work. Among the courses taken here is the training of pharmacists in New Zealand for the first 2 years of their course. A similar split is taking place in the large city technical school in Auckland. The Technical Correspondence School, with its roll of over 4,000 students and a staff of approximately 80, is playing an active part. These moves, together with the appointment in the Education Department of a Superintendent of Technical Education, are a portent of considerable future development of true technical education in New Zealand.

The education of technologists. In engineering the larger technical colleges provide students who have been unable or unwilling to devote themselves to full-time university study with an alternative method of achieving professional status. However, in 1954, a committee sponsored by the Department of Education and representative of the New Zealand Institution of Engineers, the University, the Technical Schools, Government Departments employing engineers, and the Engineers' and Assistants' Association, decided that the aim should be for all candidates for professional engineering to take a university degree. The Committee further recommended that the main efforts of the technical college should be devoted to developing courses for technicians. The training of technologists is therefore largely within the province of higher education.

Out-of-class activities

Participation of pupils in school government in New Zealand is basically through the prefect system. The prefects, usually about 20 in number, are appointed or elected in various ways, but the school pupils themselves commonly have a considerable share in their appointment. Important disciplinary powers, varying from school to school, are entrusted to the prefects and they exercise a strong influence within the school. Many schools have adopted the 'house' system and the captains of the houses promote and organize to a considerable extent the extra-curricular sporting and social activities of the pupils in their respective houses.

Great emphasis is placed on sport as a means of developing character as well as physical fitness. A large proportion of post-primary teachers, particularly amongst the men, give up their Saturdays to organizing, coaching, and super-

vising secondary school sports; this work is done gratuitously by the teachers. For boys, winter games are chiefly Rugby football with an increasing amount of hockey and soccer, and for the girls, basketball and hockey. Summer games include cricket, tennis and softball. In addition, great attention is given to training in athletics and swimming, with competitive meetings for the combined post-primary schools in the various districts or provinces. There is intense interest and active participation in sport by the vast majority of pupils in the post-primary schools. Social life is full and satisfying, and social evenings with dancing are a regular feature of the winter months. The annual school concert, play or light opera is an event of some importance in the school year and high musical and dramatic standards are maintained. There is an abundance of hobbies and cultural clubs such as debating, public speaking, crafts, chess, stamp clubs, orchestra, drama clubs, choral societies etc.

The provision of and participation in extra-curricular sporting and cultural activities is traditional in New Zealand post-primary schools.

TRENDS AND PROBLEMS

This survey of secondary education will have shown that the more important changes in post-primary education in New Zealand in recent years can be related to three broad trends. These have been the efforts: (a) to provide equality of educational opportunity in the fullest sense, (b) to give pupils at all stages a richer and better-balanced education than they have had in the past, and (c) to meet the educational demands of our own changing society and the changing world.

Free education in post-primary schools for all up to the age of 19 at a time of vastly increased numbers in this age group has presented problems. Difficulties of accommodation for the augmented entry to the post-primary schools have been largely overcome by a vigorous expansion of the building programme in recent years. The dearth of post-primary teachers is, however, probably the most urgent problem in post-primary education today. Despite all the measures being taken to expand recruitment of post-primary teachers, there will probably be a shortage for some years, particularly in mathematics and science. Education being compulsory till the age of 15, we have the familiar problem of the reluctant learners—the small percentage of pupils, often poorly equipped mentally, who resent and resist efforts to teach them. In New Zealand, fortunately, their number is small, but the efforts wasted in teaching them can be ill afforded at a time of acute teaching shortage. The policy of giving equal educational opportunities to country and town pupils alike is firmly established, but it is a policy that is difficult to implement fully.

Inherent in the comprehensive character of New Zealand's post-primary schools is the problem of the wide range of ability in some classes. This is, however, preferred to the problems of selection.

The effort to meet the educational demands of our own changing society and the changing world is most apparent in technical education. Here the challenge of the recent striking advances throughout the world in science and technology, resulting in the growth of concentrated and complex industries, will have to be met by the provision of more specifically technical education in greater variety and at all three levels of tradesman, technician and technologist. It is in technical education that the greatest development is likely to take place in New Zealand post-primary education during the next few years.

[*Text prepared by the New Zealand National Commission for Unesco in May 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 2,282,000.
Area: 103,473 square miles; 267,995 square kilometres.
Density: 22 per square mile; 9 per square kilometre.

Summary of school statistics, 1953–57. Total enrolment in all educational institutions in 1957 was almost 555,000, excluding some 30,000 persons attending adult education courses. In 1954 the school-going population represented over 21 per cent of the total population and in 1957 about 25 per cent; between these 2 years, total enrolment increased by 19 per cent. Enrolment in secondary education for this same period increased by 32 per cent.

The proportion of girls has remained fairly constant, i.e., around 48 per cent in primary education, 46 per cent in secondary education, 65 per cent in teacher training colleges, 24 per cent in institutions of higher education.

The proportion of women on the teaching staff has varied only slightly: in primary schools 53 per cent for 1957 as against 54 per cent for 1953; in secondary schools 37 per cent for 1957 as against 40 per cent for 1953; in teacher training colleges 35 per cent for 1957 as against 33 per cent for 1953. (See Table 4.)

Enrolment trends in secondary education, 1930–57. In 1957, enrolment in secondary schools was almost three times that of 1930. While the average total enrolment increased very substantially between 1930–34 and 1955–57, the ratio obtained by relating the average enrolment to the estimated population 15–19 years old shows a smaller rise, since the population also increased considerably over the same period. (See Table 2.)

Examination results in secondary education, 1953–57. Increases in the number of certificates awarded in 1957 over the number in 1953 were as follows: School Certificates, 59 per cent; technical examinations, 1.5 per cent; shorthand typists' examination (Public Service), 250 per cent; all certificates, 48 per cent. (See Table 3.)

Educational finance, 1957/58. In 1957/58 (fiscal year beginning April), total public expenditure on education amounted to 33 million New Zealand pounds, representing about £15 per inhabitant. Almost all money spent on public education came from central government revenues. Capital expenditure represented 26 per cent of the total.

Sources. New Zealand: Department of Education, replies to Unesco questionnaires.

1. EDUCATIONAL FINANCE, 1957/58 (in New Zealand pounds)[1]

A. RECEIPTS BY SOURCE

	Amount	
Total receipts[2]		**33 187 345**
Central government		33 032 802
Examination fees and correspondence charges		39 453
Maintenance fees at special schools		6 476
Other sources		108 614
Sale of books, land and buildings, stores and equipment, etc.	51 840	
Repayment of loans	11 904	
Rent charged	27 234	
Other not specified	17 636	

B. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**33 187 345**
Recurring expenditure		24 477 495
For administration or general control	1 571 408	
For instruction[3]		
Salaries to teachers, etc.	14 000 850	
Other instructional expenditure	1 013 954	
Other recurring expenditure	4 179 104	
Higher and adult education	3 712 179	
Capital expenditure		8 709 850

1. Official exchange date: 1 New Zealand pound = 2.80 U.S. dollars.
2. Closed account.
3. Excluding higher and adult education.

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**24 477 495**		**100.0**
Administration		1 571 408		6.4
Central administration	757 086		3.1	
Local administration	814 322		3.3	
Instruction		18 726 983		76.5
Pre-primary education	292 523		1.2	
Primary education[4]	9 857 002		40.3	
Secondary education[5]	4 442 932		18.1	
Higher education[6]	3 589 962		14.7	
Special education	180 033		0.7	
Adult education	122 217		0.5	
Expenditure not allocated by level[7]	242 314		1.0	
Other recurring expenditure		4 179 104		17.1
Board and transport of pupils	1 707 195		7.0	
Maintenance of buildings. rents, etc.	1 050 541		4.3	
Running expenses of schools	1 350 649		5.5	
All other (including examinations)	70 719		0.3	

4. Includes intermediate schools and classes for special education.
5. General and vocational education.
6. Includes teacher training.
7. Includes expenditure on school publications, visual education, teaching aids, etc., for primary and secondary levels.

2. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education				Average total enrolment[3] (000's)	Estimated population 15–19 years old (000's)	Secondary general and vocational enrolment ratio[3]
	General[1]		Vocational[1 2]				
	Total	Per cent female	Total	Per cent female			
1930	31 850	47	...	...			
1931	30 148	46	...	...			
1932	30 358	45	...	...	31	123	*25*
1933	29 884	46	...	...			
1934	30 559	46	...	...			
1935	37 050	47	...	...			
1936	37 563	47	...	...			
1937	38 394	48	...	...	39	129	*30*
1938	40 985	49	...	...			
1939	42 272	49	...	...			
1940	42 020	49	...	...			
1941	40 032	49	...	...			
1942	35 602	49	...	...	40	133	*30*
1943	38 617	49	...	...			
1944	44 847	49	...	...			
1945	48 012	49	...	...			
1946	49 562	49	...	...			
1947	50 521	49	...	...	50	145	*35*
1948	50 677	50	...	...			
1949	52 294	50	...	...			
1950	54 415	49	...	...			
1951	57 206	49	...	...			
1952	61 624	49	...	...	63	134	*47*
1953	67 478	49	30 168	38			
1954	75 247	49	34 764	41			
1955	82 165	49	37 191	40			
1956	85 774	49	36 592	41	86	157	*55*
1957	89 733	48	38 671	41			

1. Enrolment in technical schools is included with enrolment in schools of general secondary education.
2. Refers to agricultural colleges only.
3. Not including agricultural colleges.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953		1954		1955		1956		1957	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
School Certificate . . .	6 479	3 202	6 739	3 432	7 518	3 581	9 379	4 718	10 290	5 017
Technical examinations . .	4 085	—	3 213	—	3 830	—	5 076	—	4 708	—
Public Service shorthand typists' examination . .	292	292	303	303	808	808	878	878	1 022	1 022

4. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergarten, private	1957	189	287	287	13 343	6 701
	Nursery play centres, private	1957	130	[1] ...	[1] ...	3 816	...
	Total	**1957**	**319**	**[2]287**	**[2]287**	**17 159**	**[2]6 701**
	,,	1956	301	[2]276	[2]276	16 486	[2]6 462
	,,	1955	283	[2]259	[2]259	15 292	...
	,,	1954	268	[2]258	[2]258	14 211	...
	,,	1953	251	[2]250	[2]250	13 101	...
Primary	Primary schools, public	1957	1 917	10 830	5 474	307 944	148 110
	Intermediate schools, public	1957	47	764	281	22 462	10 780
	Maori schools, public	1957	160	645	294	13 084	6 259
	Correspondence school, public	1957	1	40	29	1 020	510
	Primary schools, private	1957	323	1 338	1 151	47 868	24 358
	Total	**1957**	**2 448**	**13 617**	**7 229**	**392 378**	**190 017**
	,,	1956	2 433	12 137	6 557	377 729	183 148
	,,	1955	2 424	11 889	6 401	364 182	176 384
	,,	1954	2 395	11 549	6 210	354 174	172 521
	,,	1953	2 374	11 264	6 090	339 654	164 718
Secondary *General and Vocational*	Post-primary schools, public	1957	120	3 193	1 131	[3]64 737	[3]30 314
	Technical part-time classes at post-primary school, public	1957	72			34 865	15 664
	District high schools, secondary departments, public	1957	113	492	123	[3]8 823	[3]4 562
	Post-primary correspondence school, public	1957	1	76	43	[3]435	[3]278
	Technical correspondence school, public	1957	1	53	—	3 031	—
	Short courses at agricultural colleges, public	1957	2	[4] ...	[4] ...	775	—
	Post-primary schools, private	1957	102	756	401	15 738	8 144
	Total[5]	**1957**	**411**	**[6]4 570**	**[6]1 698**	**128 404**	**58 962**
	,, [5]	1956	390	[6]4 338	[6]1 646	122 366	56 772
	,, [5]	1955	383	[6]4 120	[6]1 587	119 356	55 169
	,, [5]	1954	363	[6]3 804	[6]1 485	110 011	51 206
	,, [5]	1953	343	[6]3 462	[6]1 374	97 646	44 882
Higher *Teacher training*	Teacher training colleges, public						
	Total	**1957**	**6**	**221**	**78**	**3 275**	**2 287**
	,,	1956	6	210	76	2 979	2 018
	,,	1955	5	184	61	2 741	1 834
	,,	1954	5	175	59	2 744	1 801
	,,	1953	5	156	52	2 735	1 719
General and technical	Universities, public	1957	4	559	50	11 039	2 740
	Agricultural colleges, public	1957	2	[4]74	[4]2	722	19
	Total	**1957**	**6**	**633**	**52**	**11 761**	**2 759**
	,,	1956	6	...	...	11 077	2 676
	,,	1955	6	...	...	10 851	2 638
	,,	1954	6	...	...	10 803	2 626
	,,	1953	6	572	...	10 831	2 602

1. All nursery play centres are staffed with one, sometimes two supervisors as well as with two mothers.
2. Kindergartens only.
3. Full-time pupils.
4. Teachers of secondary short courses at agricultural colleges are included with those of agricultural colleges.
5. Including data on part-time (day and evening) courses.
6. Not including teachers of agricultural courses.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Special	Schools for the mentally backward	1957	2	8	4	160	45
	Schools for the deaf	1957	2	45	34	317	122
	New Zealand Foundation for the Blind	1957	1	6	3	53	26
	Training centres	1957	2	3	1	61	24
	Primary correspondence classes	1957	5	5	5	156	70
	Special classes in public primary schools	1957	60	...	...	911	369
	Special classes in public intermediate schools	1957				78	24
	Total	**1957**	**[7]12**	**[7]67**	**[7]47**	**1 736**	**680**
	"	1956	[7]12	[7]65	[7]46	1 797	747
	"	1955	[7]12	[7]64	[7]45	1 818	756
	"	1954	[7]12	[7]65	[7]47	1 837	749
	"	1953	[7]12	[7]65	[7]47	1 866	762
Adult	Tutorial classes	1957	489			11 775	7 906
	Discussion courses	1957	280			3 218	2 169
	Home science, art and crafts, drama and music	1957	761	470	147	9 920	9 262
	Summer, winter and weekend schools	1957	204			6 464	4 615
	Total	**1957**	**1 734**	**470**	**147**	**31 377**	**23 952**
	"	1956	1 712	362	104	30 880	24 600
	"	1955	1 554	399	118	28 486	22 275
	"	1954	1 234	291	103	21 719	17 339
	"	1953	1 334	265	83	23 546	17 989

7. Not including data on special classes in primary and intermediate schools.

NEW ZEALAND: ISLAND TERRITORIES

(Cook Islands, Niue Island, Tokelau Islands, Trust Territory of Western Samoa)

New Zealand is responsible for several territories in the South West Pacific; they are the Cook Islands, Niue Island and the Tokelau Islands, which are all under direct New Zealand administration and are, in fact, New Zealand territory, and the Trust Territory of Western Samoa. Politically, Western Samoa has reached a stage where, for all practical purposes, it is independent, only a few formalities being required to complete the change of status. However, New Zealand will continue to assist in the development of Western Samoa for some time to come and has committed herself to a plan, covering a period of at least five years, whereby appreciable financial help will be provided. Practically all of this money will be for education and in particular, for post-primary education.

All the island groups with the exception of the Tokelau Islands have their own post-primary schools. The Tokelaus consist of three atolls with about 2,000 inhabitants who live very simply, and at the moment primary education is being developed there from very humble beginnings. Western Samoa, however, has recently opened its second post-primary school, on Savai'i, and the Cook Islands have made provision for a second post-primary school, on Aitutaki.

In Western Samoa, Samoa College was established in 1953 at Apia, the capital. The buildings are of modern design. Most of the staff are New Zealanders, and the curriculum is planned to meet the requirements of the New Zealand School Certificate, providing in addition a certain amount of instruction adapted to local conditions. It is an academic school although some periods are set aside for instruction in domestic science and handicrafts.

In the Cook Islands, Tereora College, on Rarotonga, provides much the same type of education, but it was not until 1960 that the course included a satisfactory form 5, and that students were able to complete the preparation for the New Zealand School Certificate examination in full. Some candidates had previously presented themselves but most of these supplemented their work with correspondence lessons sent from the New Zealand Correspondence School which conducts secondary education in the more isolated parts of the Pacific.

In Niue, a post-primary school has been established

within the last three years. Although it has not yet been able to provide a full secondary course preparing candidates for the School Certificate examination, forms 3 and 4 are well established and it is only a matter of time before the School Certificate examination is introduced.

To supplement local schools, New Zealand provides a scholarship system, as a result of which a fairly constant stream of approximately 200 Island students attend New Zealand post-primary schools, universities or institutions providing professional training. The Government of New Zealand pays the whole cost of education, clothing and upkeep of these students. Already doctors, teachers and technicians trained under this scheme are returning to take up responsible positions in the Islands and the post-primary schools in these territories will soon be staffed largely by their own people.

This development has been very rapid. Even as late as 1948 the only post-primary institution in New Zealand's Pacific area was a small composite class in Western Samoa taught by one teacher at form 3 and 4 levels. In that year post-primary classes were started in the Cook Islands, but it was a considerable time before arrangements could be made for a sufficient number of permanent buildings. The pressing need for post-primary education will tend to speed up development, although New Zealand's own shortage of post-primary teachers is likely to hamper the staffing of post-primary schools in the Pacific for some time to come.

Since the people of each island group have their own distinct language and culture their problems are also quite different and each group must be provided for separately. An attempt is now being made, however, to adapt the examination for Public Service Entrance in Western Samoa to suit the Cook Islands and Niue, with a view to ensuring a uniform Pacific Islands examination and raising the standard. It may be some time before this can be achieved, as Western Samoa has so rapidly outstripped the other two territories.

In addition to the government post-primary schools the missions have set up small post-primary schools in most areas. Before the Government established schools, missions attempted to provide what was then regarded as post-primary education but what actually amounted to primary education for adolescent girls and boys. Usually, these schools grew food crops to assist their finances, but this had the disadvantage of slowing down academic progress. There are no government grants towards mission education in the Islands, and only in Western Samoa does the Board of Education include representatives from missions.

No trade schools have yet been established. In Western Samoa, students from Samoa College attend manual training classes and home science courses at a centre providing for the pupils from a number of schools. In the Cook Islands, Tereora College has a manual training block, but the instruction is supplementary to academic education. In Western Samoa there is a rudimentary trades school which provides instruction for people already in the trade, and an agricultural high school which gives basic practical training. This school is subsidized by the New Zealand Government since it is also open to students from the Cook Islands and Niue.

[*Text prepared by the New Zealand National Commission for Unesco in June 1960.*]

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STATISTICS: COOK ISLANDS

Population (end March 1958): 17,000.
Area: 90 square miles; 234 square kilometres.
Population density: 189 per square mile; 73 per square kilometre.

Summary of school statistics, 1953–57. Enrolment in primary and secondary schools numbered 4,364 pupils in 1957 representing over a quarter of the total population. Nearly 94 per cent of enrolment was in primary schools, under 5 per cent in general secondary education and the remainder were students in the teacher training college. Half of the pupils in the public secondary school and at the teacher training college in 1957 were girls. The full-time teaching staff numbered 248 in 1957, of whom one-third were women. The pupil teacher ratio was 17 in primary schools in 1957, showing little change compared with 1953. After 1953 enrolment increased slightly at the primary level. but rapid progress was made in general secondary education. The number of students increased from 63 to 160 in the public secondary school over the 5-year period and in the teacher training college enrolment rose from 24 to 64. (See Table 2.)

Educational finance, 1957. Total expenditure on education in 1957/58 (fiscal year beginning April) was 130,650 New Zealand pounds, representing about £7.7 per inhabitant. About one-sixth of this amount was for capital expenditure. (See Table 1.)

Source. Cook Islands: Director of Education, reply to Unesco questionnaire.

1. COOK ISLANDS: EDUCATIONAL FINANCE, 1957/58
(in New Zealand pounds)[1]

A. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**130 650**
Recurring expenditure		107 857
For central administration	8 270	
For instruction		
Salaries to teachers, etc.	76 875	
Other instructional expenditure	6 635	
Other recurring expenditure	16 077	
Capital expenditure		22 793

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**107 857**		**100.0**
Central administration		8 270		7.7
Instruction		96 265		89.2
Primary education	69 241		64.2	
Secondary education				
General and teacher training	27 024		25.0	
Other recurring expenditure, not specified		3 322		3.1

1. Official exchange rate: 1 New Zealand pound = 2.80 U.S. dollars.
2. Closed account.

2. COOK ISLANDS: SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	20	216	79	3 682	...
	Primary schools, private	1957	7	24	13	409	...
	Total	**1957**	**27**	**240**	**92**	**4 091**	...
	"	1956	29	222	84	4 341	...
	"	1955	29	...	...	4 473	...
	"	1954	28	244	86	4 307	...
	"	1953	28	232	...	4 206	...
Secondary *General*	General secondary school, public	1957	1	4	1	160	84
	Secondary classes, private	1957	(2)	2	1	49	...
	Total	**1957**	**1**	[1]**6**	[1]**2**	**209**	...
	"	1956	1	[2]7	[2]3	166	...
	"	1955	1	[3]6	[3]2	[4]88	[4]48
	"	1954	(1)	3	1	[4]63	[4]35
	"	1953	(1)	3	1	...	...
Teacher training	Teacher training college, public						
	Total	**1957**	**1**	**2**	**1**	**64**	**33**
	"	1956	1	2	1	31	14
	"	1955	(1)	2	—	26	14
	"	1954	(1)	1	—	24	13
	"	1953	(1)	1	—	...	...

1. In addition 5 (F.3) part-time private teachers.
2. In addition 6 (F.4) part-time private teachers.
3. In addition 6 (F.4) part-time private teachers.
4. Public secondary school only.

STATISTICS: NIUE ISLAND

Total population (mid-year 1958 estimate): 5,000.
Area: 100 square miles; 259 square kilometres.
Population density: 50 per square mile; 19 per square kilometre.

Summary of school statistics, 1953–57. In 1957, a total of 1,100 pupils were enrolled in 8 primary schools and 59 in the post-primary school. Over half the pupils were girls. The number of teachers increased from 58 to 73 over the period under review and the average pupil-teacher ratio fell from 19 in 1953 to 16 in 1957. Post-primary enrolment rose from only 20 pupils in 1954 to 59 in 1957. (See Table 2.)

Educational finance, 1957. Expenditure by the New Zealand Government for education in Niue Island in 1957/58 (fiscal year beginning April) amounted to 45,053 New Zealand pounds, averaging about £9 per inhabitant. Twenty-nine per cent of this amount was for capital expenditure. (See Table 1.)

Source. Niue: Education Officer, reply to Unesco questionnaire.

1. NIUE ISLAND: EDUCATIONAL FINANCE, 1957/58
(in New Zealand pounds)[1]

A. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**45 053**
Recurring expenditure		32 088
For central administration	2 000	
For instruction		
Salaries to teachers, etc.	22 610	
Other instructional expenditure	6 969	
Other recurring expenditure	509	
Capital expenditure		12 965

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure	**32 088**	**100.0**
Central administration	2 000	6.2
Primary and secondary education	29 579	92.2
Other recurring expenditure[3]	509	1.6

1. Official exchange rate: 1 New Zealand pound = 2.80 U.S. dollars.
2. Closed account.
3. Includes distribution of milk to pupils.

2. NIUE ISLAND: SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Niuean primary schools, public	1957	7	70	33	1 080	550
	English primary schools, public	1957	1	1	1	20	10
	Total	**1957**	**8**	**71**	**34**	**1 100**	**560**
	,,	1956	8	74	36	1 074	528
	,,	1955	8	71	...	1 087	538
	,,	1954	8	72	...	1 163	574
	,,	1953	7	58	24	1 113	545
Secondary *General*	Niuean post-primary school, public						
	Total	**1957**	**1**	**2**	—	**59**	**34**
	,,	1956	1	1	—	38	19
	,,	1955	1	1	—	20	11
	,,	1954	(1)	1	—	20	11
	,,	1953	—	—	—	—	—

STATISTICS: TOKELAU ISLANDS

Population (mid-year 1958 estimate): 2,000.
Area: 4 square miles; 10 square kilometres.
Population density: 500 per square mile; 200 per square kilometre.

Summary of school statistics, 1953–57. Enrolment in three primary schools was 499 pupils in 1957 of whom 56 per cent were girls. The pupil-teacher ratio in public primary schools was 24. (See Table 2.)

Educational finance 1957. The sum of 6,380 New Zealand pounds was budgeted for education in 1957/58 (fiscal year beginning April), representing about £3 per inhabitant. Capital expenditure was a quarter of the total. (See Table 1.)

Source. Tokelau Islands: reply to Unesco questionnaire.

1. TOKELAU ISLANDS: EDUCATIONAL FINANCE, 1957/58
(in New Zealand pounds)[1]

Expenditure by purpose		Amount
Total expenditure[2]		**6 380**
Recurring expenditure		4 780
For instruction		
Salaries to teachers, etc.	2 380	
Other instructional expenditure	1 500	
Other recurring expenditure	900	
Capital expenditure		1 600

1. Official exchange rate: 1 New Zealand pound = 2.80 U.S. dollars.
2. Budget estimate.

2. TOKELAU ISLANDS: SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	2	14	2	337	191
	Primary school, private	1957	1	...	...	162	87
	Total	**1957**	**3**	...	...	**499**	**278**
	,,	1956	3	[1]10	[1]2	512	280
	,,	1955	3	14	4	575	298
	,,	1954	3	13	4	517	284
	,,	1953	3	[1]4	[1]—	456	216

1. Public schools only.

STATISTICS: WESTERN SAMOA

Population (mid-year 1958 estimate): 102,000
Area: 1,130 square miles; 2,927 square kilometres.
Population density: 90 per square mile; 35 per square kilometre.

Summary of school statistics, 1953–57. Total enrolment in educational institutions at all levels was 26,138 pupils in 1957, representing about 26 per cent of the population. There were in addition 170 persons, of whom a quarter were women, taking adult education courses. Over 96 per cent of the enrolment was in primary schools, 1.5 per cent in general secondary schools, 0.7 per cent in vocational institutions, 1 per cent in the teacher training college and the remainder were students in theological institutions. Girls made up half the enrolment in primary schools, 46 per cent in general secondary schools, and 57 per cent in the teacher training college. Only girls are enrolled in the vocational schools reported. The teaching staff numbered 824, of whom 54 per cent were women, and the pupil-teacher ratio was 33 in primary and 9 in general secondary schools. Compared with 1953, enrolment had increased by 22 per cent in primary schools and more than doubled in general secondary schools. However, enrolment in secondary schools declined somewhat from 1956 to 1957. The number of students training to be teachers increased by 22 per cent between 1953 and 1957. (See Table 3.)

Examination results in secondary education, 1953–57. There has been a striking increase in the number of students awarded the Samoan School Leaving Certificate after 2 years of post-primary study: 446 certificates were granted in 1957/58, of which over half to girls, compared with only 66 in 1953/54. Four students passed the New Zealand School Certificate examination in 1956/57 of whom 2 were girls. The number of teaching certificates awarded in 1957/58 doubled compared with 1953/54. (See Table 2.)

Educational finance, 1957. Expenditure on education in 1957 (fiscal year beginning January) was 251,110 New Zealand pounds, representing about £2.5 per inhabitant. Capital expenditure accounted for 10 per cent of the total spent. The New Zealand Government contributed some 8 per cent of educational receipts in 1957; the remainder was derived from territorial revenue. (See Table 1.)

Source. Western Samoa: Acting Director of Education, reply to Unesco questionnaire.

1. WESTERN SAMOA: EDUCATIONAL FINANCE, 1957 (in New Zealand pounds)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**251 110**
Central Government	231 770
Territorial revenue	19 340
New Zealand Government	

B. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**251 110**
Recurring expenditure		226 390
For administration or general control	13 170	
For instruction		
Salaries to teachers, etc.	172 766	
Other instructional expenditure	15 266	
Other recurring expenditure	5 848	
Scholarships (for study abroad)	19 340	
Capital expenditure		24 720

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**226 390**		**100.0**
Central administration (salaries and maintenance)		10 424		4.6
Instruction		191 586		84.6
Primary education	149 965		66.2	
Secondary education	40 205		17.8	
General	15 085		6.7	
Vocational	4 295		1.9	
Teacher training	20 825		9.2	
Adult education	566		0.2	
Other education, not specified	850		0.4	
Other recurring expenditure		24 380		10.8
Scholarships for study abroad[3]	19 340		8.5	
Travel costs	3 310		1.5	
Stationery, transport, etc.	1 730		0.8	

1. Official exchange rate: 1 New Zealand pound = 2.80 U.S. dollars.
2. Closed account.
3. For teacher training.

2. WESTERN SAMOA: EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
School Leaving Certificate (lower stage)	66	35	152	79	237	125	366	177	446	227
New Zealand School Certificate (upper stage)	—	—	—	—	—	—	4	2	2	—
Samoan Public Service examination	12	—	11	—	12	2	26	6	29	11
Samoan Nurses: Certificate	6	6	13	13	15	15	9	9	22	22
Teachers' Certificate	41	20	67	31	42	22	62	27	83	52

3. WESTERN SAMOA: SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary[1]	Primary schools, public	1957	122	535	292	18 457	9 279
	Primary schools, private	1957	33	223	124	6 764	3 243
	Total	**1957**	**155**	**758**	**416**	**25 221**	**12 522**
	„	1956	124	769	451	26 112	12 923
	„	1955	154	745	423	24 608	12 197
	„	1954	133	635	359	21 533	10 821
	„	1953	132	571	299	20 607	10 273
Secondary *General*	Secondary schools, public	1957	1	15	8	188	85
	Secondary schools, private	1957	5	29	14	214	98
	Total	**1957**	**6**	**44**	**22**	[2]**402**	[2]**183**
	„	1956	4	43	15	[2]493	[2]195
	„	1955	4	31	11	[2]235	[2]110
	„	1954	4	16	4	[2]249	[2]69
	„	1953	4	20	4	[2]173	[2]44
Vocational	Nurses' training school, public	1957	1	[3]4	[3]4	145	145
	Girls' commercial school, private	1957	1	2	2	40	40
	Total	**1957**	**2**	**6**	**6**	**185**	**185**
	„	1956	2	7	7	229	229
	„	1955	2	6	6	178	178
	„	1954	2	7	7	194	194
	„	1953	2	7	7	208	208
Teacher training	Teacher training college, public						
	Total	**1957**	**1**	**8**	**3**	**231**	**132**
	„	1956	1	8	3	219	112
	„	1955	1	8	3	174	89
	„	1954	1	5	2	169	87
	„	1953	1	5	2	189	91
Higher	Mission theological colleges						
	Total	**1957**	**4**	**8**	—	**99**	—
	„	1956	4	12	—	145	—
	„	1955	4	16	—	161	—
	„	1954	4	16	—	213	—
	„	1953	4	16	—	238	—
Adult	Adult education course						
	Total	**1957**	**1**	**5**	**1**	**170**	**43**
	„	1956	1	5	1	140	31
	„	1955	1	5	1	73	16
	„	1954	1	5	1	106	18
	„	1953	1	5	—	82	7

1. Infant classes are included with primary education.
2. Not including students attending night classes who numbered 207 in 1957.
3. Part-time teachers only.

THE EDUCATIONAL SYSTEM

The Nicaraguan Constitution enjoins upon the State 'to direct, regulate and inspect public education' (Article 195, paragraph 13). Article 99 declares that 'the system of primary, secondary (*enseñanza media*) and vocational education is under the technical supervision of the State'.

These state functions are performed by the Ministry of Education, whose Department of Secondary Education exercises direct supervision over all secondary schools, whether government or private.

While control of education is legally vested in the Ministry of Education other governmental agencies run certain special schools; for example, the Ministry of Health maintains a school for nursing, and the Ministry of War, Marine and Aviation, various military schools.

Although there exist in Nicaragua certain language problems, due to the predominance of English-speaking people in its Atlantic region (long under British rule) and to the existence of small indigenous groups (the Miskitos and Zumos), the country forms a fairly homogeneous cultural unit. The bulk of the population are of mixed racial origin, the descendants of Spanish settlers and Indians, and the dominant religion is the Catholicism introduced by the Spanish conquerors.

The Nicaraguan State is highly centralized and there are no public or private bodies initiating educational programmes independent of state control. The municipalities maintain a few primary schools, but their influence does not extend to secondary schools, which are established and maintained either by the State or by private agencies, most of the latter being religions organizations. The private bodies finance and determine the educational and religious policy of the schools they administer, but always under state supervision. They are able, nevertheless, to influence the country's educational policy through attendance at meetings and seminars convened by the technical departments of the Ministry of Education, through their representative on the Technical Council for Education, and through their legal right to nominate a representative to the committees responsible for examining matriculation (*bachillerato*) candidates.

THE DEVELOPMENT OF SECONDARY EDUCATION

The first schools of this type were founded in Granada and León in the latter part of the nineteenth century, and in general, secondary education still retains the characteristics handed down from this period.

However, the educational facilities for children and adolescents have gradually expanded and become more varied. The Teachers' School, the forerunner of the present teacher training schools, was founded at the beginning of the century. Next followed the commercial schools and, in the last five years, the Technical and Vocational Institute has come into being. The number of general secondary schools (*institutos*) has also grown, and these now number some 35 government and 35 private schools.

Legal basis. The rules and regulations governing all branches of secondary education are as follows: the regulation for general secondary schools, both state controlled and private (Executive Ordinance No. 918, 5 August 1948); the law on the technical and administrative organization of the Ministry of Education (Executive Decree No. 39, 8 April 1958); the general regulation for teacher training colleges (Decree of 1 July 1959).

The law regulating compulsory primary education has had little effect on the secondary school system. A very high proportion of children leave after primary grade 3 (there are 6 grades in all), so that the number of those who go on to secondary schools is small. However, in the last five years there has been a noticeable increase in the enrolments at both secondary and special schools. This is probably due to the rise in the standard of living and increasing mechanization of industry, where those who lack a minimum of general or vocational education find no openings.

Administration. The Department of Secondary Education is responsible for the structure, orientation and inspection of the education of those adolescents who, on completion of their primary schooling, wish to obtain a general education, or to enter a trade or the teaching profession.

The Department consists of separate sections for general secondary education, teacher training, and technical education. Attached to each section are inspectors who pay frequent visits to the schools in their district. In the course of these visits, they take note of the activities of the teaching staff, the progress made by pupils, the working of school services and of all the other aspects and needs of the school. After his visit, the inspector submits an immediate report to his chief in which he assesses the merits of the schools he has visited and suggests possible solutions for local problems.

In addition to these visits, the Department of Secondary Education holds meetings of principals to discuss all problems of secondary education, both general and specific.

Secondary education is neither compulsory nor free, but the Government is establishing in each of the 16 departmental capitals a secondary school, a commercial school, or a teacher training college, at which more than 1,000 pupils are being educated and housed through a system of fellowships, in addition to 2,130 day pupils.

That education is a constant concern of the Government is evidenced by the fact that the Education budget shows a yearly increase, amounting this year to 12.72 per cent of the national total. Of the moneys voted for education, 8.06 per cent is allocated to secondary education, the sum

available being used to pay for salaries, services, materials, for construction, maintenance of buildings and equipment, and scholarships.

The education budget is supplemented by allocations in the national budget derived from general revenue, special taxes and from public loans. Most of this (66.1 per cent) is used to pay the salaries of teachers and of technical and administrative staff. Many religious private schools receive an annual subsidy from the Government and almost all house hundreds of students holding government scholarships.

School buildings are planned and constructed by the Ministry of Development and Public Works, with the participation of the Ministry of Education. Some of the secondary schools own their premises and part of the education budget is set aside to pay the rent of those which do not.

The secondary schools have their own laboratories, stocked with a minimum of equipment, libraries, etc. This is paid for partly through government aid and partly out of the schools' own funds. The Ministry of Education supplies these schools with furniture of a kind and in a quantity to meet the needs of the locality. This problem has been solved through the recent establishment of a factory outside Managua, which is able to manufacture school furniture in sufficient quantities.

Teachers' salaries are not standardized and, in secondary and technical schools, teachers are paid according to the subject taught. In the teacher training schools, however, they receive fixed salaries as full-time or part-time teachers. Apart from the basic salary, teachers receive allowances for degrees and length of service.

State teachers enjoy freedom of association, receive welfare assistance and are guaranteed all the political rights of Nicaraguan citizens.

The Ministry of Education encourages teachers who wish to refresh their knowledge or pursue research by granting fellowships for study abroad. Fellowship-holders receive their salary for the entire period of such study.

Doctors and dentists, paid by the Ministry of Education, examine all pupils and complete the health card which all secondary school pupils are required to possess. Some schools have improved this service by opening their own medical and dental clinics with the co-operation of the Parents' Association (Asociación de Padres de Familia). These services are free to pupils.

TYPES OF SECONDARY EDUCATION

In Nicaragua, pupils leaving primary school may normally enrol at one of the following types of school: a general secondary school; a commercial or technical school; an agricultural school; another type, e.g., the school of fine arts.

There is no hard-and-fast system of guidance to parents and children in the choice of study courses. In co-operation with the Point 4 Programme of the United States Government, the Ministry of Education applies a system of industrial and vocational education for children who have completed the 5th and 6th years of primary school and the first year of secondary school; one of the aims of this system is to give the children vocational guidance. Plans have recently been made for a ministerial guidance office under the supervision of a psychologist. This office will, *inter alia*, give vocational guidance to those leaving secondary school.

Pupils who have their *bachillerato* may enrol at one of the following higher educational establishments: the National University (minimum course of study 4 years), the National Nursing School (3 years), the National Agricultural School (4½ years) or National Public Accountancy Schools (3 years).

The school year begins on 15 May and ends on 15 February and is divided into two terms by holidays in the last fortnight of September. Classes are held every day from Monday to Saturday and the school day is from 8 a.m. till noon and from 2 to 5 p.m. The total number of teaching hours per week is 30.

General secondary schools

The only schools of this type in the country are the *institutos*, which are the direct descendants of the Latin schools maintained by the Church in the Colonial period.

The aims of secondary education are to satisfy the educational needs of the adolescent and to take care of his training as a whole, and to prepare pupils for entrance to a university.

Enrolment is conditional on the successful conclusion of primary school. Pupils wishing to enrol at schools which grant scholarships with boarding facilities (the teacher training schools, the National Technical and Vocational School) and pupils wishing to obtain one of the scholarships granted by the Government for the public secondary schools and commercial schools, must sit for an entrance examination.

The principal and teaching staff in any school are free to group their pupils in accordance with age and capability. This practice is gradually spreading.

The matriculation syllabus is basically 'humanist' but there is a noticeable tendency towards increasing the number of hours devoted to scientific subjects. The following table shows the total number of hours per week assigned to the various subject groups for the whole 5-year course.

Subject groups	No. of hours	Percentage
Mother tongue	21	14
Foreign languages	21	14
Mathematics	21	14
Natural science	32	21.7
Philosophy and social sciences	36	24
Art	6	4
Home economics	3	2
Physical education and sport	10	6
Total	150	99.7

It will be noticed that the number of classes devoted to mathematics and natural sciences makes up more than a third (35.7 per cent) of the total for all subjects.

The usual methods of class teaching are those known as *recitación* (learning by heart) and *exposición* (explanation of texts). However, more positive and functional methods have been introduced in two groups of subjects: in Spanish,

the Ministry has obtained the services of an expert in this branch, whose collaboration has improved the methods used and brought textbooks up to date; in natural sciences, with the help of Unesco, a large number of teachers have been sent abroad for further study, with a consequent improvement in the teaching of this subject.

The regulations make provision for the following examinations. (a) Monthly: these are set by the teacher who must prepare a report showing the marks obtained by each pupil during this period. The teacher is also required to assess the pupil's progress at least three times a month. (b) End of term: these are usually held in the first fortnight of September and last 10 days of January. (c) Annual: held in the last fortnight of February. (d) *Bachillerato* examinations: these are taken by pupils who have completed the fifth year of secondary school. They can be held at any time of the year except during the holidays. Successful candidates obtain the diploma of *Bachiller en Ciencias y Letras*, which is necessary for enrolment in any of the university faculties.

At the annual examination, the pupils are given a report showing the average of their term marks. The mean between the term and examination marks is considered the final mark. The minimum pass mark is 7.51, the scale ranging from 5 to 10. Examinations are of the traditional type. Attempts to apply objective tests have not been successful.

Teaching staff. There are no teacher training schools for secondary education. Staff is recruited among professional men (doctors, pharmacists, lawyers, engineers), primary school teachers and matriculated persons who show the aptitude and vocation for teaching a particular subject. School principals are free to make their own nomination, which is then submitted for the Ministry's approval. The Ministry is making every effort to improve the training of teachers. Young men have been sent abroad to specialize and periodical refresher courses are held for in-service staff. The possibility of establishing a higher educational college for the training of secondary school teachers is now under consideration.

Vocational and technical schools

Agriculture. There are two agricultural schools, one of them, the National Agricultural School of Managua, at university level. The other, at secondary level, is the International Agricultural School at Rivas run by Dominican monks. Candidates for enrolment must have completed the second year of the secondary school at least. The course lasts 3 years and ends with the award of the diploma of agricultural expert (*perito agrónomo*).

Domestic science and careers for women. There are half a dozen private schools which teach dressmaking, cooking and other domestic skills. Some of them follow a syllabus approved by the Ministry of Education and are supervised by the Ministry.

Vocational and technical schools. In co-operation with the United States Government, through the medium of the Inter-American Co-operative Education Service, the Instituto Nacional Técnico Vocacional came into operation in May 1953. Courses are given in motor engineering, cabinet-making, electricity, sheet metalwork, refrigeration, welding, plumbing, diesel engineering, air-conditioning. The courses vary between 1 and 4 years and all include both theory and practice, with a minimum of 20 hours weekly in the workshop, 20 hours of technical theoretical and general subjects and 3 hours of physical education.

Applicants for enrolment must: (a) be not under 15 or over 25; (b) have completed primary school; (c) possess the necessary manual skill and vocation; (d) have passed the special entry examination; (e) have passed medical and laboratory tests of their mental and physical health; (f) submit a certificate of good character and conduct issued by the competent authority of the district. All the pupils receive bursaries and are issued free of charge the material and tools required for their instruction. Successful pupils obtain a technician's diploma in the branch they have studied. The teachers and experts work full-time and are paid on a special salary scale.

Public commercial schools. There are four of these, namely, a day and a night school at Managua, and a day school at Granada and Bluefields. The following courses are given: (a) secretarial and stenography (3 years at the day school and 4 years at the evening school); (b) accountancy (4 years at day school and 5 years at evening school). Applicants for enrolment must have completed primary school, pass an entrance examination, and show proof of good health and conduct. Accountants obtain their diplomas after 6 months of practical work and a final examination. More than 100 bursaries are granted by the Government.

Private commercial schools. There are 23 recognized schools providing commercial training, the great majority in secretarial work and stenography. Some also train accountants. These schools teach the official syllabus and are under the supervision of the Ministry.

There are more than 40 commercial schools which do not follow the official curricula and syllabuses, and over which the Ministry of Education has no direct control. Attempts are now being made to subject them to general educational legislation.

Teacher training schools

There are now 5 teacher training schools in the country. The development of this type of education was given considerable impetus when the Jinotepo Teacher Training School for Men and the San Marcos School for Women were associated with the Unesco major project on the Extension of Primary Education in Latin America. In addition, the Inter-American Co-operative Education Service is giving technical assistance to the rural teacher training school at Estelí. Three of these schools are co-educational, namely, the Estelí rural school and the Managua day and night schools.

Teacher training courses are also given at certain private establishments, which conform to the official programmes and curricula of the Ministry.

The aims of Nicaragua's urban and rural teacher training

schools are: (a) to give students a theoretical and practical education, to make them familiar with the ideals, problems, resources and needs of the country, to train them to teach in the primary schools of the Republic and to consolidate thereby the principles and practice of democracy; (b) to organize and develop psycho-pedagogical research; (c) to introduce students to the problems and practices of community education; (d) to give further theoretical and practical training to the teaching staff of the training schools and primary schools attached to them or situated in their vicinity; (e) to organize and develop special courses for the training of school principals and inspectors; (f) to develop activities contributing to the professional skill and improvement of in-service teachers; (g) to promote public interest in teaching as a profession by demonstrating its importance and its contribution to the nation's future.

Enrolment is subject to the same conditions as enrolment in secondary schools, except at the evening teacher training school. In this case applicants must have completed primary school, and if they are unqualified teachers, have had at least 5 years of experience or, if not, have completed at least the third year of secondary school. Students are chosen after an entrance examination.

At teacher training schools, great importance is attached to teaching practice, which is so arranged that students devote at least 80 hours in their fourth and fifth years to practical teaching in primary schools.

There is a special co-ordinating organ responsible for fostering the efficiency and smooth functioning of all teacher training schools. It consists of: (a) the Director of Primary Education; (b) the Director of Secondary Education; (c) the chief of the department for teacher training; (d) the principals of teacher training schools; (e) Unesco Technical Assistance experts; (f) a representative of the Inter-American Co-operative Education Service.

TIME-TABLE FOR URBAN TEACHER-TRAINING SCHOOLS

(in hours per week)

Subject	Year				
	1	2	3	4	5
Spanish	5	5	5	3	3
English or French	4	4	3	–	–
Mathematics	5	5	5	2	–
World history	3	4	–	–	–
History of Nicaragua and Central America	–	–	3	–	–
European, Asian and African geography	3	–	–	–	–
Geography of America and Oceania	–	3	–	–	–
Geography of Nicaragua and Central America	–	–	3	–	–
History and geography of Nicaragua	–	–	–	–	2
Natural science	4	–	–	–	–
Anatomy and physiology	–	3	–	–	–
Health education	–	–	2	–	–
Applied physics	–	–	–	3	–
Practical chemistry	–	–	–	–	3
Social education	2	2	2	–	–
Home crafts (for boys and girls)	2	2	2	2	–
Art and music	4	4	2	2	–
Physical education and sport	2	2	2	2	2
Introduction to teaching	–	–	3	–	–
General psychology	–	–	2	–	–
Child psychology more especially as related to children of school age	–	–	–	3	–
Educational psychology	–	–	–	–	3
Community education	–	–	–	–	2
School organization	–	–	–	4	–
History of education	–	–	–	–	3
Educational theory	–	–	–	9	6
Marking and rudiments of educational statistics	–	–	–	–	2
Teaching practice	–	–	–	6	10
Total	34	34	34	36	36
Private study	12	12	12	12	12
Extra-curricular activities	5	5	5	3	3

Note. The subjects of physical education and sport, art education, social education and home crafts are meant to be integrated with extra-curricular activities.

Other specialized schools

Admission to the following institutions is, unless otherwise stated, conditional on the satisfactory completion of primary school.

The School of Hygiene, administered by the Ministry of Health, trains health inspectors. There is no age-limit. The course lasts for six months, and students receive a monthly stipend of about U.S.$30. The school also trains health officers, but entrants for this course must have completed the second year of secondary school or the equivalent.

The National School of Music is under the Ministry of Education. The courses vary in length but, in general, last for at least 4 years.

The National School of Fine Arts, which is also administered by the Ministry of Education, gives courses in sculpture, painting, drama and ballet.

Military schools. These are administered by the Ministry of War, Marine and Aviation. The Military Academy requires that entrants shall have completed the second year of secondary school. The 3-year course includes general secondary education and those passing out are given the diploma of Bachelor of Science and Letters and the rank of second-lieutenant. Candidates for admission to the Radio School must have completed the first year of secondary school; the course lasts 3 years. The Aviation School has a 3-year course based on the second year of secondary school.

The National Seminary, which is administered by the Archbishopric of Managua, has a 12-year course for candidates for the priesthood.

TRENDS AND PROBLEMS

The government's main concern with regard to education is to achieve a more efficient organization of services, with greater emphasis on improved teaching quality on the technical side.

The trend in secondary education is away from the

inculcation of mere factual knowledge contained in syllabuses and towards the formation of the intellect, bearing in mind the characteristics and needs of our environment. The present organization of the secondary course as a single cycle will shortly be replaced by systems of two cycles, the first of which, lasting 3 years, will give a general education and the second, of 2 years, more specialized courses. It is also intended that curricula shall become more flexible.

The trend in vocational education is to adapt courses and organization to the present and future needs of the nation, particularly in agriculture and industry. To achieve these ends, it has become necessary to found new schools that will offer fresh vocational possibilities to pupils leaving primary school. It is also planned to create an executive organ which will co-ordinate the structure and orientation of the training given to technical personnel by the National Technical and Vocational Institute, private enterprise and the Institute for National Development (INFONAC).

Similar trends can be observed in teacher training, e.g., an increase in the number of schools, and intensified effort to give intending teachers the best professional training. These tasks are extremely urgent, for a solution to the grave problem of primary education depends largely upon the existence of well-trained teachers.

[*Text prepared by the Ministry of Public Education, Managua, in January 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 1,378,000.
Area: 57,143 square miles; 148,000 square kilometres.
Population density: 24 per square mile; 9 per square kilometre.

Summary of school statistics, 1953–58. Total enrolment in 1958/59 may be estimated at nearly 150,000 pupils, representing about 11 per cent of the population; there were, in addition, 11,900 persons attending adult education courses. In 1957/58, the number of university students was 916. No separate figures for enrolment in vocational education are available for recent years. Of school enrolment reported in 1958/59, 3 per cent were pupils in kindergartens, 92 per cent in primary schools, 4 per cent in general secondary schools and the remainder, less than 1 per cent, in secondary teacher training schools. Girls made up more than half the enrolment in kindergartens and primary schools, 28 per cent in general secondary schools and nearly three-quarters of the enrolment in teacher training schools. Data on the teaching staff are very incomplete. In 1958/59, there were 3,684 teachers in public primary schools, of whom 89 per cent were women, and the average pupil-teacher ratio was 31. Compared with 1953/54, enrolment in primary and secondary education appeared to have increased by about 20 per cent by 1957/58. (See table.)

Examination results in secondary education, 1953–57. The only information available on examination results refers to teacher training certificates. In 1957/58, 81 certificates were awarded, against 34 in 1953/54. In 1955/56, the latest year for which figures are available, nearly two-thirds of the successful candidates were women.

Educational finance, 1959. According to data published by the Unesco Regional Office for the Western Hemisphere in the *Boletín Trimestral de Proyecto Principal de Educación Unesco-América Latina*, Vol. 2, No. 5 (January–March 1960), the 1959 budget estimate of the Ministry of Education amounted to 34,911,000 cordobas of which 20,249,000 cordobas were allotted to primary education. [Official exchange rate: 1 cordoba = 0.14 U.S. dollar (approx.).]

Sources. Nicaragua: Ministerio de Educación Pública, *Boletín Estadístico*, No. I (1958/59); Pedro Quintanilla, *Problemas Fundamentales de la Educación Primaria de Nicaragua;* Dirección General de Estadística y Censos, *Boletín de Estadística: III Época*, No. 7 (June 1959).

SUMMARY OF SCHOOL STATISTICS, 1953–58

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1958/59	[1] ...	[1] ...	[1] ...	3 152	1 795
	Kindergartens, private	1958/59	...	...	...	1 034	533
	Total	**1958/59**	**...**	**...**	**...**	**4 186**	**2 328**
	„	1957/58	[1] ...	[1] ...	...	[1] ...	[1] ...
Primary	Primary schools, public	1958/59	[2] 1 831	[2] 3 684	[2] 3 262	115 015	59 081
	Primary schools, private	1958/59	...	...	...	13 568	6 399
	Total	**1958/59**	**[3] 1 831**	**[3] 3 684**	**[3] 3 262**	**128 583**	**65 480**
	„	1957/58	[4] 2 347	[4] 5 317	...	[5] 148 314	[5] 75 177
	„	1956/57	...	...	...	...	...
	„	1955/56	[3] 1 956	[3] 3 767	...	[3] 118 679	...
	„	1954/55	[3] 1 994	[3] 3 650	...	[3] 110 704	...
	„	1953/54	2 066	4 143	...	115 645	...
Secondary							
General	Secondary schools, public	1958/59	...	...	...	2 799	546
	Secondary schools, private	1958/59	...	...	...	2 868	1 020
	Total	**1958/59**	**...**	**...**	**...**	**5 667**	**1 566**
	„	1957/58	[1] ...	[1] ...	...	[1] ...	[1] ...
	„	1956/57	...	...	...	...	...
	„	1955/56	...	...	...	...	...
	„	1954/55	...	...	...	...	...
	„	1953/54	39	492	...	3 781	...
Vocational	Vocational schools						
	Total	**1953/54**	**[6] 34**	**[6] 175**	**...**	**[6] 3 383**	**...**
Teacher training	Teacher training schools, public	1958/59	...	...	...	[7] 783	[7] 525
	Teacher training schools, private	1958/59	...	...	...	174	174
	Total	**1958/59**	**...**	**...**	**...**	**957**	**699**
	„	1953/54	6	84	...	397	...
Higher							
General and technical	National University						
	Total	**1958/59**	**1**	**...**	**...**	**...**	**...**
	„	1957/58	1	...	...	916	...
	„	1953/54	1	...	...	1 076	...
Adult	Study group for teachers	1958/59	...	...	...	1 047	537
	'Pilot project' schools	1958/59	...	...	...	3 546	1 588
	Literacy courses	1958/59	...	...	...	7 311	2 918
	Total	**1958/59**	**...**	**...**	**...**	**11 904**	**5 043**

1. Included in primary schools.
2. Including kindergartens.
3. Public schools only, including kindergartens.
4. All public and private schools.
5. Public and private, including secondary education.
6. Public and private commercial schools only.
7. Including 66 (F. 63) students in one 'Normal' night school.

NORWAY

THE EDUCATIONAL SYSTEM

The Norwegian Constitution of 17 May 1814 makes no particular reference to education. The educational system of the country is regulated by special laws, the most important of which are: 1935, Act on Secondary Schools; 1938, Act on Teacher Training Colleges; 1940, Act on Vocational Schools; 1946, Act on Continuation Schools; 1949, Act on Folk High Schools; 1950, Act on Apprenticeship Schools; 1951, Act on Special Schools (for Handicapped and Mentally Deficient Children); 1954, Act on Experiments in Schools; 1957, Act on Secondary Commercial Schools and Vocational Schools for Commerce and Clerical Work; 1959, Act on Primary Schools.

Since 1814, when the union with Denmark was dissolved, Norway has been an independent, constitutional monarchy. The Evangelic-Lutheran religion is the public religion of the nation and is taught as a compulsory subject in primary schools and general secondary schools. Pupils who do not belong to the State Church are exempted from this instruction on application from their parents.

During the union with Denmark the Danish language gained ground in Norway, especially from about 1600, when it had become the only written language used in the administration. By 1814, when Norway gained her independence, the written language in use could scarcely be distinguished from Danish, but there were many Norwegians who, for nationalistic or democratic reasons, wanted to bring the written language more into conformity with the spoken language of the nation. The written language was gradually Norwegianized and had developed a marked difference from Danish by the beginning of the twentieth century. This form of the Norwegian language is known as *bokmål*. About 1850 the linguist Ivar Aasen created *nynorsk*, a language based on Norwegian dialects. This language was adopted by several writers and soon developed a literature of its own. *Nynorsk* was recognized as another official language in 1885, and since then *nynorsk* and *bokmål* have had equal rights. Subsequent spelling reforms have brought these two forms of Norwegian closer to each other. The local school board decides which of the two languages should be used in the primary schools within a school district. In 1955/56 *bokmål* was used in 2,681 school districts with 314,404 pupils, and *nynorsk* in 2,542 school districts with 106,374 pupils. In general secondary schools both languages are compulsory but the pupils choose one of them as their main language.

Apart from these two forms of Norwegian there are small linguistic minorities in the north, where Lappish is spoken by about 15,000 and Finnish by a few thousand Norwegians. A number of primary schools in this area give instruction in both Lappish and Norwegian, and Lappish textbooks are in use. There exist a few vocational schools intended for Lapps, but no general secondary school gives instruction in Lappish.

Education in Norway, both primary and secondary, is considered as the responsibility of the State. Except for elementary commercial schools, private schools are few. The Norwegian Representative Assembly (*Storting*) is elected directly by the people for four years. The final decision in educational matters lies with this body, which makes the laws and votes the money to be spent on educational purposes each year.

The Schools Department in the Ministry of Church and Education controls all primary and general secondary education and most of the vocational education. The Department has seven divisions—roughly one for each type of school. Matters of a purely administrative character, such as appointments, state grants, etc., are dealt with by the Ministry direct, while matters of a more pedagogical nature are generally submitted to one of a number of advisory councils, each dealing with a particular type of school.

For the purposes of civil administration Norway is divided into 20 counties. The county school board is composed of at least five members, of whom one is an expert on primary education, one on general secondary education and one on vocational education. The board promotes the school system of the county, and is in particular charged with long-range planning and co-ordination of the schools of the different communities within the county.

At regional (county) level the executive powers of the central education authority are vested in the school directors, of whom there are 11 in all, each responsible for a particular area. These school directors are state representatives, in both administrative and supervisory matters in the areas to which they have been appointed. Up to the present they have been mainly concerned with primary education.

The school system of each municipality is governed by a local school board whose members are elected by the municipal council, which is responsible for seeing that the municipality offers the best possible opportunities for both practical and theoretical education. All primary schools and the secondary schools run by the municipality are governed by the local school board. In all municipalities there is a school inspector. He acts as the executive secretary of the local school board and is in charge of the daily management of the school system. He is automatically a member of the advisory council for primary schools mentioned above.

Most types of secondary school have a board of management which supervises the activities of the school and attends to its requirements. The composition of the board of management is fixed in the laws governing the various types of school and differs according to which authority is responsible for the running of the school—the State, the county or the municipality.

The structure of the Norwegian school system is shown in the diagram on page 903.

THE DEVELOPMENT OF SECONDARY EDUCATION

At the beginning of the last century, general secondary education was given in a few 'learned schools' or 'classical schools' (*latinskoler*) and in some cases in 'modern schools' (*borgerlige realskoler*). By an Act of 1869 general secondary education was reorganized. The two types of school, *middelskole* and *gymnasium*, then introduced, had a 6-year course for children from 6 to 15, and a 3-year course for young people from 15 to 18 respectively. The *middelskole*, as the name indicates, gave an intermediate education for children and young people who did not intend to go on to the university. But as admission to the *gymnasium* was based on the final examination at the *middelskole*, they had the opportunity to continue their education in the *gymnasium* and to matriculate at the university. By the Act of 1869 the *gymnasium* had two 'sides': a classical side with Latin and Greek as major subjects, and a science side with the main stress on mathematics, natural science and English.

Although the Act of 1869 aimed at articulating the primary schools and the general secondary schools (3+6+3), in many places primary education was given in preparatory classes attached to the *middelskole*. The link between the primary schools in towns and the secondary schools was immensely improved by a new Act (1896) on secondary education, which required that pupils admitted to secondary schools (*middelskoler*) should have had five years of primary schooling. The matriculation examination was reached through a 4-year course in the *middelskole* and a 3-year course in the *gymnasium* (5+4+3). In the gymnasium the two sides were reorganized as a Latin side and a science side, and a third, the English side, was added.

By the Act of 1896 the management of the secondary school system was vested in the Ministry of Education. To assist the Ministry in supervising the teaching and in arranging the leaving examinations the Council for Secondary Education was established. Regulations were also adopted for a local board of management for each state secondary school.

In 1921 the *Storting* adopted regulations which provided that no state funds should be allotted to a *middelskole* which was not based upon a 7-year course at the elementary schools. Following this first step towards a unified school system, a parliamentary commission was appointed to report on the further development of general education. The recommendations of this commission together with the views of outstanding educationalists became the basis of the Act passed by the *Storting* in 1935. By this Act the unified school system was adopted.

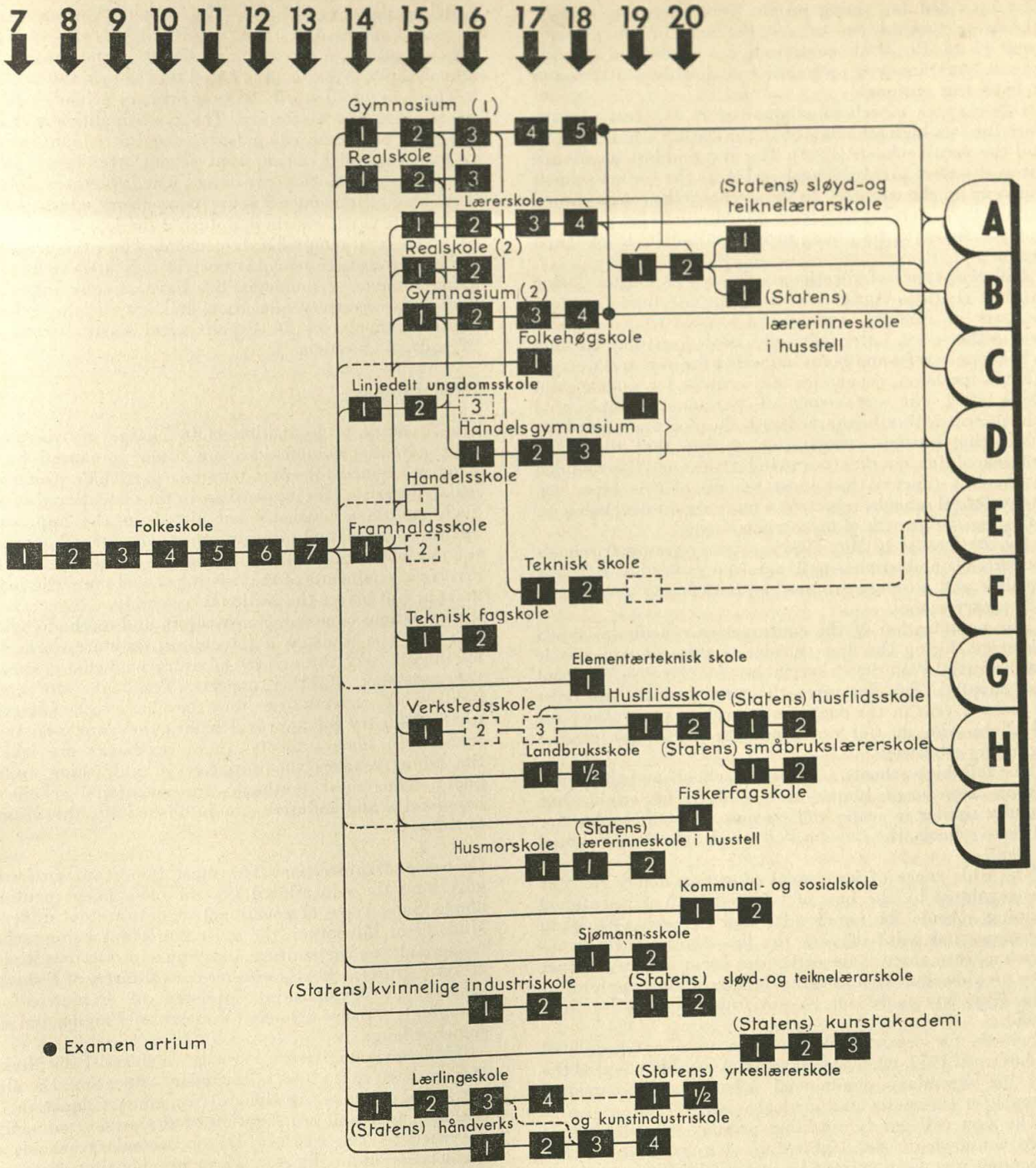
Besides the *middleskole* and the *gymnasium* two other types of school for general education originated in the middle of the last century. The establishment of the continuation school arose out of the need for further education of young people who did not intend to go to the general secondary schools. Originally the development of this type of school was confined to rural areas, but in 1908 the continuation school was also adopted by the towns. The length of the courses in the continuation schools first varied from 1 to 6 months, but later on the courses were extended. Apart from the continuation schools, which

GLOSSARY

elementærteknisk skole: vocational secondary school for industrial employees who have completed apprenticeship.
fiskerfagskole: vocational training school for fishermen.
folkehøgskole: folk high school (6-month courses in general education).
folkeskole: primary school covering the period of compulsory education.
framhaldsskole: continuation school.
gymnasium: general secondary school leading to higher education; (1) ordinary type, (2) rural.
handelsgymnasium: upper vocational secondary school of commerce.
handelsskole: vocational training school of commerce.
husflidsskole: vocational training school of home art and handicraft.
husmorskole: vocational training school of home economics.
kommunal- og sosialskole: school for social service and local administration.
lærerskole: teacher training college with courses at two levels.
lærlingeskole: part-time vocational training school for apprentices.
landbruksskole: vocational training school of agriculture.
linjedelt ungdomsskole: comprehensive school.
realskole: lower general secondary school; (1) ordinary type, (2) rural.
sjømansskole: vocational training school of seamanship.
(*Statens*) *håndverks- og kunstindustriskole:* state vocational training school of arts and crafts.
(*Statens*) *husflidsskole:* training college for teachers of home art and handicraft.
(*Statens*) *kunstakademi:* academy of fine arts.
(*Statens*) *kvinnelige industriskole:* state vocational training school of arts and crafts for women.
(*Statens*) *lærerinneskole i husstell:* teacher training college of home economics.
(*Statens*) *sløyd- og teiknelærarskole:* specialized teacher training school for teachers in school of arts and crafts for women.
(*Statens*) *småbrukslærerskole:* training college for teachers in agricultural schools.
(*Statens*) *yrkeslærerskole:* specialized teacher training school for teachers of vocational subjects.
teknisk fagskole: vocational training school for technical subjects.
teknisk skole: vocational training school at upper secondary level.
verkstedskole: vocational training school for pre-apprenticeship training.

HIGHER EDUCATION

A. *Universitet:* university.
B. *Norges Tekniske Høgskole:* Norwegian Technical University.
C. *Norges Tannlægehøgskole:* State College of Dentistry.
D. *Norges Handelshøgskole:* State College of Business Administration and Economics.
E. *Norges Lærerhøgskole:* State College for Teachers.
F. *Norges Landbrukshøgskole:* State College of Agriculture.
G. *Norges Veterinærhøgskole:* State Veterinary College.
H. *Statens Gymnastikkhøgskole:* State School for Physical Education.
I. *Det Teologiske Menighetsfakultet:* The Independent Theological College.


7 8 9 10 11 12 13 14 15 16 17 18 19 20
Gymnasium (1)
Realskole (1)
Lærerskole
Realskole (2)
Gymnasium (2)
Folkehøgskole
Linjedelt ungdomsskole
Handelsgymnasium
Handelsskole
Folkeskole
Framhaldsskole
Teknisk skole
Teknisk fagskole
Elementærteknisk skole
Verkstedsskole
Husflidsskole
(Statens) husflidsskole
Landbruksskole
(Statens) småbrukslærerskole
Fiskerfagskole
Husmorskole
(Statens) lærerinneskole i husstell
Kommunal- og sosialskole
Sjømannsskole
(Statens) kvinnelige industriskole
(Statens) sløyd-og teiknelærarskole
(Statens) kunstakademi
Lærlingeskole
(Statens) yrkeslærerskole
(Statens) håndverks og kunstindustriskole
(Statens) sløyd-og teiknelærarskole
(Statens) lærerinneskole i husstell
A B C D E F G H I
● Examen artium

were intended for young people from 14 to 16, evening schools were established to meet the needs of young people from 17 to 19. Both continuation schools and evening schools were financed by public contributions; attendance at both was optional.

Other types of school originating in the last century were the folk high schools (1864), the county schools (1875), and the youth schools (1893). The first and last mentioned categories were private schools, whereas the county schools were run by the counties. In these schools the courses lasted from 3 to 7 months, and were aimed mostly at providing general education for young people and adults in the rural areas.

Different types of vocational schools were begun during the last century. Agriculture being at the time the main industry of Norway, agricultural schools were naturally first in the series. Later followed schools providing training in the home crafts and home industries for men and women, schools for home economics and schools for seamanship. Until 1907 the organizing of permanent commercial schools was rather haphazard as no licence was needed for conducting business transactions before that time. The first schools for handicrafts and industries were also founded in the last century, but most schools of this type, e.g. the technical schools, represent a more recent development, following the growth of industrialization.

By the Law of 10 May 1935 secondary grammar schools (*middelskole* and *gymnasium*) were reorganized as a 3-year *realskole* and a 5-year *gymnasium*, both based on a 7-year elementary school.

The organization of the continuation school was much discussed during the first decades of this century, but it was not until 1946 that a special law for this type of school was adopted. The law gives the municipalities the right to make 1 year in the continuation school compulsory for all those who do not enter another school for general secondary education.

The folk high schools, the county schools and the youth schools mentioned above are of different origin, but broadly similar in scope and purpose. A common law for all these schools, the Law on Folk High Schools, was voted in 1949.

The wide range of vocational education before the war was regulated by the Law of 1 March 1940 on vocational training schools for handicrafts and industry. From an organizational point of view the law divides these types of school into three main categories according to whether they provide education prior to, during, or after apprenticeship. This law could not be put into force until 1 July 1945.

Schools for commercial education were not regulated by law until 1957, when the National Assembly adopted the law on secondary commercial schools and vocational schools for commerce and clerical work.

The first colleges for training primary school teachers were founded in the eighteenth century, but teacher education was not regulated by law until 1890. Instruction was to be given in a 2-year course, subsequently expanded to 3 years (Law of 1902) and 4 years (1930). Up to that time the teacher training colleges were based on the completion of the primary school, but the Law of 1930 also introduced a course for students who had passed the matriculation examination. The present law on teacher training colleges dates from 1938 and provides two main types of course, a 4-year course based on the continuation school and a 2-year course based on the *gymnasium*.

The Law of 10 April 1959 on primary schools will also affect secondary education. The municipalities will have the right to extend compulsory school attendance from 7 to 9 years, which means that school attendance will be compulsory up to 16 years of age. The law states that if it is decided to introduce 9 years' compulsory education in a municipality, the instruction during the last 2 years must be given in a comprehensive school. The organization of the comprehensive school is not yet regulated by law, but a fair number of municipalities have already introduced 9 years' compulsory education and are running comprehensive schools on an experimental basis (see section 'Trends and problems').

Administration

The Ministry of Education is in charge of educational policy. Special commissions are often appointed by the King in Council to report on some particular problem or make suggestions for innovations in the educational system. Such reports are usually submitted to the appropriate advisory council and often to other competent bodies, e.g. the teachers' organizations. If changes are proposed which involve amendments of the existing school laws, the matter must be put before the National Assembly.

Regulations concerning curriculum and methodology are issued by the Ministry of Education; they are worked out by the Ministry through its advisory councils, often with the assistance of other experts. Textbooks are mostly published by private firms, but they have to be submitted to the Ministry for approval before they are used in the schools. In some subjects where textbooks are lacking, the Ministry takes the initiative in publishing suitable books. Thus most textbooks for vocational schools for handicrafts and industry are published by the Ministry of Education.

Control and supervision. The most important authorities governing the educational system have been mentioned above. Some types of vocational schools are not under the Ministry of Education, the most important being: schools for agriculture, horticulture, dairying and forestry (Ministry of Agriculture); schools for fishermen (Ministry of Fisheries); schools for seamanship (Ministry of Commerce and Shipping); nursery schools (Ministry of Family and Consumer Affairs).

Of the several advisory councils which assist the Ministry of Education in matters of secondary education, the oldest is the State Council for General Secondary Education. The establishment and organization of the present council are governed by the Act of 1935 on secondary schools and regulations under the Act. These provide that the council shall consist of a chairman, a vice-chairman and six other members, all of whom have had practical experience in the field of general secondary education. Each of the written subjects taken at the matriculation examination has at least one representative. All the members are appointed by the King for a period of 5 years. In dealing

with matters of hygiene the council has the assistance of an expert, also nominated by the King for a period of 5 years.

The council is authorized to supervise the teaching in the *realskole* and in the *gymnasium*. It organizes the leaving examinations, sets the tests, and conducts these examinations on a nation-wide basis. At the request of the Ministry it reports on teaching problems and otherwise participates in the administration of the general secondary school system. In addition, the council is concerned with the teaching programme, approval of textbooks, appointment of headmasters, conferment of examination rights on new schools, and a great number of other matters.

The chairmanship of this council is a full-time post. When the other members meet in council or travel to inspect schools they have to obtain leave of absence from their teaching or administrative positions in the school system. Recently a full-time supervisor of English was attached to the council; his responsibilities, however, also cover the teaching of this subject in primary and continuation schools.

The corresponding body for vocational education and training below university level is the State Council for Vocational and Technical Education, established according to the Law of 1940 on vocational training schools of handicraft and industry. The law provides that more than half of the members of this council shall be representatives of the practical trades. In accordance with regulations adopted in 1946 the council consists of 15 members, including representatives from each of the following groups: labour unions, employers in industry and handicrafts, foremen, inhabitants of rural areas and different kinds of schools (including at least one teacher). The director of the vocational school system is *ex officio* the chairman of the council. One representative from the Ministry of Education and another from the Ministry of Municipal Affairs and Labour may take part in the meeting of the council and usually do so, but without having the right to vote.

The duties of this council are much the same as those of the other advisory councils, but as the vocational school system is still being developed the Council for Vocational and Technical Education has been given more initiative. It has, for instance, the duty of ensuring co-operation between the schools and industry in establishing the major objectives of the whole teaching programme.

In 1950 the National Assembly enacted a law on apprentices in handicrafts, industry, commerce and office work, establishing the State Apprenticeship Council, and laying down that one half of the members of the council should represent the trades covered by the Act, with equal representation for employers and employees. This council has 10 members, 9 of whom are nominated by the King in Council, with the Director of the Vocational School System as permanent *ex officio* chairman. Consequently the Council for Vocational and Technical Education and the Apprenticeship Council work side by side under his direction. They are, however, organized as separate institutions, each with its own office manager and staff. The main functions of the Apprenticeship Council are: to administer and supervise the national apprenticeship system as regulated by the law, and to advise the Ministry on matters relating to the introduction of the Act into municipalities previously not under the law, on occupations to be covered by the law, on the duration of apprenticeships, curricula, etc.

For commercial education there are two advisory councils, the State Committee for Commercial Schools and the State Council for Secondary Commercial Schools. Other advisory councils under the Ministry of Education include the State Council on Experiments in Schools, the State Council on Home Arts and Crafts Education, the State Council for Correspondence Schools, and the State Scholarship Council.

Advisory services of another kind are provided by special inspectors or counsellors directly attached to the Ministry of Education, e.g. for physical education, manual training, domestic science, drawing and modelling, etc.

As mentioned in a previous section, the school administration on the regional level consists of a county school board. This board is in charge of educational matters common to the whole county. It has, for instance, to make proposals to the county council concerning the income and expenditure of the schools to which county funds are allotted.

The state representative at the regional level, the school director, has administrative, supervisory and advisory responsibilities. His administrative function is to carry out the laws and all decisions taken by the Ministry affecting the school system under his management. In his supervisory capacity he is authorized to visit schools, observe the teaching and report on the standing and the development of the school system in his district. As an adviser he assists the Ministry on all educational problems either at the Ministry's request or on his own initiative. It is also his duty to serve as adviser to the county school board and all the local school boards within his area. The new law on primary schools, which will come into force from 1 July 1959 will affect the duties of the county school board and the school director to some extent, but the details have not yet been worked out.

The local school board makes recommendations to the Ministry of Education on the appointment of headmasters and teachers in the municipal secondary schools. The local school board serves as board of management to all secondary schools run by the municipality, but may also appoint special boards of management for one or several of these schools. For state schools, county schools and intermunicipal schools regulations concerning the composition of the board of management are issued by the Ministry of Education. In state secondary grammar schools the board consists of the headmaster of the school and six members, of whom four are chosen by the Ministry, one by the municipal council in the municipality where the school is located, and one from among their own number by the teachers of the school in question. The board supervises the activities of the school.

All types of secondary schools are directed by a headmaster who is automatically a member of the board of management. The headmasters of municipal secondary schools are appointed by the Ministry of Education on the recommendation of the local school board and the advisory council in question. Thus the headmaster of a municipal school is responsible partly to the local school board and partly to the Ministry.

Finance. Generally speaking, Norwegian schools may, according to their financial basis, be classified as state

schools or municipal schools. The state schools proper are run entirely by state funds, the total expenditure and income being fixed by the *Storting* for each school year. These schools provide secondary educational facilities in regions where the responsibility of running schools cannot be undertaken by any single local authority. During recent years, however, there has been a trend towards establishing such regional schools on a county basis or even on an inter-municipal basis. In the latter case, two or more municipalities jointly establish schools for further education.

The municipal schools are established and run by the municipality. Roughly speaking, the municipality has to provide for the buildings, maintenance, equipment, etc., while the State contributes to certain of the running expenses. Regulations concerning state contributions to municipal schools are either laid down in the law regarding the type of the school in question, or are otherwise approved by the *Storting*. In either case the necessary funds have to be allotted by the *Storting* for every budgetary year. The municipal schools form by far the largest group. Most secondary grammar schools (*realskoler* and *gymnasier*) belong to this group, and the state money spent on this type of school considerably exceeds the expenditure on the state schools.

In addition to the state contribution, municipal schools of certain types in rural areas are subsidized by county funds. In such types of municipal schools the total expenses are divided between the local, provincial and central authorities. Thus the municipality is responsible for its own school system, but the State and the county contribute to certain expenses, which are not necessarily the same for both authorities.

County allotments cover a minimum proportion of the cost of new buildings and remodelling of continuation schools in rural areas. All county allotments are paid out of the general county tax levied on the municipalities. Thus there is no special county tax for this purpose. Schools run by the county also obtain state grants, which are generally the same as those allotted to the municipalities.

Tuition fees are paid only in some types of secondary schools. In state schools some fees are still payable, but steps have recently been taken to abolish them. In municipal secondary grammar schools (*realskoler* and *gymnasier*) fees are still usually paid by the pupils. According to the law on secondary schools of 1935, the maximum amount per pupil for a school year is fixed by the *Storting*. Thus it is left to the local authority to levy tuition fees up to the maximum permissible. Many municipal councils however make no charges for tuition in schools providing further education.

In 1957 the National Assembly passed an Act establishing the Student Loan Fund (*Statens lånekasse for studerende ungdom*). This fund gives loans to Norwegian pupils and students studying at institutions of further and higher education for their final degrees. No interest is charged on such loans during the period of study and for one half-year after its completion. Students are obliged to repay the loans, plus interest at a low rate, within a maximum of 15 years after the close of their studies. To obtain a loan no private guarantee as security is necessary, but the student has to prove his aptitude for the study in question. The fund does not cover pupils in secondary grammar schools and the more elementary schools for vocational training.

The new national scholarship scheme, adopted in 1956 by the National Assembly, established the following criteria for the award of scholarships: economic need, absence from home during school attendance or the period of study, aptitude for the training concerned. These scholarships are available to pupils in schools offering general education and pupils at technical schools.

The funds granted in the state budget for this purpose are distributed according to advice from the State Scholarship Council.

In the vocational training schools a special scheme is in operation. In each fiscal year a certain amount is set aside for scholarship purposes from money collected through the unemployment insurance fund; the idea being that the unemployment fund shall offer economic aid for education to young people who might otherwise be unemployed during a period of depression on account of lack of training. Such scholarships are granted to persons who have paid their contributions to the unemployment fund for at least 45 weeks. At training institutions approved by the Directorate of Labour, pupils who comply with the regulation mentioned automatically receive a fixed grant per day during the period of school attendance.

Grants towards travelling expenses for pupils in secondary schools are met in two ways: (a) the State may give a contribution corresponding to 30 per cent of the cost of a return ticket twice a year for journeys of more than 200 kilometres from home to the teaching institution concerned; (b) the State and the municipality may jointly cover the expenses to meet daily travel of more than 6 kilometres.

School buildings. It is the duty of the various school authorities, in co-operation with the health authorities, to control the standard of school buildings and see that they are in keeping with the requirements laid down in regulations. Before new school plants are built, the plans must be approved by the Ministry. The Ministry of Education has recently appointed a school building committee to report on the co-ordination of the building of new schools and to work out standard plans for secondary schools of various types and sizes.

TYPES OF SECONDARY EDUCATION

When a pupil has completed his compulsory schooling, he may choose from among a wide variety of institutions for further education. For the time being, however, some types of secondary school are too crowded to admit all those who apply for admission, e.g., the secondary grammar schools of some municipalities. In such cases the pupils are generally admitted on the basis of the marks obtained in the primary school.

Guidance services have developed rapidly in Norway since the war. Such services are provided by the Directorate of Labour which has district offices in each county. In places of some size the local labour exchanges have special offices which assist young people in choosing education or training for different professions or occupations. During the last year in primary schools the pupils are given infor-

mation about the prospects of employment and the types of training required for various occupations; this is done either by a teacher or by a guidance officer who visits the schools.

Normally the school year in secondary schools follows that of the last few years in the primary school: 38 weeks a year, 6 school days a week, and 6 instruction periods a day, the summer vacation usually lasting from the end of June to the end of August. There exist, however, many types of schools, especially vocational schools, to which these general rules do not apply.

General secondary schools

For the time being three main types of schools provide for general secondary education: the continuation school (*framhaldsskole*); the folk high school (*folkehøgskole*); and the *realskole* and the *gymnasium*, the two last-mentioned often termed *høgre almenskoler* in Norwegian.

Continuation schools. Most municipalities, both in urban and in rural areas, provide for an eighth year of school work, i.e., 1 year of additional general education beyond the completion of the primary school. On the initiative of the local school authorities, the continuation school course may be made compulsory by the municipal council for all children who leave the elementary school without going on to other advanced schools. This is at present (1959) the case with more than one quarter of all rural and urban municipalities, and there is a general trend towards changing the optional schools into compulsory ones.

The aims of a continuation school are to promote general education, further the growth of character in the pupils, and prepare them for life. As this is the fundamental basis of the programme, the curriculum in the continuation schools offers theoretical training beyond the elementary school level in the field of general education, together with some opportunities for instruction related to various practical trades. To a certain extent the continuation school also aids the pupil to make a wise decision with regard to the choice of his further education or trade.

Two types of continuation schools may be established, one chiefly theoretical, the other giving training mainly in practical subjects, for instance: woodwork, metalwork, needlework, domestic cookery, etc. Within certain limits fixed by the law, the local school authorities of each district are entitled to build up and run continuation schools along the lines best suited to the people living in their part of the country. A typical time-table for a compulsory 1-year course is given on this page.

TIME-TABLE FOR 1-YEAR CONTINUATION COURSE

(in periods per week)

Subject	Theoretical line		Practical line	
	M.	F.	M.	F.
Norwegian	6	6	4	4
Citizenship	2	2	2	2
Health education	2	2	2	2
Mathematics and book-keeping	5	5	3	3
Mathematics	4	4	2	2
Book-keeping				
Domestic subjects with theory	–	5	–	10
Domestic science	11	6	17	7
Other practical subjects and designing	3	3	3	3
Physical education				
Total	33	33	33	33

The courses in the continuation schools may vary in length from 3 months to 2 years, in some cases to 3 years (evening courses). If the course has been mainly theoretical there is usually a final written examination, the local school board deciding which subjects are to be tested. All pupils, whether in theoretical or practical courses, are entitled to receive a certificate upon completion of their course. Certificates issued by continuation schools, however, cannot easily be compared on account of the differing content and duration of the courses.

Folk high schools. The purpose of the folk high school is to give young people advanced general education. To be admitted the pupils must normally have reached the age of 17. It is characteristic of these schools that they are liberal in organization and that the teaching, based on democratic ideals, aims at preparing young people for living in a democracy. The subjects taught are mainly the same as in the continuation schools, but as the pupils are older and more mature, the teaching is on a somewhat higher level. In addition more emphasis is placed on the theoretical side in the main course.

The ordinary course at a folk high school lasts for about 6 months, from October to April. A more recent development is a second year course, also of 6 months' duration; to be admitted the pupils must either have gone through an ordinary 6 months' course or have some equivalent training. This second year course, therefore, is a continuation or extension of the ordinary course. At the end of each course held by a folk high school there is usually an examination, arranged by the school itself. The pupils are granted a certificate showing their performance in the subjects taken, which may be useful when applying for admission to other types of secondary schools.

The 'realskole'. A *realskole* is either a separate institution or is combined with a *gymnasium*. The separate type is mostly found in rural areas, while towns as a rule maintain combined schools. The general aims of both the *realskole* and the *gymnasium* are 'to contribute to the pupils' Christian and moral upbringing and seek to develop them both mentally and physically'.

Based on the completed elementary school course, the *realskole* gives a general education which may provide the basis for further specialized training and for employment in various public bodies and in private concerns. The law provides for courses of 2, 3, and 4 years' duration, but the 3-year course is by far the most common. The 2-year *realskole* is popular in rural areas. It is intended for gifted pupils who satisfy the requirements of an entrance examination. If a pupil who is admitted to the first class of a *realskole* cannot keep up with the others, or does not appear to be mature enough to profit sufficiently from the teaching, the school council decides, before Christmas and after the pupil's parents have received due notification,

whether he or she may remain in the class. A pupil who has spent 2 years in a class and who is still not mature enough to be promoted or to be admitted to the leaving examination may neither continue as a pupil of the school nor be admitted as such to the examination.

The law on secondary grammar schools (*høgre almenskoler*) names the subjects to be taught in the *realskole* but the only reference to subject content concerns the teaching of Norwegian and is to the effect that *realskole* pupils are to be given written instruction in *bokmål* and *nynorsk*. However, the law provides that the scope and aim of teaching in the individual subjects shall be laid down in regulations. Thus detailed provisions concerning instruction in the different types of schools are issued by the Ministry in teaching plans (*Undervisningsplaner for den høgre almenskolen*) drawn up on the basis of recommendations made by the State Council for Secondary Education. These describe in detail the aims and the methods of teaching each subject and fix the number of weekly periods assigned to each subject.

TIME-TABLE FOR *REALSKOLER*
(in periods per week)

Subjects	3-year *realskole*			2-year *realskole*	
	1	2	3	1	2
Religion	2	1	1	1	1
Norwegian	4	5	6	4	5
German	5	6	–	5	5
English	4	4	5	7	6
History and citizenship	2	2	5	2	3
Geography	2	2	3	2	3
Natural science	2	1	4	4	3
Physics	2	2	–	–	–
Arithmetic, mathematics and applied mathematics	5	5	4	5	6
Accounting	–	–	2	2	–
Drawing	2	2	–	–	2
Manual training	2	2	2	2	–
Physical training	3	3	3	2	2
Singing	1	1	1	1	1
Total	36	36	36	37	37

The *realskole* course concludes with a public leaving examination. All the subjects listed are required of pupils who wish to sit the complete leaving examination (*realskoleeksamen med full fagkrets*). The law provides, however, that the headmaster may exempt a pupil in the *realskole* from instruction in either German or English; for such pupils there is the 'single language *realskole* examination' (*ett-språklig realskoleeksamen*).

State schools and municipal schools with ordinary state support are entitled to hold the leaving examination at the schools. There are written and oral subjects, the latter comprising all the subjects offered except physical training. Pupils who have gone to a school with examination rights have to take tests in all written but in only one oral subject; other candidates take tests in all subjects, written and oral (such students are called *privatister*). For the written subjects, there is a countrywide examination in the latter half of May; this examination, held under the supervision of the State Council for Secondary Education, is the same for all schools, and the papers are marked by committees of teachers. For oral subjects, in the case of pupils from schools with examination rights, marks are awarded by the respective teachers in these subjects.

Gymnasier. The *gymnasium* provides a longer course than the *realskole* and at the same time prepares the pupils for entrance to universities and other institutions of higher learning.

A *gymnasium* course may last for 4, 5 or 6 years. The 4-year *gymnasium* is a rural secondary school based on a primary school course, usually without instruction in a foreign language, but as a rule with the addition of at least a 6-month continuation school or similar course. The 5-year *gymnasium*, which is the normal type, is based on the primary school course, with instruction in a foreign language (English).

The 5-year *gymnasier* are, generally speaking, municipal schools with state grants. The 4-year schools, on the other hand, are state schools in rural districts. A few private schools of the 5-year and other types still exist but there has been a trend towards the transfer of such schools to municipal status. As mentioned previously, a 5-year *gymnasium* is usually combined with a 3-year *realskole*. While the first 2 years of a 5-year *gymnasium* and a 3-year *realskole* are similar, providing exactly the same instruction, this is not so with the 4-year *gymnasium* and the 2-year *realskole*, where only the first year may be said to be identical. Admission to the first class of the 5-year *gymnasium* normally takes place on the basis of the elementary school leaving certificate. What has been said above concerning the selection of pupils on the basis of the entrance tests and the transfer of pupils to higher classes in the *realskole*, also applies to the *gymnasium*.

The *gymnasium* proper, i.e. the three upper classes, are divided into five sides: science, modern languages, Latin (with or without Greek), natural science and Norse. Pupils in a 5-year *gymnasium*, therefore, have to make their choice at the end of the second year, in a 4-year *gymnasium* after the first year. In 1957 the modern languages side supplied 46 per cent of all pupils graduating from *gymnasier* and the science side 50 per cent.

The curriculum of the *gymnasium* is laid down in the teaching plan already referred to in describing the *realskole*.

Although the *gymnasium* curriculum contains largely the same subject matter as that for the *realskole*, the degree of concentration in all the subjects is much greater and the requirements are far higher. Some subjects common to more than one side are also differently stressed on the various sides.

The *gymnasium* course concludes with the matriculation examination (*examen artium*). All the state and municipal schools have examination rights, i.e., they are empowered to hold the matriculation examination under the supervision of the State Council for Secondary Education. Like the *realskole* examination, the matriculation examination consists of a written and an oral part. As a consequence of this division, references are often made to written and oral subjects. It is a rather peculiar feature, however, that *privatister* (see above) are given oral examinations in the written subjects too, while a student at a school with

TIME-TABLE FOR *GYMNASIER*
(in periods per week)

Subjects[1]	Science side			Modern languages side		
	year			year		
	3	4	5	3	4	5
Religion	1	1	1	1	1	1
Norwegian	5	5	6	5	5	6
German	3	–	–	4	4	–
English	4	4	–	5	7	8
French	4	4	4	4	6	7
History	2	3	5	2	3	5
Geography	3	–	1	3	–	–
Biology	–	2	–	–	–	4
Chemistry and physiology	4	–	–	4	–	–
Physics	–	6	6	–	–	–
Mathematics	6	5	7	4	5	–
Descriptive geometry	–	1	1	–	–	–
Physical training	3	4	4	3	4	4
Singing	1	1	1	1	1	1
Totals	36	36	36	36	36	36

1. All subjects listed are required for the matriculation examination (*examen artium*).

examination rights has to take only one oral examination, in one of the subjects, either written or oral. (At the 1957 matriculation examination, between 17 and 18 per cent of the students were *privatister*.) Naturally, both categories of students have to take tests in all written subjects.

The written part of the matriculation examination is held in May and the oral in June. The written examination takes place simultaneously all over the country; the papers are set by the State Council for Secondary Education, and each script is marked by two experienced teachers. In this capacity the teachers are called *censorer* in Norwegian, and are appointed for a certain period by the Council for Secondary Education. In the oral test a pupil is examined by his own teacher if he is at a school with examination rights, and by an appointed teacher if he is a *privatist*. The mark for the oral test is, however, determined by a visiting teacher, who is the *censor*. Pupils other than *privatister* have to take only one oral test, and get 48 hours' notification of the subject in which it is to be. The matriculation certificates do not indicate which oral subject was actually examined.

As stated previously, the matriculation examination forms the basis for entrance to specialized studies at universities and institutions of higher learning. It is normally taken at the end of 12 years' schooling, at about 18 or 19 years of age. For the greater part of the candidates it marks the end of their formal education, but for others it is so to speak the platform for specialized training in science, letters, medicine, law, theology, engineering, commerce, agriculture, dentistry, etc. This group looks forward to studies leading to more exacting examinations for higher degrees; they are regarded as mature enough to do without further courses in general education.

About one-third of the primary school population in Norway goes on to the *realskole* and the *gymnasium*. Pupils leaving the *gymnasium*, therefore, may be said to form a select group.

Teachers. To become a full-time teacher in the *realskole* and the *gymnasium* it is necessary to have a university degree from the Faculty of Liberal Arts or the Faculty of Science. In addition, a 6-months' course in pedagogy is required. Teachers in the continuation schools are as a rule trained at the teacher training colleges, but have often some kind of additional training.

Correspondence schools. These play quite an important role as a supplement to the educational system of Norway. The first of them was established in 1914 and since that time several schools have come into existence. So far, however, no state school has been established, nor have any of the schools obtained state grants.

Vocational and technical schools

In the vocational field there exist a wide range of educational facilities. The survey given below does not pretend to be an exhaustive description of all the courses offered by the various educational institutions.

Commercial schools. Vocational schools for commercial and clerical work (*handelsskoler*) may run day or evening courses. There are usually three main types of course: a 6-months' day course, a 1-year day course, and a 2-year evening course (in some places also a 1-year evening course), of which the first and last cover the minimum requirements for a business man's licence. These minimum courses usually offer strictly commercial subjects: book-keeping, commercial mathematics, commercial law, business correspondence and office procedure, all of them compulsory. The curriculum of the 1-year day course comprises the same compulsory subjects, and a wide variety of optional supplementary subjects such as foreign languages, geography, history of commerce, political economy, shorthand, typing, etc. The teaching is more advanced and the final examination is of a higher standard.

Secondary commercial schools are called *handelsgymnasier*. They usually offer three types of course, a 3-year 'economic *gymnasium*' course (*økonomiske gymnasium*), which these schools are required to include by law, a 1-year general commercial course, and a 1-year secretarial course. Entry to the economic *gymnasium* course is confined to those who have had 2 years of general education in the *realskole* or in the ordinary *gymnasium*, or have passed the *realskoleeksamen*. There is no continuous upward line between the vocational commercial schools described above and the secondary commercial schools. Admission to the 1-year courses in the latter is based on a completed matriculation examination from any side in the ordinary *gymnasium*.

The economic *gymnasium* course gives advanced training in commercial and economic subjects together with general education and an introduction to social affairs. The Ministry of Education lays down the teaching plan for the economic *gymnasium;* the one now in operation is reproduced in the table at the top of the next page.

The course concludes with a leaving examination conducted along the same lines as the leaving examination at the ordinary *gymnasium*, and admitting to studies at universities and colleges.

TIME-TABLE FOR ECONOMIC *GYMNASIER*
(in periods per week)

Subject	Year		
	1	2	3
Norwegian	4	4	5
English	4	3	5
French	–	4	5
German	5	3	–
History	2	2	4
Geography	2	3	–
Mathematics and arithmetic	6	6	–
Natural science (chemistry, physiology, biology)	3	–	2
Law	–	2	2
Social economics	–	2	4
Business administration and economics	6	5	7
Typewriting	2	–	–
Physical training	2	2	2
Total	36	36	36

Vocational schools for industry and handicraft. This group includes several types of school regulated by the Act of 1940 on vocational education. The instruction provides the pupils with the practical skill and the theoretical knowledge which are necessary for the vocations concerned and which they cannot expect to acquire through their work in a factory.

Workshop schools (*verkstedskoler*) provide instruction prior to the period of apprenticeship; they are called preliminary schools. Their aim is to furnish young people with knowledge of machines, tools, materials and methods of work, and practical skill in their trades which will be of advantage to them in beginning their apprenticeship. To be admitted, the pupils must have reached the age of 14 and completed the primary school course. Generally, however, the schools prefer to take them at 15 years of age or more.

The ordinary preliminary school lasts for 1 school year. But other and longer courses are also authorized; for instance, advanced courses of an additional 6-months' to 1 year's duration (extended preliminary school). There are also a few 6-month preliminary courses in some trades. If the conditions within a certain trade make training through apprenticeship difficult or impossible, a full-time school in such trades with daily instruction for 3 years may also be established. A few such complete workshop schools are in operation in various trades, e.g. radio mechanics, agricultural mechanics, motor-car repair mechanics, shoemaking, bricklaying and tailoring. These schools prepare the pupils for the journeyman's test in the trade concerned.

TIME-TABLE FOR 1-YEAR PRELIMINARY SCHOOL (A-PLAN)

Subject	Number of instruction periods						Total number of periods in 40-week course
	First 2 weeks		Next 30 weeks		Last 8 weeks		
	Per week	Total	Per week	Total	Per week	Total	
Practical work	37	74	21	630	37	296	1 000
Construction and projection drawing	–	–	2	60	–	–	60
Trade theory, with appropriate drawing	3	6	3	90	3	24	120
Freehand drawing	–	–	2	60	–	–	60
Norwegian, with correspondence	–	–	4	120	–	–	120
Mathematics	–	–	5	150	–	–	150
Natural science	–	–	3	90	–	–	90
Physical training	2	4	2	60	2	16	80
Total	42	84	42	1 260	42	336	1 680

The Ministry has drawn up standard teaching plans for the different types of workshop schools. One of these plans, the A-plan for 1-year preliminary schools, is given in the table at the bottom of the previous column. It constitutes a course including theoretical instruction corresponding to that given during the first 2 years of a normal 3-year apprentice school.

A pupil who has completed a preliminary school run according to the A-plan has to take the last year of the 3-year apprentice school course when he is indentured.

Apprentice schools (*lærlingskoler*) offer training during the period of apprenticeship. Their aim is to provide the theoretical knowledge which craftsmen should acquire during apprenticeship, but which is not obtainable in the factory or place of work (theoretical apprentice schools), or to provide, where necessary or desirable, in addition to the theoretical knowledge, supplementary practical training in the school workshop (practical apprentice schools). To be admitted to an apprentice school the pupils must have reached the age of 14 and have completed the 7-year primary school course. Normally the pupils entering an apprentice school are 15 or over, but as these schools are also open to youth who are not apprentices, the law offers the possibility of entering at the age of 14. All apprentices are obliged to attend an apprentice school if such a school is established within reach of their work-place.

The ordinary course at an apprentice school lasts for 3 school years, each of about 8-months' duration (30–31 weeks). A supplementary course of 1 year's duration is often offered for those who want to prepare for a craftsman's licence; it is not compulsory, as there are many other ways of preparing for this. Instruction at the apprentice school may be given in evening courses with 10 hours' instruction per week, 2 periods daily for 5 days a week. Where conditions make it desirable the instruction may be concentrated in fewer days per week, or all the instruction can be given on one whole day each week (in which case the total number of teaching periods per day shall not exceed 7 without the approval of the Ministry).

The teaching at the apprentice schools is based on a standard plan adopted by the Ministry of Education.

Schools offering post-apprenticeship courses. Full-time schools of this type have so far only been established in a few fields, although the further training of those who have finished their apprenticeship is regarded as a vital necessity. The schools and courses established are intended for skilled workers, journeymen, master craftsmen, foremen and supervisors.

Among the institutions offering courses after the period of apprenticeship, the State Technological Institute plays the most important role. Its aims are to give independent producers, together with workers and foremen, the op-

portunity of learning the proper use of technical aids in their occupations, and to increase their knowledge of modern production procedure. These objectives are accomplished by instruction and training given in short courses. Two schools, one a state school (Oslo) and the other a municipal one (Bergen), offer various courses for young people who have special artistic abilities in drawing and modelling.

Elementary technical schools (*elementærtekniske skoler*) have as their main objective the provision of general education and theoretical elementary technical training for workers and employees in industrial concerns and in construction undertakings. The schools run 1-year courses based on the completed primary school course. The minimum age of admittance is 17, but preference is given to applicants who have a certain amount of practical experience. These schools are very often attended by pupils who have 8 to 10 years' experience and want to acquire technical knowledge of a somewhat more comprehensive character than that offered by the apprentice schools.

Technical trade schools (*tekniske fagskoler*) are practical-theoretical schools providing the training required for a number of different posts in industrial concerns and construction work (foremen, works managers, designers and similarly qualified positions). The courses last 2 years with practical and theoretical instruction in approximately equal proportions.

Technical schools (*tekniske skoler*) set out to provide a technical and general education which will enable students to take over medium or higher technical positions in industry and in the state and municipal technical administration. The ordinary course lasts 2 years and is purely theoretical, with some laboratory work. However, a Bill has recently been submitted to the National Assembly seeking to extend the course for another year. Thus it is anticipated that 2-year and 3-year courses may in future exist side by side.

The minimum age for admittance to the technical schools is 17. The holder of a *realskole* certificate may be automatically admitted provided he has at least 2 years' practical experience of a kind recognized by the department to which he is applying for admission. Applicants who have not passed the *realskole* examination or who have passed it more than 4 years previously have to take an entrance test in Norwegian, one foreign language (English), mathematics, natural science, drawing and writing. The schools run special preparatory courses of 6 months' duration to prepare applicants for the entrance examination, while for applicants with *realskole* certificates older than 4 years preparatory refresher courses lasting 3 months are also in operation. It should be borne in mind, however, that there is keen competition for admission to the technical schools, and consequently there is a tendency to prefer those who have the most comprehensive practical training. This fact has contributed to the rise of the average age of admission to 19–20 during the post-war period.

The technical schools are divided into departments, of which the largest schools have nine. Each head of department is appointed by the Ministry from among the teachers in the main technical subjects and has the immediate supervision of the teaching in the department, the laboratories and the technical collections, and is responsible to the director of the school. The number and types of departments may vary from school to school, the most common being construction and building technique, house building, chemistry, electro-technics, and machine-engineering. With the approval of the National Assembly, schools may add new departments if there is a demand for the training concerned.

A sample teaching time-table for 2-year courses in the departments of building construction and electro-technics at technical schools is given below; the table shows the number of weekly periods in each of the four terms (two terms per year) and the total number of periods for each subject in the courses.

Subject	Building construction				Electro-technics					
					Basic stage[1]		High-tension current		Low-tension current	
	I	II	III	IV	I	II	III	IV	III	IV
Norwegian	2	2	2	2	2	2	2	2	2	2
Commercial subjects			2	4			2		2	
Law and social science			2					2		2
Machine drawing	6	4			6	2				
Lettering	2				2					
Free hand drawing	4	4			4					
Mathematics	12	6			12	8			2	2
Mechanics	6	8	8		6	8	4			
Physics	7	4			7	4				
Chemistry	4	2			4	2				
Construction		8	18	32		4	4	2	4	
Technology of building		4								
Surveying		2	2	4				2		2
Engine theory			4	2		8	10	4	2	
Electro-technology			4			8	14	24	18	22
Laboratory work in electro-technology							8	4	8	4
Mechanical technology							4	4	4	4
Geology			2							
Total	43	44	44	44	43	46	48	44	42	38

1. The first year in the electro-technics department forms a basic stage, leading to specialization (high-tension or low tension current) in the second.

Schools for home arts and crafts (*husflid-og heimeyrkeskoler*). These schools offer vocational training more or less similar to that provided in the preliminary schools. The courses for men are from 6 to 10 months' duration, and include theoretical instruction and practical training in such subjects as woodwork, painting, drawing, knowledge of materials, calculation, book-keeping, electro-technology, modelling, designing and a number of other subjects relating to home arts and industries. The corresponding schools for women offer courses in weaving and sewing, lasting for 3 months to 2 years.

Agricultural schools (*landbruksskoler*). As a rule, these are public institutions run by the counties. The ordinary courses last for 18 months, giving theoretical instruction during two winters and practical training in the intervening summer. To be admitted, students must be 18 and must have had at least 1 year of general experience in their field of study. Those matriculating from these schools are called agronomists. Students who have passed the leaving

examination from the *gymnasium* or taken a special preparatory course are admitted to the State College of Agriculture.

There are also schools of horticulture (*hagebruksskoler*), of dairying (*meieriskoler*) and of forestry (*skogskoler*).

The training of teachers for service in the different types of agricultural school is conducted by the State College of Agriculture and by the State Training College for Teachers in Smallholders' Schools.

Schools for housekeeping (*husmorskoler*). A student has to be aged 18 and to have had one year of housekeeping experience. The courses offered vary in length from 3 to 10 months. As the county schools usually have farms they may also offer courses in horticulture and animal husbandry. Other schools generally have courses in food preparation, care of kitchens and kitchen equipment, laundry-work, house cleaning, hygiene, child care and the care of the sick.

Schools of seamanship (*sjømannsskoler*). There are schools of navigation preparing sailors who possess a certain length of marine service for the mate's and master's certificate examinations. To be admitted to the department preparing for the mate's examination, the period of marine service needed is at least 42 months subsequent to the age of 15, at least 12 of which must have been served on ships in foreign trade. The duration of this course is 10 months, and the holder of a mate's certificate must be at least 21. Admittance to the department preparing for the master's examination is restricted to those who have passed the mate's examination and have served as mates on ships of 500 tons or above for 24 months in foreign trade. Half the time of service must be as first mate. A master's certificate is only granted to persons aged 24 or over.

Schools for marine engineers offer theoretical instruction for men aged 17 or over with 9 months' practical experience in mechanical engineering and 3 months' service at sea.

Attached to some of the schools of navigation is a department in which training is conducted for wireless operators at sea.

Fishing trade schools (*fiskerfagskoler*). These offer a 1-year course with the main stress on practical training and theoretical instruction in subjects relating to the fishing trade, and in addition some general subjects such as physics, chemistry, Norwegian, hygiene and book-keeping. The requirements for admission to the courses are a completed primary school education and 24 months' service at sea.

In addition to the schools mentioned above, there exist a number of schools for other occupations, e.g. training schools for nurses run in connexion with the hospitals, and for midwifery (under the administration of the Ministry of Social Affairs). Some of the major public services run schools for the training of their own employees (customs and excise, the postal service, the telegraph service, the railways and the police).

Teacher training schools

The training of teachers for primary schools, continuation schools and folk high schools is the responsibility of teacher training schools (*lærerskoler*). All these *lærerskoler* are entirely financed by the State. The teaching is completely free of charge.

The law provides for two main types of course, lasting 4 years and 2 years respectively. The 2-year course may have two lines of study: the normal line, which corresponds to the 4-year course, and an English line in which the teachers of English in primary schools are trained. In the 2-year course of study a student may have 1 year of practical teaching between two school years and afterwards come back to complete his training.

Admission to the 4-year course is based on an entrance test held under the supervision of the State Council for Teacher Training at a time set by the Ministry. For admission to the 2-year course, the applicant must have reached the age of 19 before 1 July in the year in which admission is sought. He or she must have the matriculation certificate either from an ordinary *gymnasium* or from the economic *gymnasium*.

TIME-TABLE FOR 4-YEAR TEACHER TRAINING COURSE
(in periods per week)

Subject	Year			
	1	2	3	4
Religion	2	3	2	3
Norwegian	7	6	5	5
Foreign language (English)	5	3	2	–
History and citizenship	–	3	3	3
Geography	3	2	–	–
Natural science				
Physics and chemistry	2	3	3	–
Biology	2	2	2	2
Mathematics and geometry	4	4	3	–
Pedagogy	–	2	4	4
Teacher training (practice)	–	–	4	9
Singing	2	1	2	2
Music	1	1	–	–
Drawing	2	2	2	2
Writing	1	–	–	–
Crafts	2	2	2	2
Physical training	4	3	3	4
Total	37	37	37	36

All the subjects in the table above are compulsory. Practical instruction in teaching takes place in the practice school, which may be an ordinary municipal elementary school, or an elementary school run by the State in connexion with the teacher training school. In the 4-year course, the practical training is taken during the last 2 years, and in the 2-year courses in both years. The courses end with a final examination, the teachers' examination, which is held under the direction and supervision of the State Council for Teacher Training. The Council for Teacher Training decides in which of these subjects the students shall be tested. In practical teaching there is no final examination.

To provide for specialized supplementary training, a few institutions have been established and are run by the State. Courses at these institutions may be taken immediately on the completion of the teacher's examination, but it is rather more common to supplement one's training after a

short period of teaching service. The following give additional training: the State School for Teachers of Arts and Crafts; the State School for Teachers of Home Economics, the State School for Teachers of Arts and Crafts (Women), the State School for Physical Education.

TRENDS AND PROBLEMS

Reference has previously been made to the Law of 1954 on experiments in schools. One of the most important experiments being carried out under this law concerns the comprehensive school (*linjedelt ungdomsskole*), which aims at an amalgamation of the continuation school and the *realskole*.

This experiment is based on the assumption that if the nation's young people are to benefit fully from higher specialized training in the vocational field, the period of compulsory school attendance will have to be extended from 7 to 9 years. The responsibility of devising a workable system of 9 or even 10 years of continuous compulsory education, beginning with a common curriculum and finishing with a comprehensive but pedagogically differentiated education, has been placed on the State Council for Experiments in Schools.

The first experimental schools are based on a completed primary school course and form a secondary stage of 2 years. This stage is differentiated into two main lines: the general and academic line which leads to the *gymnasium*, and the general and pre-vocational line, which leads to vocational training and work in various trades. The courses are united under one principal with one staff of teachers and form a single community with common activities. The subjects offered in these experimental schools are those usual in general education in Europe. Particular stress is also laid on aesthetic education and creative work. Psychological and vocational guidance plays an important part. The introduction of guidance and pre-vocational training in a course which is common to all will give the pupils an opportunity to pursue a suitable line of study better adapted to individual needs.

The general and vocational preparatory line has a slight differentiation in the ninth year which makes it possible for the pupils to choose subjects especially appealing to their interests and abilities. The choice might be commercial, home economic, agricultural subjects or activities relating to crafts.

At this moment it is hard to tell how the new type of school will be organized in the future, but there seems to be unanimous agreement that an extension of compulsory school attendance is urgently necessary if the nation's educational facilities are to cope with the development of the society it is intended to serve. The new Law on Primary Education (1958) gives the municipalities the right to introduce 9 years of compulsory schooling, and there is reason to believe that a large number of them will use this right as soon as they are able to meet the increased demand for school buildings. The law also states that in such cases the instruction during the last 2 (or 3) years should be given in a comprehensive school, run on an experimental basis and supervised by the State Council of Experiments in Schools. It is believed that in the first five years the council will be able to evaluate the findings of the experiments and submit a recommendation on the organization of the comprehensive school.

[*Text prepared by the Royal Norwegian Ministry of Church and Education in July 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 3,526,000.
Area: 125,065 square miles; 323,917 square kilometres.
Population density: 28 per square mile; 11 per square kilometre.

Summary of school statistics, 1953–57. In the school year 1957/58, enrolment at all levels in public schools and in a few private secondary schools totalled some 595,000 pupils which represented about 17 per cent of the total

population. This did not include adults attending folk high schools. Enrolment in primary schools represented 79 per cent of the school-going population; another 19 per cent were in general and vocational secondary schools, 1 per cent in institutions of higher education and the remainder were in secondary and higher teacher training schools and in special schools for handicapped and maladjusted children. From 1953 to 1957 total enrolment increased by 18 per cent.

In 1957/58 the proportion of girls was 49 per cent in primary schools, 47 per cent in general secondary schools, 40 per cent in vocational secondary schools, 62 per cent in secondary and higher teacher training institutions and 19 per cent in general and technical institutions of higher education. As compared with 1953/54, these proportions had changed very little except in teacher training schools in which total enrolment was low. The position is similar as regards the proportion of women on the full-time teaching staffs: 46 per cent of women teachers in primary schools for 1957/58 and 45 per cent for 1953/54, 20 per cent in general secondary schools for 1957/58 and 18 per cent for 1953/54.

In primary schools there has been no significant change in the number of pupils per teacher—27 in 1957/58 and 28 in 1953/54. (See Table 1.)

Enrolment trends in secondary education, 1930–57. Average total enrolment in secondary education more than doubled between the periods 1930–34 and 1955–57. (See Table 3.)

Examination results in secondary education, 1953–57. Diplomas and certificates granted totalled 49,887 in 1957/58 and 42,540 in 1953/54. Final examinations at general secondary schools (*realskole* and *gymnasium*), trade and crafts schools apprentices' certificates and commercial school certificates represented between 75 and 80 per cent of the total. The proportion of girls among successful candidates for all examinations increased very slightly from 39 per cent in 1953/54 to 42 per cent in 1957/58. (See Table 2.)

Educational finance, 1957. Total expenditure on education in 1957 (fiscal year begins in January) amounted to 1,028 million kroner; this was 295 kroner per inhabitant. About 76 per cent came from local authorities, 21 per cent from the Central Government and the remainder from tuition fees. Capital expenditure represented about 23 per cent of the total. Percentage distribution of recurring expenditure is given in Table 4C.

Sources. Norway: Central Bureau of Statistics, replies to Unesco questionnaires.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	4 980	15 189	7 194	438 269	213 354
	Higher primary (continuation) schools, public	1957/58	1 601	2 202	824	33 004	17 207
	Total	**1957/58**	**6 581**	**[1]17 391**	**[1]8 018**	**471 273**	**230 561**
	,,	1956/57	6 590	[1]16 757	[1]7 643	461 705	225 844
	,,	1955/56	6 624	[1]16 053	[1]7 259	447 250	218 998
	,,	1954/55	6 737	[1]15 399	[1]6 889	426 286	209 316
	,,	1953/54	6 811	[1]14 683	[1]6 546	404 666	198 883
Secondary							
General	*Realskoler*, public[2]	1957/58				43 711	21 567
	Gymnasier, public[2]	1957/58	297	[3]3 278	[3]663	16 376	6 812
	Total[2]	**1957/58**	**297**	**[3]3 278**	**[3]663**	**60 087**	**28 379**
	,, [2]	1956/57	298	[3]3 092	[3]596	53 516	25 262
	,, [2]	1955/56	296	[3]2 941	[3]544	49 102	23 178
	,, [2]	1954/55	291	[3]2 779	[3]526	46 505	21 999
	,, [2]	1953/54	292	[3]2 743	[3]504	43 758	20 620
Vocational	Technical schools	1957/58	14	[4]509	...	4 663	38
	Trade, art and crafts schools	1957/58	37	[4]297	...	2 091	1 338
	Workshop and apprenticeship schools	1957/58	161	[4]1 956	...	12 088	1 730
	Commercial schools and schools of administration	1957/58	95	[4]1 410	...	15 465	8 538
	Agricultural schools	1957/58	62	[4]523	...	2 682	139
	Schools of navigation	1957/58	50	[4]601	...	4 285	97
	Domestic science schools	1957/58	64	[4]459	...	3 105	3 105
	Nursing schools	1957/58	31	[4]1 113	...	2 872	2 772
	Other vocational schools	1957/58	13	[4]335	...	4 068	2 526
	Total[2]	**1957/58**	**527**	**[4]7 203**	**...**	**51 319**	**20 283**
	,, [2]	1956/57	537	[4]7 105	...	50 120	19 604
	,, [2]	1955/56	528	[4]7 113	...	48 106	18 497
	,, [2]	1954/55	525	[4]6 657	...	47 476	17 483
	,, [2]	1953/54	524	[4]6 512	...	46 611	16 662

1. Excluding part-time teachers who numbered 3,525 (F.2,314) in 1957/58.
2. Including some private schools.
3. Excluding part-time teachers who numbered 1,270 (F. 496) in 1957/58.
4. Including part-time teachers, who in all vocational schools numbered 4,902 in 1957/58.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Teacher training	Teacher training schools						
	Total	**1957/58**	**13**	**372**	**102**	**2 576**	**1 413**
	,,	1956/57	13	355	94	2 363	1 250
	,,	1955/56	13	331	91	2 304	1 231
	,,	1954/55	13	317	92	2 194	1 103
	,,	1953/54	12	271	74	2 025	1 008
Higher							
Teacher training	Training colleges for specialist teachers, public	1957/58	7	171	...	1 182	924
	State College for Teachers	1957/58	1	14	...	70	19
	Total	**1957/58**	**8**	**185**	**...**	**1 252**	**943**
	,,	1956/57	8	177	...	1 107	824
	,,	1955/56	8	171	...	1 134	852
	,,	1954/55	8	156	...	1 022	718
	,,	1953/54	8	162	...	954	671
General and technical	Universities, public	1957/58	2	503	46	4 106	1 035
	Colleges, public	1957/58	5	452	15	1 934	118
	Theological college, private	1957/58	1	8	—	95	5
	Total	**1957/58**	**8**	**963**	**61**	**6 135**	**1 158**
	,,	1956/57	8	856	69	5 677	996
	,,	1955/56	8	803	52	5 460	976
	,,	1954/55	8	767	45	5 527	908
	,,	1953/54	8	790	46	5 577	940
Special	Schools for blind children	1957/58	3	26	8	186	53
	Schools for deaf children	1957/58	8	58	34	378	189
	Schools for mentally handicapped children	1957/58	13	77	43	882	304
	Schools for children and youth with speech defects	1957/58	3	12	6	83	21
	Schools for maladjusted children and youth	1957/58	9	30	15	258	104
	Total	**1957/58**	**36**	**203**	**106**	**1 787**	**671**
	,,	1956/57	34	212	108	1 697	642
	,,	1955/56	33	204	100	1 583	616
	,,	1954/55	33	210	96	1 591	607
	,,	1953/54	33	206	104	1 501	596
Adult	Folk high schools						
	Total	**1957/58**	**70**	**508**	**199**	**4 367**	**2 768**
	,,	1956/57	72	519	200	4 340	2 704
	,,	1955/56	70	471	186	4 020	2 511
	,,	1954/55	71	470	193	4 064	2 522
	,,	1953/54	74	499	201	4 141	2 604

2. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Final examinations in *realskole* and *gymnasium*	10 863	5 030	11 538	5 330	12 646	5 878	13 244	6 092	14 099	6 537
Certificates from technical schools and institutes	3 892	18	3 883	27	3 489	29	3 819	38	3 816	31
Trade and crafts schools apprentices' certificates	11 491	2 134	11 742	2 401	11 543	2 306	12 410	2 334	12 715	2 553
Commercial school certificates	9 538	4 985	9 760	5 228	10 319	5 644	11 960	6 810	12 241	7 015
Agricultural school certificates	1 757	112	1 638	117	1 664	125	1 656	112	1 763	87
Domestic science school diploma	3 057	3 057	2 839	2 839	2 859	2 859	2 938	2 938	3 046	3 046
Diploma from schools of nursing	885	868	895	877	946	926	903	876	955	930
Diplomas from art and music schools	397	110	406	115	339	72	393	80	411	72
Teacher training certificate	660	325	650	315	961	514	1 062	578	841	465

3. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational[1]		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	23 136	43	20 875	...	392	39			
1931	23 945	43	22 384	...	783	37			
1932	25 370	42	22 723	...	1 094	39	49	216	*23*
1933	26 610	42	23 485	...	1 093	38			
1934	28 448	43	25 418	...	714	37			
1935	30 157	42	27 932	...	316	39			
1936	31 881	44	31 055	...	122	42			
1937	33 653	43	34 551	...	237	44	69	221	*31*
1938	34 370	44	40 099	...	529	44			
1939	37 539	44	39 714	...	835	46			
1940	36 127	45	36 362	...	989	45			
1941	35 129	44	40 435	...	989	43			
1942	35 523	44	44 711	...	775	46	79	220	*36*
1943	40 016	44	48 707	...	528	44			
1944	41 415	44	30 725	...	194	44			
1945	44 356	43	48 183	...	1 076	47			
1946	44 683	45	44 475	...	1 449	48			
1947	42 687	45	43 107	...	1 468	47	88	225	*39*
1948	39 921	46	43 577	...	1 472	47			
1949	37 797	46	45 293	...	1 839	48			
1950	37 435	46	46 246	...	1 832	49			
1951	38 319	47	46 452	...	1 896	47			
1952	40 296	47	43 884	32	1 936	47	89	203	*44*
1953	43 758	47	46 611	36	2 025	50			
1954	46 505	47	47 476	37	2 194	50			
1955	49 102	47	48 106	38	2 304	53			
1956	53 516	47	50 120	39	2 363	53	106	215	*50*
1957	60 087	47	51 319	40	2 576	55			

1. From 1930 to 1951 excludes the Trade and Arts School whose enrolment in 1957 was 2,091 (F.1,338) pupils.

4. EDUCATIONAL FINANCE, 1957 (in millions of kroner)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**1 028**
Central government	216
Local authorities	781
Tuition fees	31

B. EXPENDITURE BY PURPOSE

		Amount
Total expenditure[2]		**1 028**
Recurring expenditure		789
For administration	12	
For instruction		
Salaries to teachers, etc.	542	
Other instructional expenditure	175	
Other recurring expenditure	60	
Capital expenditure		239

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**789**		**100.0**
Central administration		12		1.5
Instruction		717		90.0
Primary education	438		55.6	
Secondary education	209		26.5	
General	91		11.5	
Vocational	104		13.2	
Teacher training	14		1.8	
Higher education	50		6.3	
Special education	16		2.0	
Adult education	4		0.5	
Other recurring expenditure		60		7.6
Scholarships, etc.	13		1.7	
Pensions	42		5.3	
Teacher's fund	5		0.6	

1. Official exchange rate: 1 krone = 0.14 U.S. dollars.

2. Closed account.

PAKISTAN

THE EDUCATIONAL SYSTEM

With the emergence of Pakistan as a sovereign independent State, education received a great impetus. The country had inherited an educational system installed a century ago and founded upon socio-economic and politico-cultural bases entirely different from those of an independent country, especially a country where the social structure in most parts is based upon Islamic ideology. To make schools capable of meeting the new calls made upon them, Pakistan has had to face many arduous problems, including the provision of an adequate national system of education, a supply of well trained teachers, curriculum re-organization, re-orientation of teaching methods, the provision of adequate facilities for technical and vocational education, the organization of adult education schemes with a view to liquidating mass illiteracy, etc. Ever since independence, there have been dynamic changes and a new orientation in all phases of the educational system, in keeping with the traditions and long cherished aspirations of the people.

In the national system of education there are three general stages—primary, secondary, and higher. Besides this broad classification, provisions exist for pre-primary (though not everywhere), technical, vocational, commercial and professional education in the various parts of the country. The structure of the system may be seen in the diagram on page 919.

Pre-primary education. In the urban areas there are a few kindergarten and infant schools, mainly run and managed by the private agencies. A number of infant schools have been opened in the rural areas also; these schools are financed by the local and central governments 'to act as a fillip' to private enterprise in this direction. There are no prescribed syllabuses for these schools, which follow their own methods. At this stage co-education is the rule.

Primary education. The duration of primary education (after the introduction of compulsory education in some parts of the country, and after an overall reorganization of the educational system) is now 5 years in all parts of Pakistan. The average age of primary school pupils is 6 to 11 years. The medium of instruction is the mother tongue or the regional language. In the rural areas, and even in urban schools, co-education exists to a considerable degree.

Secondary education. The aim of secondary education is to provide special knowledge in important subjects like language, social studies, classics, mathematics, art, English, with bifurcation into streams at the higher secondary education stage according to interests and aptitudes. The subjects taught in the secondary schools (including technical schools) are mother tongue, English, mathematics, history, geography, civics, classics, music, and other fine

arts, carpentry, blacksmithing, engineering, etc. The mean age of the secondary school pupils is 11+ to 15+ or 16+ in various regions of the country.

Higher education. There are six universities in the country, two in East Pakistan and four in West Pakistan. All the intermediate (between the secondary and first degree levels) and degree-granting colleges are affiliated to these universities. These institutions for higher education offer courses in arts, science, commerce, technology, medicine and education. The medium of instruction in all of them is English. These colleges and universities admit students who have passed the requisite examinations, preference usually being given to those having comparatively good grades or who have passed with distinction. There is no discrimination on the grounds of sex, colour, caste or creed.

Vocational education. Vocational education is provided in the various technical institutions, and in a few purely vocational schools and colleges, some of which are run by the Department of Education. These institutions provide education of the diploma or certificate standard. The period of courses and qualifications for admission vary from school to school. They conduct their own examinations internally.

Teacher training. There are two types of institutions for the training of teachers: (a) teacher training colleges affiliated to the universities and providing degree courses in teaching (B.T., M.T. now B.Ed. and M.Ed.); (b) teacher training schools and normal schools (or primary training institutes and junior training colleges). In order to meet the acute shortage of teachers, more training institutions are being provided in different parts of the country. A number of primary teacher training schools have been established in East Pakistan in order to meet the growing needs of the schools in the compulsory education areas. Two colleges have also been set up to form teachers for primary teacher training schools.

The training colleges prepare teachers for the secondary schools; entrants must be graduates, although in East Pakistan the junior training colleges admit undergraduates also. The primary training schools or institutes and normal schools, which mainly train primary school teachers, admit matriculates. In colleges there is co-education, with only a few exceptions, but normal schools are single-sex. The period of training is 1 academic year in the colleges, and 2 to 3 years in normal schools or primary training institutes. The medium of instruction is English in the colleges and the regional languages in the schools.

Independent schools. There are three types of school outside the recognized school system, managed mostly by private enterprise, although many receive grants-in-aid from the local government: (a) European schools which are affiliated to the Cambridge Local Examinations Syndicate and provide general education through the medium of English; (b) *madrasahs* which provide special education in Arabic, Persian, and Islamic theology through the medium of Urdu; (c) *tols* (in East Pakistan) which teach Sanskrit, Pali and Hindu theology through the medium of Bengali. These schools are gradually becoming less popular. Some of them have already remodelled themselves on modern lines and have adapted themselves to local requirements. They are being assimilated into the recognized school system, e.g. 'new-scheme *madrasah*'. Passing out examinations of the European schools and the new-scheme *madrasahs* are recognized by the universities in Pakistan.

There are also a few colleges of physical training, which give diplomas to the students after their successful completion of the required courses.

In summary, it may be said that in the fields of scientific, technical, vocational and commercial education (e.g. agriculture, engineering, medicine, veterinary science, forestry, textiles, etc.) new facilities have been created with the establishment of several polytechnics, technical and other institutions, and facilities for science teaching have been expanded. In addition to the growth of the training and research facilities within the country, various schemes for training abroad have been in operation, especially under the sponsorship of some international agencies like the International Co-operation Administration (United States of America), Colombo Plan, Ford Foundation, United States Education Foundation, etc.

THE DEVELOPMENT OF SECONDARY EDUCATION

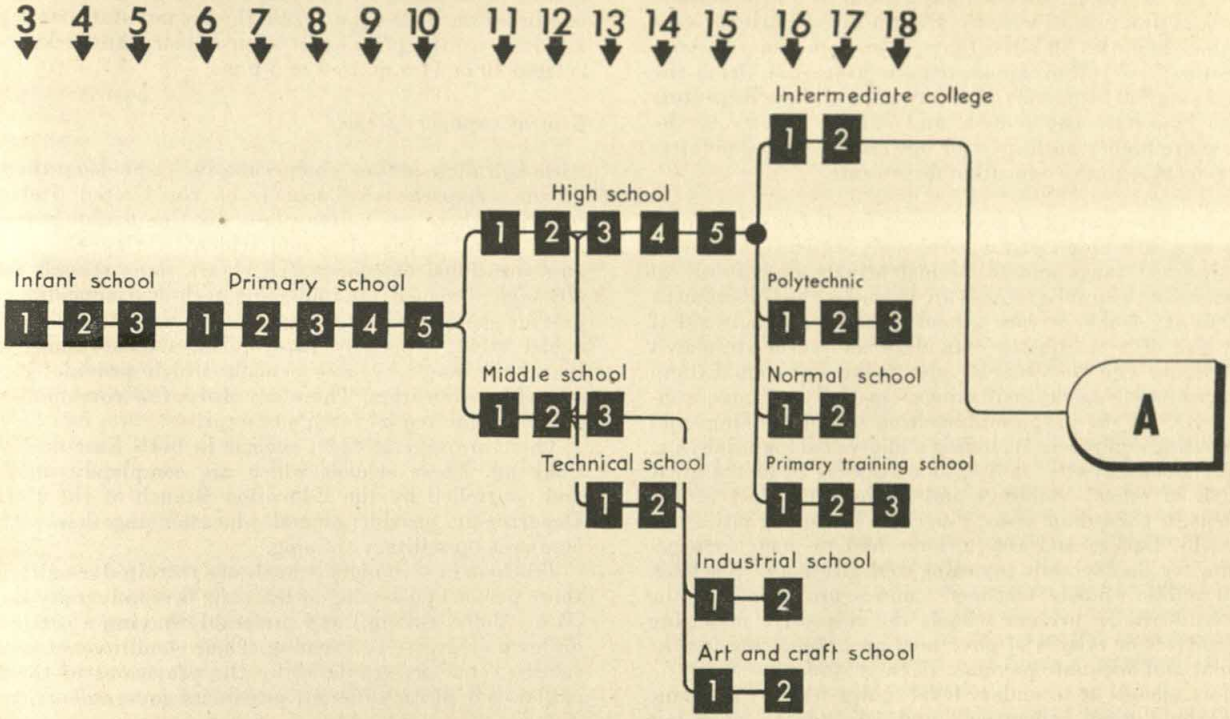
It has already been mentioned that on independence, Pakistan inherited an educational system which had been designed for alien ends. During the first half of British rule in the Indo-Pakistan sub-continent, i.e. until 1857, little was done for education. After the transfer of power from the East India Company to the British Government, the necessity to give some sort of education to the local people who might be useful in the administration of the country was keenly felt; as a result a system of primary and secondary education was developed.

Legal basis

There is no comprehensive piece of legislation dealing with all types and levels of education. The central and provincial governments, however, have enacted laws from time to time to cover specific aspects. These are: (a) the Bengal Primary Education Act, 1919; (b) the Bengal (Rural) Primary Education (East Bengal Amendment) Act, 1951; (c) the Punjab Primary Education Act, 1940; (d) the Sind Primary Education Act, 1947. The several universities in Pakistan have also been established by Statutory Acts. All these laws have considerable bearing on the secondary education system of the country.

Administration

Education is a provincial responsibility, the role of the Central Government being to co-ordinate educational policies throughout the country, and to guide and stimulate planning for educational development on a national basis. The provincial governments discharge their educational responsibilities through the various directorates of their Departments of Education. The chief administrator is the Director of Public Instruction. The departments are responsible for the planning and policy of education in



GLOSSARY

NOTE. This diagram does not show the regional variations in different parts of the country. The duration of the complete school course (primary and secondary) is 10 years in all provinces, except Sind where it is 11 years.

art and craft school: equivalent to *industrial school.*
high school: general or vocational secondary school leading to matriculation examination.
industrial school: vocational training school.
infant school: pre-primary school.
intermediate college: non-degree granting college providing the first stage of higher education.
middle school: lower general secondary school.
normal school: teacher training school.
polytechnic: advanced vocational training school.
technical school: vocational secondary school.

HIGHER EDUCATION

A. University and degree-granting colleges.

their respective provinces (or administrative unit, e.g. Karachi Federal Area). Boards of secondary education have been established in both wings of Pakistan, e.g. the East Pakistan Board of Secondary Education and the Karachi Board of Secondary Education, and the Punjab Board of Secondary Education. These bodies, composed of appointed, nominated, and *ex-officio* members (the latter representing the several Education Departments and universities), are mainly responsible for activities connected with school recognition, examinations, syllabuses, and textbooks. But their specific duties and responsibilities, especially in relation to the district and local boards, or to the education inspectorate, have not been clearly defined. (The Sind and Peshawar Universities also conduct the Secondary Final Examination.) The respective directorates exercise direct control over the secondary education system through grants-in-aid and systematic supervision by a large panel of inspectors. For individual schools, both public and private, there are managing committees responsible for the running of the schools, while in matters of internal administration and control the principal or headmaster has a large measure of autonomy.

There is an elaborate system of inspection for the secondary schools in each province as well as in the centrally administered areas like the Karachi Federal Area. Each Director of Public Instruction (DPI) and his staff of divisional inspectors supervise the district inspectorates, which are the basic administrative units. The provincial directors, the divisional inspectors, and the district inspectors are assisted by deputy and assistant inspectors, whose duties are primarily administrative.

District inspectors and other categories of inspectors of junior rank are recruited from teachers who have the minimum educational qualifications of B.A. together with

a diploma or degree in education as well as a considerable amount of practical experience. But the divisional inspectors and their deputies and assistants, even sometimes district inspectors, are often appointed on promotion from the existing staff of inspectors. The functions of these inspectors are to supervise the schools and submit reports to the immediate higher authority for onward transmission (after any remarks) to the education directorate.

Finance. The sources of government funds for educational purposes, including assistance to needy students, are direct and indirect taxes and occasional private donations. All expenses in the public schools are borne by the Government and most of the private schools receive grants-in-aid if they are of a satisfactory standard and meet stipulated conditions. The Government also makes occasional lump sum grants to various institutions, especially at the secondary level, for the purpose of erecting school buildings and purchasing equipment including audio-visual materials, e.g. maps, globes, charts, radios, etc. There is in fact a great dearth of school buildings and equipment. Most of the schools in the urban areas, especially in the big cities like Karachi, Lahore and Dacca, have had to make arrangements for double shift (morning and afternoon) teaching.

In public schools teachers' salaries are borne by the Government. In private schools the respective managing committees or boards of governors are responsible for the regular and adequate payment of their staff.

Most schools at secondary level charge fees. At the same time they grant concessions and stipends to poor but meritorious students.

School welfare services. Although there is no organized system of school welfare services, the general health services carry out a physical check-up of the students, at least once a year. In addition, milk and some other food is supplied by Unicef and a few other benevolent organizations. There are also arrangements in most of the urban schools for a light mid-day lunch. But the rural school system has no such facilities or arrangements so far. The governments of different provinces are considering the systematic provision of services which will be concerned exclusively with health and social welfare in the schools.

TYPES OF SECONDARY EDUCATION

As the result of the new changes and orientation in the education system of the country, there have sprung up hundreds of secondary schools of different types. In the general category there are high schools and middle schools, the latter sub-divided into lower and upper middle schools. There are polytechnics and technical schools, industrial schools and schools for arts and crafts, and special schools for the handicapped. An idea of the general organization and content of secondary education has been given above in the description of the educational system as a whole.

The academic year coincides with the calendar year in East Pakistan but in West Pakistan it commences in July and continues until the following June. Public schools observe Sunday as a weekly holiday, while private schools remain closed on Friday. Where there is an arrangement of double shift teaching, the first shift begins at 8 a.m. and continues until 12 noon, while the second starts at 1 p.m. and lasts until 5 p.m; in all other schools the working day is from 10 or 11 a.m. to 4 or 5 p.m.

General secondary schools

Although there are no 'comprehensive' schools on the lines of the comprehensive schools of the United States of America, there are active plans for the establishment of multi-lateral types of school which overlap the general and vocational categories. There are some schools which although designed for imparting technical education also provide general education at the secondary level. In the urban areas, especially in Karachi, Lahore and Dacca, there are many evening schools which provide general secondary education. There are also a few correspondence schools organized by foreign enterprises.

There are several cadet schools in both East and West Pakistan. These schools which are completely managed and controlled by the Education Branch of the Defence Department, provide general education together with an emphasis on military training.

Teachers in secondary schools are recruited usually from those persons possessing at least the first university degree (B.A., B.Sc., B.Com.) and preferably having a certificate, diploma or degree in teaching. Their conditions of service, salaries, etc., are regulated by the provisions of the education code of the different provincial governments.

Vocational and technical schools

At the time Pakistan achieved independence, the only institutions providing vocational and technical education were artisan and trade schools, a number of private commercial schools, and some professional colleges of engineering and agriculture which offered 2-year diploma courses. To meet growing needs and requirements, there have been established a few polytechnics and technical high schools in both East and West Pakistan. The duration of the course in these technical high schools is the same as in the general high schools. The subjects taught for the Matriculation examination are English, second language, mathematics, physics and chemistry, and elementary engineering theory and workshop practice.

There are medical schools, various types of technical and commercial schools, arts and crafts schools, etc. Some high schools have provision for teaching agricultural subjects. There are two colleges of home economics, one college of forestry at Abbotabad, and two agricultural and veterinary colleges. These institutions provide education in medicine, agriculture, animal husbandry, forestry, domestic sciences, mechanics and electricity, building trades, mining and metallurgy, textiles, and fine like arts music and dancing.

Mention may be made here of some excellent centres established, managed and controlled by the Defence Ministry for the training of skilled craftsmen to work in its own plants. The PIDC (Pakistan Industrial Development Corporation) has sponsored the Institute of Personal Training, which organizes training within industry programmes both in PIDC and in private plants. Recently the State Bank of Pakistan has also started to provide similar

training facilities for its personnel as well as for recruits who will be absorbed into the staff after successful completion of the required courses of study.

Teacher training schools

Provisions for teacher training have been mentioned in the description of the educational system as a whole.

Other specialized schools

In recognition of the importance of aesthetic education during the formative years, there have been established several schools of art and music, e.g. the Government Institute of Arts at Dacca, the Bulbul Academy of Fine Arts, and some others at Karachi and Lahore. These institutions offer courses in both vocal and instrumental music and other forms of art. The duration of the courses varies from 2 to 5 years. The number of these institutions is increasing.

Out-of-class activities

There has been a tremendous outgrowth of these activities in all the schools of Pakistan. The education directorates are encouraging the schools, both public and private, to make games and sports, literary activities, dramatics, educational excursions, etc., part and parcel of the curricula proper. The students are also given a large autonomy in organizing various activities of school social life. They thus receive training in the actual art of citizenship and have an opportunity to develop facets of their education which are of prime importance.

TRENDS AND PROBLEMS

Pakistan has had to face many educational problems since independence. The Government, in collaboration with leading educators in the country, has been putting forth its best endeavours to solve these problems, and it realizes fully the importance of education in all fields of national life—social, economic, political, moral, cultural and religious.

The various provincial governments have already introduced in some parts of the country a system of compulsory education for all children between the ages of 6 and 11. A fundamental education programme for adults up to the age of 40 has been put into operation with a view to liquidating mass illiteracy.

There is a great dearth of suitable buildings and equipment so that many schools are being run in double shifts in order to provide for more children. Attempts are being made not only to provide more school places but also to raise standards. In order to meet the need for well qualified teachers, many institutes provide training in the most modern methods and techniques, and the subjects of the philosophy and psychology of education have been made compulsory in the teacher training colleges. There is also a system of refresher courses for teachers in service.

In order to keep pace with modern trends in education, several conferences and symposia have been held with a view to devising ways and means of developing the curriculum on modern lines according to the age, ability, aptitude, and interest of the children, with due regard to the local and national needs.

There has been a growing trend to expand scientific and vocational education, thus opening up the agricultural and industrial potentialities of the country, and promoting activities which will lead to a higher standard of living and greater national prosperity.

Finally, the present regime has established a Commission on National Education with a view to devising ways and means for the reorientation and development of education at all levels, primary, secondary and higher. This Education Commission circulated a few months ago a long and detailed questionnaire on education in order to elicit public opinion. It has already submitted its long report to the Government and it is expected that the reorganization it recommends will soon take place.

[*Text prepared by the Pakistan National Commission for Co-operation with Unesco in October 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 85,635,000.[1]
Area: 364,797 square miles; 944,824 square kilometres.
Population density: 235 per square mile; 91 per square kilometre.

Summary of school statistics, 1953-57. Total enrolment in schools and universities was about 5,700,000 in 1957/58, representing approximately 7 per cent of the total estimated population. In addition there were some 6,000 adults attending literacy courses. Of total school enrolment 74 per cent were pupils in primary schools, 23 per cent in general secondary, 0.2 per cent in technical secondary and 0.1 per cent in teacher training colleges. The remainder were students enrolled in universities (2 per cent) and pupils in special schools (0.7 per cent). The number and proportion of girls enrolled at different levels of education cannot be determined accurately, since an unknown number of girls attending schools for boys are not accounted for. However, the increase of total enrolment in schools for girls over the 5 years under review was striking: 22 per cent in primary schools, 45 per cent in general secondary schools and 12 per cent in vocational education. No data are available for girls enrolled in teacher training schools. Total enrolment of boys and girls increased by less than 9 per cent in primary schools over the years 1953/54 to 1957/58, by 20 per cent in general secondary and by 17 per cent in vocational schools over the same period. Primary school teachers increased by nearly 12 per cent over the years 1953/54 to 1957/58; the proportion of women teachers remained under 8 per cent. The corresponding increase in the number of secondary school teachers was about 20 per cent and women formed nearly 10 per cent of the total in 1957/58. The average pupil teacher ratio in primary schools was 36 and in general secondary schools 25. (See Table 1.)

Examination results in secondary education, 1955-57. The number of students passing the Matriculation or end of general secondary school examination increased from 52,574 in 1955/56 to 60,950 in 1957/58. The proportion of girls to total successful candidates was about 9 per cent in both years. No information is available on number graduating from teacher training institutions or certificates granted to students in vocational schools.

Educational finance, 1957/58. Total expenditure on education in 1957/58 (fiscal year beginning April) was 267,861,128 rupees representing approximately 3.2 rupees per inhabitant and 1.3 per cent of the estimated national income in 1957. Of the total expenditure about 9 per cent was contributed by the Central Government, 63 per cent by provincial governments, 7.5 per cent by local authorities, 12 per cent from tuition fees and 8 per cent from other sources including donations. Capital expenditure was 9.4 per cent of the total spent on education in 1957/58. (See Table 2.)

1. Data are for territory excluding Kashmir-Jammu, the final status of which has not yet been determined, also excluding Junagadh, Manavadar, Gilgit, Balistan and the port and peninsula of Gwadar acquired from Muscat and Oman on 8 September 1958.

Sources. Pakistan: Ministry of Education, Central Bureau of Education, replies to Unesco questionnaires.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female[1]
Primary[2]	Primary government schools	1957/58	28 518			2 941 300	66 328
	Primary district board schools, public	1957/58	10 073	106 669	7 054	680 548	108 531
	Primary municipal board schools, public	1957/58	924			234 792	61 332
	Primary schools, aided and unaided, private	1957/58	3 994	10 345	1 976	370 191	156 207
	Total	**1957/58**	**43 509**	**117 014**	**9 030**	**4 226 831**	**392 398**
	,,	1956/57	42 766	111 633	8 178	4 129 852	386 512
	,,	1955/56	42 013	110 486	8 058	4 031 175	354 393
	,,	1954/55	40 638	107 394	7 562	3 904 389	324 895
	,,	1953/54	40 395	104 636	7 145	3 889 975	321 719
Secondary *General*[2]	Secondary government schools	1957/58	849	10 394	1 855	260 492	46 935
	Secondary district board schools, public	1957/58	1 415	13 296	1 331	299 817	16 531
	Secondary municipal board schools, public	1957/58	117			67 266	24 179
	Secondary schools, aided, private	1957/58	2 957	24 542	2 381	600 110	84 482
	Secondary schools, unaided, private	1957/58	509	4 640	232	97 878	6 968
	Total	**1957/58**	**5 847**	**52 872**	**5 799**	**1 325 563**	**179 095**
	,,	1956/57	5 756	52 143	5 449	1 326 214	165 589
	,,	1955/56	5 670	50 312	5 100	1 272 115	150 290
	,,	1954/55	5 370	46 237	4 835	1 183 278	139 482
	,,	1953/54	5 285	44 103	4 614	1 103 742	123 802

Note. In addition to the schools covered here, there exist a great number of non-recognized schools, organized in mosques in rural areas, and taking the form of private English medium schools in urban areas. Their estimated number in 1957/58 was 2,653, with 11,662 teachers and 223,057 students.

1. Figures in this column relate to the number of pupils enrolled in schools for girls, including a small number of boys, but not including a much greater number of girls enrolled in schools for boys.
2. Data on primary classes attached to secondary schools are included under general secondary education.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Vocational	Technical and industrial schools, public	1957/58	51	...	...	5 788	1 980
	Engineering school, public	1957/58	1	...	...	468	—
	Commercial schools, public	1957/58	3	...	...	264	—
	Agricultural school, public	1957/58	1	...	...	149	—
	Medical schools, public	1957/58	7	...	...	1 771	100
	Art school, public	1957/58	1	...	...	130	...
	Technical and industrial schools, private	1957/58	45	...	...	2 178	493
	Commercial schools, private	1957/58	9	...	...	992	10
	Art school, aided private	1957/58	1	...	...	29	—
	Total[3]	**1957/58**	**119**	**...**	**...**	[4]**11 769**	[4]**2 583**
	„ [3]	1956/57	128	...	...	[4]10 992	[4]2 136
	„ [3]	1955/56	132	...	...	[4]10 531	[4]2 175
	„ [3]	1954/55	133	...	...	[4]9 863	[4][5]2 174
	„ [3]	1953/54	136	...	...	[4]10 067	[4][5]2 306
Teacher training	Teacher training schools, public	1957/58	85	...	...	7 592	...
	Teacher training schools, private	1957/58	6	...	...	489	...
	Total	**1957/58**	**91**	**...**	**...**	**8 081**	**...**
	„	1956/57	90	...	...	8 206	...
	„	1956/56	88	...	...	8 389	...
	„	1954/55	91	...	...	8 096	...
	„	1953/54	102	...	...	7 541	...
Higher *Teacher training*	Teacher training colleges, public	1957/58	9	...	...	1 209	482
	Physical training colleges, public	1957/58	2	...	...	160	...
	Teacher training college, private	1957/58	1	...	...	35	...
	Total	**1957/58**	**12**	**...**	**...**	**1 404**	**...**
	„	1956/57	12	...	...	1 140	...
	„	1956/56	11	...	...	987	...
	„	1954/55	10	...	...	854	...
	„	1953/54	9	...	...	681	...
General and technical	Universities, public	1957/58	6	...	...	7 899	...
	Colleges, public	1957/58	81	...	...	38 683	6 493
	Colleges, private	1957/58	131	...	...	66 370	3 831
	Total	**1957/58**	**218**	**...**	**...**	**112 952**	[6]**10 324**
	„	1956/57	196	...	...	96 646	[6]8 157
	„	1955/56	186	...	...	86 521	[6]7 575
	„	1954/55	170	...	...	76 033	[6]6 580
	„	1953/54	157	...	...	69 565	[6]5 097
Special	Schools for physically handicapped	1957/58	8	...	...	367	...
	Reformatory and Borstal	1957/58	3	...	...	251	—
	Orphanages	1957/58	23	180	13	2 309	317
	Tanzeem schools	1957/58	778	...	...	34 341	...
	Total	**1957/58**	**812**	**...**	**...**	**37 268**	**...**
	„	1956/57	869	...	...	36 885	...
	„	1955/56	866	...	...	31 745	...
	„ [7]	1954/55	36	...	...	2 984	...
	„ [7]	1953/54	33	...	...	2 362	...
Adult	Literacy-cum-citizenship education						
	Total	**1957/58**	**205**	**...**	**...**	**6 303**	**...**
	„	1956/57	168	...	...	4 102	...
	„	1955/56	159	...	...	5 810	...
	„	1954/55	...	...	...	...	...
	„	1953/54	...	...	...	...	...

3. Not including data on Arabic *madrasahs* (in 1957/58 they numbered 107, enrolment 4,100).
4. Full-time students only.
5. Not including fine arts school.
6. Not including universities.
7. Not including Tanzeem schools.

2. EDUCATIONAL FINANCE, 1957/58 (in rupees)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	[3]**267 861 128**
Central government	25 348 142
Provincial governments	168 636 061
Local authorities	20 150 910
Tuition fees	31 817 483
Other receipts from parents	
Gifts, endowments, etc.	21 908 532
Other sources not specified	

B. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**266 990 953**
Recurring expenditure		241 835 066
For central administration	12 041 667	
For instruction		
Salaries to teachers, etc.	213 780 314	
Other recurring expenditure	16 013 085	
Capital expenditure		25 155 887

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**241 835 066**		**100.0**
Central administration		12 041 667		5.0
Instruction		213 780 314		88.4
Primary education	79 746 909		33.0	
Secondary education	88 291 476		36.5	
General	80 329 811		33.2	
Vocational	3 800 006		1.6	
Teacher training	4 161 659		1.7	
Higher education	38 797 656		16.1	
Special education	5 643 076		2.3	
Adult education	67 253		0.03	
Expenditure not allocated by level	1 233 944		0.5	
Other recurring expenditure[4]		16 013 085		6.6

1. Official exchange rate: 1 rupee = 0.210 U.S. dollar.
2. Closed account.
3. Excludes tuition fees from government schools under Karachi Directorate of Education and receipts from non-government colleges in Karachi.
4. Includes scholarships, grants-in-aid and miscellaneous expenditure.

PANAMA

THE EDUCATIONAL SYSTEM

Provisions relating to education in the Constitution of 1 March 1946 are as follows:

'It is a fundamental duty of the State to subserve national education in all its aspects—intellectual, moral, civic and physical. Education in Panama is to be inspired by democratic principles and by the ideals of national progress and human fellowship.' (Article 77.)

'Primary education is compulsory. Public kindergarten, primary, and secondary schooling at all levels and of all types shall be free of charge. "Free" kindergarten and primary education includes an undertaking by the State to provide pupils with all school supplies necessary for their studies. The fact that secondary education is free of charge shall not preclude the fixing of an enrolment fee.' (Article 78.)

'Freedom of teaching is guaranteed. The State shall, nevertheless, be entitled to intervene in private educational establishments to ensure that attainment of the cultural aims of the nation and society and the better intellectual, moral, civic and physical education of the pupils.' (Article 79.)

'No educational establishment shall refuse admission to a pupil on the grounds of his parents' or guardians' irregular union or on grounds of class, race, or political affiliations.

Violation of this rule by a private establishment shall entail the loss of its subsidy, if any, from public funds, withdrawal of state recognition, if accorded, of its diplomas and certificates and, in the event of contumacy, loss of the right to continue teaching.' (Article 80.)

'The teaching of Panamanian history and civics shall in all cases be given by teachers of Panamanian nationality. Teaching shall not be carried on in a foreign language in any private educational establishment without authority granted by the Ministry of Education on substantiated grounds of public interest. The curricula of private primary schools shall conform to those of public establishments, but permits may be granted for the introduction of additional courses in any language. The inclusion of Panamanian history and geography and of civics in the secondary education curricula of private schools shall be compulsory.' (Article 81.)

'The requisite incentives for the publication of Panamanian school books and the standards qualifying the same for official adoption shall be prescribed by law.' (Article 83.)

'The expenditure on education shall have priority over all other. The Organic Law on Education will prescribe the proportion of the revenue to be set aside for this service.' (Article 84.)

'The only recognized academic and professional qualifications shall be those granted by the State or granted state recognition as provided by law.' (Article 85.)

'The official University of the Republic shall be autonomous. It shall have the legal status of a body corporate, with its own endowment and the right to administer the same. It shall be competent to organize its courses and to appoint and discharge its staff in the manner prescribed by law. Its activities shall include the study of national problems and the spread of popular culture.' (Article 86.)

'The State shall promote the establishment of special technical schools for the trades and professions, agriculture and stock farming and commerce, adjusted to the particular needs of Panama. Legislation shall be introduced establishing, from the primary school level upwards, vocational guidance services to enable the aptitudes and capacities of pupils to be brought to light, and individuals to be guided to maximum personal fulfilment and social usefulness.' (Article 89.)

'The State shall promote by all practicable means the pursuit of culture among the masses and shall maintain a scheme of free extension courses for adults for the prevention and elimination of illiteracy and for the instruction of the working classes in practical skills.' (Article 90.)

'Legislation shall be passed setting up a Department of Physical Culture to be responsible for the propagation of this activity in teaching institutions and in the community.' (Article 91.)

'In addition to the general objects of national culture, schools for peasant and aboriginal communities[1] shall further serve the following ends: (a) inculcation of awareness of the duties, rights, dignity and opportunities of the Panamanian citizen; (b) creation of a predilection for country life by objective teaching of the practical rudiments essential for secure, healthy and seemly living in that environment; and (c) carrying into the homes of peasants and aborigines the influence of educational and welfare measures calculated to raise their moral, cultural and social level.' (Article 96.)

The Organic Law on Education (No. 47 of 24 September 1946) gives further expression to these Constitutional requirements and contains notably the following provisions:[1]

'Secondary education at all levels shall be directed towards meeting the economic, physical, civic, cultural and moral needs of society. To this end, the curricula shall take account of the distinctive characteristics of Panamanian children and young people and of their physical and social environment.' (Article 4.)

'Panamanian schools shall be democratic. No educational establishments of an exclusive or sectarian character may operate in the territory of the Republic, nor may any establishment imparting instruction in a language other than Spanish, except in cases provided for under the Constitution.' (Article 5.)

'The Ministry of Education is authorized to lay down educational programmes and to decide on the curricula and organization of the official kindergarten, primary and secondary schools of the Republic, and to establish those which it deems necessary, besides taking steps to see that private schools achieve the ends of national education and culture more satisfactorily.' (Article 7.)

THE DEVELOPMENT OF SECONDARY EDUCATION

Article 133 of the Constitution of 1903 provided that the State should maintain schools of arts and crafts, and secondary and vocational educational establishments. Between 1904 and 1907 the following institutions were founded: a teacher training school for men and another for women; a school of arts and crafts, now known as the Escuela Melchor Lasso de la Vega; a school of music and elocution which became the National Institute of Music; and the School of Nursing. The National Museum, the Pedagogic Library and the National College of Commerce and Industry date from the same period. Law No. 22 of 1909 set up the National Institute which began work on 17 July 1911. Law No. 45 of 1910 established a girls' vocational school which is now co-educational under the name of the Escuela Profesional Isabel Herrera O. The same year saw the founding of the institution which became the School of Fine Arts. Secondary education institutions have continued to be established.

Legal basis

Articles 51 to 71 of the Organic Law on Education (No. 47 of 24 September 1946) relate to secondary, teacher training and vocational education. Articles 72 to 78 are concerned with private education.

All children between 7 and 15 years of age are obliged to attend school (Article 45 of the Organic Law on Education,

1. An ethnic factor affecting the provision of education is the existence of the Indian or aboriginal groups and that of the so-called 'Creoles'. In the province of Bocas del Toro a large part of the population speaks a kind of dialect known as *guaci guaci*.

1. A commission appointed by the Minister of Education is now at work on the codification of educational legislation in Panama.

No. 47 of 1946). The enforcement of these requirements has produced a considerable increase in secondary school enrolments and in the number of secondary schools.

Administration

The Ministry of Education may, whenever it deems fit, convene conferences of professors, inspectors, headmasters and teachers to consider matters relating to education and teaching. In 1958 a special school, the Instituto Fermín Naudeau, was founded to work out methods, etc., which could then be applied in the other schools of the country. The institute has a Department of Psychological Research.

In each municipality there is a municipal education committee (*junta municipal de educación*) of five members, one appointed by the Ministry of Education, two elected by parents' associations, and two elected by the teachers of the district. The function of these committees is to co-operate with the educational authorities in all matters which may contribute to the promotion of culture and education in the district, and to ensure that the proportion —20 per cent—of the municipal funds devoted to education is expended in accordance with the provisions of the present law. All accounts payable against the municipal treasury must bear the signature of the chairman of the municipal education committee.

The Executive shall define the organization and other functions of the municipal education committees. At present, a Bill to reorganize them is under consideration.

Control and supervision. The Second Deputy Minister of Education is responsible for the immediate supervision of all aspects of official and private secondary, vocational and artistic education.

There is only one category of inspectors of secondary education, that of teacher-supervisor. These officials are under the immediate authority of the Directorate of Secondary Education at the Ministry of Education. They specialize in the supervision of particular subjects. For appointment as a teacher-supervisor a candidate must be a secondary teacher, hold a university teaching diploma and have at least 5 years' teaching experience. He is appointed for 2 years; thereafter he may either be maintained in his post or return to teaching.

Under the terms of Article 16 of Decree No. 100 (14 February 1957), a supervisor's duties include: (a) giving guidance and help with regard to the interpretation, adaptation and application of the secondary syllabuses in the subject with which he is concerned; (b) ensuring, through proper guidance, that, in the learning process, the particular objectives of the subject in question are achieved; (c) stimulating and promoting the professional improvement of teachers by means of study and discussion groups, conferences, films, circulars, bulletins and other appropriate supervision techniques; (d) assisting teachers of his subject to appreciate its place in the whole education process so that they may promote and maintain the best possible integration and co-ordination of that subject with others; (e) devoting at least 60 per cent of his time to visits and supervision work in schools and the rest to the preparation of reports, evaluation tests and other activities connected with supervision; (f) reviewing the syllabus with secondary school heads and the teachers of his subject, with a view to proposing any reforms deemed necessary; (g) guiding and assisting the teachers of his subject in the preparation of regular tests to evaluate the pupils' progress, the purpose being to use the results of such tests as an additional means of checking and appraising the teaching, etc.

Finance. Every form of systematic educational work carried out by the State, in whatever institution it may be conducted, is the responsibility of the Ministry of Education and is chargeable to that Ministry's budget. When educational programmes are conducted in institutions coming under some other Ministry, the educational staff are subordinate to the heads of these institutions, except as regards the discharge of their teaching duties.

The State bears the cost of teaching, administrative and auxiliary staff for education, and of the supply of properly equipped premises, textbooks and teaching equipment and materials for the Republic's primary schools. Where secondary schools are concerned, the State is required to provide properly equipped premises, and textbooks and school supplies to the extent that its means allow.

Public secondary education is free. The municipalities are required to assist in promoting and supporting education and the necessary amenities. The proportion of the municipal revenue to be devoted to these purposes, which must be spent within the district, is laid down by law.

Buildings and equipment. Public school buildings are erected by the Ministry of Public Works in conformity with plans drawn up by the Designs and Building Section of that Ministry. No project may be implemented until the Ministry of Education has expressly approved it as satisfying the relevant educational requirements.

When the community provides part of the materials or the labour required, the Ministry of Public Works supplies what is lacking, together with technical guidance and the plans of the school buildings.

School welfare services. For secondary pupils, there are medical, dental, book-lending and school meals services, as well as scholarships for certain categories of deserving pupils. Since 1959, an Educational Guidance Department has begun to function under the Directorate of Vocational Education.

TYPES OF SECONDARY EDUCATION

The school year, consisting of four 2-month terms, begins on 2 May and ends in the last week of January. It thus comprises 180 school days, 5 per week; the school day is divided into eight 45-minute class periods.

General secondary schools

The secondary school course comprises 6 years of study divided into two 3-year cycles. For admission, the official primary school leaving certificate (for the full 6-year primary course) is required. Secondary schools may, however, accept pupils wishing to take particular subjects for which they show aptitude, even if they do not hold a primary school leaving certificate.

According to Article 51 of Law No. 47 of 1946, the purpose of secondary education is to continue fostering and guiding the pupil's all-round development, which began in the primary school; to investigate his aptitudes and interests; and to prepare him, in accordance both with his own capabilities and with the needs of society, to occupy successfully his station in the social life of the community.

In 1955, the Executive appointed a commission to carry out a comprehensive review of all matters connected with secondary education in Panama, its objectives, curricula, programmes, etc. This commission defined the 'specific objectives of secondary education' in the following terms:

1. To develop an understanding of the nation's natural and human resources, its historical, economic and cultural development, the importance, consequences and possibilities of its geographical position, and the social values which give Panama its national individuality.
2. To help adolescents to analyse and interpret objectively the economic, social and cultural circumstances which have had a beneficial or a detrimental influence on society, e.g., the Canal, immigration, the uneven distribution of the population, absentee land-holding in the rural districts, malnutrition and insanitary conditions, the cultural standard of the people, the isolation of large areas which could be productive but are uncultivated, the wealth of Panamanian folklore.
3. To develop the scientific attitude necessary to a study of the problems of the Panamanian community by means of observation, investigation and experiment both in the school and outside.
4. To promote vocational guidance towards, and efficiency in, productive and socially useful activity in national life.
5. To promote the physical and mental health of individuals and groups.
6. To co-operate in maintaining and strengthening family life and to promote human welfare.
7. To develop a taste and appreciation for literature and art.
8. To evaluate and strengthen the political principles enshrined in the democratic system of Panama and set forth in the Constitution and laws of the Republic.
9. To guide adolescents towards the achievement of human values by the consolidation of social and ethical practices in keeping with Panamanian culture, respect for human rights as defined by the United Nations in the Universal Declaration of Human Rights, and the development of a strong civic consciousness.
10. To foster the principles of human fellowship, interdependence and peaceful relations among the peoples through co-operation in the national sphere, the study of cultural similarities among American countries, and a knowledge of the universal values which lead to interaction between cultures.

The lower cycle of secondary education is of a general and exploratory character. A pupil who completes the lower cycle receives a certificate entitling him to admission to the upper cycle. The upper cycle is concerned with academic, professional or vocational specialization. Professional and vocational education are referred to in the section 'Vocational and technical schools' below.

The academic upper secondary cycle (*segundo ciclo académico* or *liceo*) is designed to give the pupil a broader cultural background and at the same time to prepare him for professional and university studies. On completing the academic upper secondary cycle, called the *bachillerato* course, he is awarded the diploma of *bachiller*. No special examination is required for this diploma. The pupil must merely have passed the regular two-monthly and annual examinations held by the school.

Private secondary schools may be 'incorporated' (*incorporadas*) or 'free' (*libres*). They are incorporated if they have adopted the curricula, programmes, textbooks and regulations of state schools at a similar level. If the examinations organized by these schools conform to the regulations of the Ministry of Education, their diplomas or certificates are officially recognized. Free schools are those which do not fulfil the above conditions; their certificates are not officially recognized.

Curriculum. The curriculum of the lower secondary cycle is the same throughout the Republic.

TIME-TABLE OF LOWER SECONDARY CYCLE
(in periods per week)

Subject	Year of schooling		
	7	8	9
Compulsory			
Spanish	4	4	4
Social studies	4	4	4
Science	4	4	4
Health and physical education	3	3	3
Industrial arts, agriculture, domestic economy, business practice	4	4	6
Art	2	(2)[1]	(3)[1]
Music	2	(2)[1]	(3)[1]
Mathematics	4	4	Optional
English	3	3	Optional
Religion and ethics	2	1	1
Total	32	29	25

Optional: general mathematics (4); algebra (4), English (4); business practice (3); native handicrafts (3); social hygiene (3).

1. Art and music are alternatives in grades 8 and 9.

The school week consists of 40 periods of 45 minutes each. A minimum of 92 credits is needed for the lower cycle certificate. (One credit = 1 period per week for a year.)

The curriculum of the upper cycle is shown in the table on the next page.

In order to obtain his secondary school-leaving certificate, a pupil must also pass in one of the following courses: science II, chemistry or physics, each of 5 periods per week, bringing to a total of 61 the number of compulsory class hours for graduation. He may choose one of these three courses in the second or third year of the upper cycle. A minimum of 93 class periods is required for the secondary school-leaving certificate, including the 61 represented by compulsory courses. The maximum number of class-periods a week which a pupil may count as credit in any

year is 33. However, an exception is made in favour of pupils in their final year who need one or two more courses in order to graduate.

TIME-TABLE OF THE ACADEMIC UPPER SECONDARY CYCLE
(*Ciclo de Bachillerato*)
(in periods per week)

Subject	Year of schooling		
	10	11	12
Compulsory			
Spanish	5	5	5
Social studies[1]	5	5	4
Science	5	Optional	–
Health and physical education	2	2	Optional
English	4	Optional	Optional
Art	(3)[2]	(3)[2]	–
Music	(3)[2]	(3)[2]	–
Introduction to philosophy	–	4	–
Interpretation of the social and economic problems of Panama	–	–	4
Total	24	19	13

Optional: mathematics I, II and III (5 periods each); introductory course in surveying (4); technical drawing (4); elements of accountancy (4); science II (5); zoology (4); botany (4); chemistry (5); physics (5); health and physical education III (2); panorama of American poetry (3); introduction to world literature (4); elocution and debating (3); Latin (5); French I and II (5 each); English II and III (4 each); history of America (3); cultural anthropology (4); ethics (4); logic (3).

1. Social studies include the following subjects: 10th year, general geography; 11th year, general history; 12th year, civics.
2. Art and music are alternatives.

Teaching staff. Secondary school teachers are trained in the Faculty of Humanities and Education of the University of Panama. The requirement for admission to the faculty is the secondary school-leaving certificate or the diploma of a primary teacher training school. The 4-year course leads to a degree (*licenciado*) in one of the following specialities: languages, mathematics and physics, biology and chemistry, education, social sciences and philosophy. A further year of specialized study in anyone of these departments leads to a diploma qualifying the holder for a teaching post in a university. The courses and degrees of the independent University of Panama are recognized by the Government as the essential basis for a career in state education.

Vocational and technical schools

A distinction is made between professional education (*educación profesional*) and vocational education (*educación vocacional*). Professional education is given at both the secondary and the university levels. In the former case, it is provided in the teacher training course of the Juan Demostenes Arosemena School, in the commercial departments of the National Institute and of the Isabel Herrera O. School, and in such other institutions as may be specified by the Ministry of Education. At the higher education level, it is provided at the National University. There are also special short courses for holders of the primary school leaving certificate and various courses for adults.

The departments in professional schools corresponding to the upper cycle of secondary education are the 3-year commercial and domestic economy courses. The curriculum of the commercial course includes Spanish, English, commercial arithmetic, basic principles of commerce, typewriting, stenography, accountancy, business machine operation, economic geography, business practice, social and economic problems of Panama.

The object of vocational education is to train pupils for manual trades or to teach them a craft. It is provided in a number of institutions of which the following are representative.

Instituto de Artes Mecánicas (Institute of Mechanical Arts), at Divisa. Its course begins after primary school, and comprises a preparatory year followed by three successive 1-year courses of training for one of five 'occupational areas': building construction; metal work; electricity; automobile and diesel engines; saddlery and ropemaking.

Escuela de Artes y Oficios Melchor Lasso de la Vega (School of Arts and Crafts), near Panama's University City. It is of a higher standard than the Divisa School, constituting, so to speak, the upper cycle in technical vocational education. The areas of vocational training dealt with at this school are the following: general and precision engineering; automobile mechanics and diesel engines; electricity and radio; refrigeration; blacksmithing and plumbing; building, carpentry and cabinet-making; printing; tailoring. The course comprises a general first year which serves to determine the direction to be followed, after which come 3 years of industrial training. In order to enter the industrial school, pupils must have completed the lower cycle.

This school also offers special evening training courses for workers employed during the day. They are variable in length and are organized periodically, in accordance with the needs of industry and the requests made by students. The subjects are surveying, radio, commerce and workshop instruction.

Colegio Felix Olivares. This school provides a vocational course in agriculture in four stages. The first of these is a preparatory year to which pupils who have completed their primary schooling may be admitted; the other three 1-year courses provide vocational training in agriculture.

Instituto Nacional de Agricultura (National Institute of Agriculture). The institute, which is situated 18 miles from the capital, comes under the Ministry of Agriculture, Trade and Industry and is divided into three major departments: the School of Agriculture proper, the National Experimental Farm Station, and General Services. Only pupils who have completed the lower cycle of secondary schooling, are at least 16 years of age and have an aptitude for work on the land are admitted. The 3-year course leads to a certificate in agricultural studies (*bachiller agropecuario*).

Escuela de Enfermería (School of Nursing). This school accepts students who have completed the course at a secondary or teacher training school. It is annexed to St. Thomas's Hospital; the course lasts 3 years and includes both academic and practical work.

Escuela Profesional Isabel Herrera O., near Paitilla. Besides a lower secondary cycle (3 years) and its professional upper secondary courses in commercial subjects and domestic economy, the school also provides a few evening courses in accountancy, dressmaking (making of children's, women's and men's clothes, etc.), pastry-making, beauty culture.

Art education. The National Institute of Music and the Schools of Fine Arts come under the Department of Fine Arts and Publications. They also provide special courses for training teachers of these subjects for primary and secondary schools.

Teacher training schools

Candidates for enrolment in the teacher training course must have completed the lower secondary cycle. The curriculum for the 3-year teacher training course, is shown in the table opposite.

For the award of a primary teacher's certificate, a student must have passed all the compulsory subjects and one of the optional subjects listed in this table.

Out-of-class activities

Secondary schools have literary, scientific and sports clubs. There are also associations of former pupils, the presidents of which have the right to speak and vote at meetings of the Student Welfare Boards. Secondary schools likewise have councils of order and discipline.

TIME-TABLE FOR TEACHER TRAINING SCHOOL
(in periods per week)

Subjects	Year		
	1	2	3
Compulsory			
Spanish	4	4	–
Social studies	4	4	–
Mathematics	4	4	–
Science	4	4	–
Art	2	2	–
Music	2	2	–
Physical education	2	2	–
Principles of ethics and religion	–	2	–
Domestic economy	2	2	–
Industrial arts	–	3	–
Agriculture	3	3	–
Public health	–	–	4
Introduction to education	5	–	–
Growth and development of the individual	5	–	–
Principles and technique of learning	–	4	3
Organization of school work and conduct of a class (1st semester)	–	–	(3)
Appraisal of pupils' progress (2nd semester)	–	–	(3)
Study of the pupil and the community	–	–	2
Preparation and use of teaching materials	–	–	3
Practice teaching	–	–	15
Total	37	36	30

Optional subjects in 3rd year: one subject (4 periods a week) to be chosen from agriculture, native handicrafts, physical education, improvement of living conditions, public health, pre-primary education, music, English.

TRENDS AND PROBLEMS

At the present time, the educational authorities are endeavouring to develop training in farm work in secondary schools. By this means they hope to arouse interest in such work and to bring about a better development of the national economy.

They also intend to give fresh stimulus to the supervisory services by increasing their staff and by providing facilities for the better performance of their duties.

[*Text revised by the Panamanian National Commission for Unesco in August 1959.*]

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STATISTICS

Population (mid-year estimate): 995,000.
Area: 28,753 square miles; 74,470 square kilometres.
Population density: 35 per square mile; 13 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58 enrolment of full-time pupils, both public and private, reached a total of 179,000, being about 19 per cent of the population. Of these pupils nearly 2 per cent were receiving pre-primary education, 80 per cent were enrolled in primary schools, 17 per cent in schools of the secondary level, and 1.4 per cent were at the university. The proportion of girls was 53 per cent in pre-primary schools and 49 per cent in primary schools; in general secondary schools the proportion rose from 44 in 1953 to 47 in 1957, in vocational schools it dropped from 74 in 1953 to 63 in 1957 and in teacher training schools it increased from 76 in 1953 to 79 in 1957. At the university, girls constituted 45 per cent of the student body in 1957 as compared with 47 per cent in 1953.

The percentage of women teachers was 76 per cent of all full-time teachers (not including the University). Average number of pupils per teacher was 31 in primary schools,

25 in secondary schools, lower stage, and 17 in secondary schools, upper stage. In general, the pupil-teacher ratio was lower in private schools than in public schools. Between 1953 and 1957 total school enrolment increased by 18 per cent; this increase was relatively highest in general secondary education, where the total number of pupils rose by 64 per cent and the number of girls alone by 77 per cent (See Table 2.)

Enrolment trends in secondary education, 1945–57. Between 1945 and 1957, enrolment in general secondary education showed more than five-fold increase. The same is true of teacher training enrolment. Figures on vocational school enrolment show large fluctuations, probably due to the inclusion of some vocational courses for adults in certain years only. Leaving out the vocational school enrolment, Table 3 shows an increase in the secondary enrolment ratio from 9 in the 1945–49 period to 22 in the period 1955–57; including vocational school enrolment, the secondary enrolment ratio for the period 1955–57 would be about 30.

Examination results in secondary education, 1953–57. From Table 4 it may be seen that the number of students passing the *bachillerato* examination had increased markedly between 1954 and 1957, but the increase in the number of commercial school diplomas granted was even more spectacular between 1955 and 1956. The highest number of girls receiving domestic science school certificates was registered in 1956, and the highest number of pupils, both boys and girls, receiving primary school teachers' training certificates were in 1955 and 1956. The proportion of girls receiving various types of diplomas or certificates ranged from 8 per cent (trade and craft schools apprenticeship certificates) to 99 per cent (domestic science school certificates). In regard to the *bachillerato* examination, the proportion of girls was 37 per cent.

Educational finance, 1957. In the fiscal year beginning in January 1957, total expenditure on education by the Central Government amounted to 12 million balboas, averaging 12 balboas per inhabitant. Recurring expenditure accounted for 94 per cent of the total; the distribution of the recurring expenditure by level and type of education is shown in Table 1B.

Source. Panama: Ministry of Education, reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1957 (in balboas)[1]

A. EXPENDITURE BY PURPOSE

	Amount
Total expenditure[2]	**11 939 448**
Recurring expenditure	11 218 956
For central administration	1 439 050
For instruction	
Salaries to teachers, etc.	8 658 503
Other instructional expenditure	940 081
Scholarships, etc.	181 322
Capital expenditure	720 492

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure	**11 218 956**	**100.0**
Central administration	1 439 050	12.8
Instruction	9 598 584	85.6
Pre-primary education	69 647	0.6
Primary education	6 557 606	58.5
Secondary education	2 486 919	22.2
Higher education	385 000	3.4
Special education	9 581	0.1
Other education[3]	89 831	0.8
Other recurring expenditure (scholarships, etc.)	181 322	1.6

1. Official exchange rate: 1 balboa = 1 U.S. dollar.
2. Expenditure by the Central Government only.
3. Includes supplementary vocational and artistic education.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1957/58	18	43	43	1 413	719
	Nursery schools, public	1957/58	4	5	5	211	95
	Kindergartens, private	1957/58	42	85	75	1 430	790
	Total	**1957/58**	**64**	**133**	**123**	**3 054**	**1 604**
	„ [1]	1956/57	65	107	104	3 266	1 718
	„ [1]	1955/56	57	121	111	3 316	1 760
	„ [1]	1954/55	57	107	99	3 079	1 613
	„ [1]	1953/54	52	111	100	2 900	1 526

1. Not including public nursery schools.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	1 070	4 300	3 483	133 290	64 695
	Primary schools, private	1957/58	85	329	244	9 286	4 661
	Total	**1957/58**	**1 155**	**4 629**	**3 727**	**142 576**	**69 356**
	,,	1956/57	1 152	[2]4 516	[2]3 661	141 331	68 655
	,,	1955/56	1 128	[2]4 266	[2]3 449	137 729	67 037
	,,	1954/55	1 081	4 056	3 306	132 743	64 524
	,,	1953/54	1 050	3 900	3 195	125 482	60 963
Secondary *General*	Secondary schools (lower cycle), public	1957/58	9	469	271	14 127	6 819
	Secondary schools (upper cycle), public	1957/58	3	112	53	2 156	744
	Secondary schools (lower cycle), private	1957/58	3	258	151	4 373	2 359
	Secondary schools (upper cycle), private	1957/58	12	86	37	1 111	374
	Total	**1957/58**	**27**	**925**	**512**	**21 767**	**10 296**
	,,	1956/57	35	846	451	18 132	8 270
	,,	1955/56	30	[3]813	[3]418	15 717	6 747
	,,	1954/55	24	[3]562	[3]302	14 253	6 143
	,,	1953/54	22	[3]503	[3]273	13 260	5 816
Vocational	Technical school, public	1957/58	4	5	3	15	11
	Commercial schools, public	1957/58		39	32	444	292
	Agricultural schools, public	1957/58		5	1	58	—
	Homecraft centres, public	1957/58		41	39	571	571
	Industrial schools, public	1957/58	1	57	10	1 138	18
	Technical schools, private	1957/58	3	5	4	72	54
	Industrial schools, private	1957/58	2	17	—	251	—
	Commercial schools, private	1957/58	17	93	57	2 759	1 816
	Homecraft centres, private	1957/58	27	43	39	1 738	1 668
	Total	**1957/58**	**54**	**305**	**185**	**7 046**	**4 430**
	,, [4]	1956/57	61	350	209	8 383	5 480
	,, [4]	1955/56	59	[3]311	[3]205	7 974	5 432
	,, [4]	1954/55	65	[3]426	[3]266	7 452	5 286
	,, [4]	1953/54	60	[3]406	[3]242	6 705	4 931
Teacher training	Teacher training schools, public	1957/58	1	62	42	1 339	1 047
	Teacher training department in private school	1957/58	(1)	40	16	558	451
	Total	**1957/58**	**1**	**102**	**58**	**1 897**	**1 498**
	,,	1956/57	1	78	45	1 609	1 277
	,,	1955/56	1	70	34	1 554	1 241
	,,	1954/55	1	67	28	1 386	1 078
	,,	1953/54	1	56	29	1 226	935
Higher	University, public						
	Total	**1957/58**	**1**	**128**	**21**	**2 454**	**1 097**
	,,	1956/57	1	124	18	2 340	1 052
	,,	1955/56	1	118	11	1 992	899
	,,	1954/55	1	119	16	1 955	902
	,,	1953/54	1	105	13	1 735	812
Special	Schools for handicapped children	1957/58	2	19	18	140	53
	School for the blind	1957/58	1	3	2	23	7
	School for deaf and dumb	1957/58	1	11	9	63	30
	Total	**1957/58**	**4**	**33**	**29**	**226**	**90**
	,,	1956/57	4	22	21	204	73
	,,	1955/56	3	21	19	203	86
	,,	1954/55	3	26	22	153	61
	,,	1953/54	3	15	12	211	50
Adult	Institute of Music and Fine Arts	1957/58	9	43	18	1 183	914
	Courses for adults in vocational schools	1957/58	25	48	28	1 320	853
	Private primary schools for adults	1957/58	3	15	14	253	98
	Total	**1957/58**	**37**	**106**	**60**	**2 756**	**1 865**
	,, [5]	1956/57	12	...	...	1 848	1 041
	,, [5]	1955/56	10	...	...	2 492	1 449
	,, [5]	1954/55	4	71	32	2 173	1 274
	,, [5]	1953/54	5	79	36	3 031	1 688

2. Including part-time teachers of the private schools.
3. Some technical school teachers are included in the teachers of general schools.
4. Including private adult education courses.
5. Public schools only.

3. TRENDS IN SECONDARY EDUCATION, 1945–57

School year	Number of students enrolled by type of education						Average total enrolment[1] (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio[1]
	General		Vocational[1]		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1945	3 929	52	7 451	40	322	76			
1946	4 664	51	5 476	59	406	74			
1947	6 018	49	7 393	66	488	74	6	74	*9*
1948	7 152	48	8 363	63	551	74			
1949	8 122	48	9 320	62	636	77			
1950	9 436	49	9 989	60	744	77			
1951	10 105	49	10 186	60	905	78			
1952	11 081	49	10 328	60	1 033	78	13	85	*15*
1953	13 260	44	6 705	74	1 226	76			
1954	14 253	43	7 452	71	1 386	78			
1955	15 717	43	7 974	68	1 554	80			
1956	18 132	46	8 383	65	1 609	79	20	94	*22*
1957	21 767	47	7 046	63	1 897	79			

1. Enrolment reported for vocational education is not consistent, owing to the inclusion of some vocational courses for adults in certain years only. Vocational education has therefore not been included for calculating average total enrolment and the secondary enrolment ratios.

4. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55[1]		1955/56		1956/57		1957/58[2]	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Bachillerato	...	...	280	78	336	92	740	222	881	328
Technical and industrial school certificates	...	...	67	26	87	11	215	48	262	40
Trade and crafts school apprentice certificate	...	...	24	—	67	—	165	40	150	12
Commercial school diploma	...	...	134	83	138	79	1 043	666	1 177	793
Domestic science school certificate	...	...	107	107	133	133	340	337	293	291
Primary teacher training certificate	464	347	614	469	750	586	749	582	683	557

1. Figures refer to public schools only.

2. In addition, 9 agricultural school diplomas were granted in 1957/58.

PARAGUAY

THE EDUCATIONAL SYSTEM

The present Constitution of Paraguay, promulgated in 1940, merely lays down the bases of the country's political organization and broadly defines various rights, obligations and safeguards.

The three articles concerning education read as follows:

'Primary education shall be compulsory and free of charge. The Government shall encourage secondary, vocational and university education.' (Article 10.)

'The safeguarding of public health, the organization of social welfare services, and the moral, intellectual and physical education of young people are fundamental duties incumbent upon the State.' (Article 11.)

'The professions for which formal qualifications are required, the conditions for the award of such qualifications, and the authorities awarding them, shall be defined by statute. The administration and supervision of education are the responsibility of the State.' (Article 20.)

In addition to this, there are a few provisions guaranteeing to all the inhabitants of the Republic the right 'to learn and to teach' and the right to choose a profession, and, in the case of 'teachers and university professors', the privilege of being eligible to serve as deputies or representatives to Parliament—an office from which all state-remunerated officials are normally prohibited.

Paraguay has no single Organic Law on Education, but there are a great many separate laws and decrees containing clauses on education, and under these provisions, services have been created and organized, and regulations governing the various aspects of primary, secondary and vocational education have been established.

With regard to higher education, Law No. 356 of 9 July 1956 established 'the Organic Charter of the National University of Asunción', which is the only university in Paraguay. The most important provision of this law is that declaring the University's independence and its status as a corporation under public law.

Primary education was made compulsory for children from 5 to 14 years of age by the Law of 1896. The Law of 28 July 1909 reduced this period of compulsory primary education to 7 to 14 years of age for children in towns and 9 to 14 years of age for children in rural areas.

Other important laws are as follows:

The Law of 4 November 1924, dividing primary schools into categories—lower, middle and upper, with 3, 5 and 6 grades respectively. This law also contains provisions concerning the curriculum.

The Organic Law of the Teaching Profession of August 1921, amended and amplified by the Law of 25 April 1941.

The Law of 1 August 1931, instituting vocational training schools.

The Law of 28 October 1939, establishing the National Council of Physical Education.

The Law of 13 August 1943, creating the Ministry of Education.

The Law of 9 July 1945 governing the organization of the Ministry and defining its sphere of work. It established the three following categories of bodies: (a) administrative bodies, including the *Secretaría* or office of the head of the administrative branches of the Ministry, and the various departments and divisions; (b) executive bodies, including all educational institutions, co-operating bodies and those concerned with cultural extension work, coming under the immediate jurisdiction of the Ministry; and (c) bodies co-operating with the Ministry, i.e., the Council of Primary Education and Teacher Training, the Council of Secondary and Vocational Education and the various advisory committees, such as the Educational Reform Committees.

At the present time, the Ministry of Education comprises the following departments: the Department of Research in Educational Psychology, the Department of Primary Education, the Department of Fundamental Education, the Department of Teacher Training, the Department of Secondary and Vocational Education, the Department of Higher Education and Cultural Extension, the Department of Physical Education, the Department of Educational Statistics, the Department of School Buildings, and the Department of Administration.

The Departments of Primary Education, Fundamental Education, Teacher Training, and Secondary and Vocational Education have a corps of inspectors to guide and supervise activities in the type of education or educational establishment for which they are respectively responsible.

Under Article 2 of Decree-Law No. 9470 of July 1945, the duties of the Ministry of Education are as follows: (a) to organize, direct and supervise the educational and cultural extension bodies administered directly by it; (b) to direct and supervise the intellectual, moral, vocational and physical education provided by educational institutions in general; (c) to encourage private initiative in the fields of education and culture; to co-ordinate, in the public interest, the activities of private institutions and to exercise the necessary supervision over them; (d) to stimulate interest in, and a taste for, reading, scientific, literary and artistic studies, works and applications; (e) to safeguard the nation's historical, artistic and cultural heritage; (f) to promote studies and research on the country's cultural situation and seek ways of improving and developing the educational system; (g) to stimulate teacher training; (h) to promote and co-operate in intellectual exchanges, both within and without the country; (i) to see that steps are taken to inculcate and develop in children and young people a love of work, public spiritedness, devotion to the nation's ideals and a sense of human brotherhood, in conjunction with a true understanding of social life.

The political structure of Paraguay is that of a unified Republic; and this has always been so since the country's

independence was proclaimed on the night of 14 May 1811. But it is worthy of note that Paraguayan unity is due not only to the country's political structure: other factors have contributed to its homogeneity. Provincial antagonism or regionalism is unknown, nor is there any ill-feeling towards the capital city on the part of other towns or the rural population. The fullest possible racial integration has been achieved: out of a total population of 1,500,000 inhabitants, the Indians represent only 2 per cent. The country is predominantly rural, yet 75 per cent of the population, without counting the 200,000 inhabitants of Asunción, lives in the vicinity of the capital, within a radius of 120 miles, representing hardly 13 per cent of the whole territory. Linguistically, too, there is considerable unity since, although the entire population does not speak Spanish, it can be claimed that there is no Paraguayan unable to speak Guarani. Three-quarters of the population of Asunción and about half the rural population are bilingual. As regards religion, practically all the inhabitants are Roman Catholics. The Constitution lays down that the Roman Catholic and Apostolic faith shall be the state religion and that the President of the Republic shall be of that faith. Nevertheless, since religious tolerance is guaranteed under the Constitution, many Protestant churches and places of worship of other creeds also exist.

Circumstances have led to complete centralization, the whole country being administered by the Central Government and the local authorities being left only a very small margin of administrative responsibility. In the field of education, therefore, all laws, provisions, programmes and curricula are the same throughout the country and the whole system comes under the central educational authorities.

The State is responsible for the great majority of the country's educational institutions; private schools account for less than a quarter of the total number, but they are fully protected, both by law and in practice. Under Decree-Law No. 387 of 20 September 1943, the Ministry of Education is responsible 'for supervising private schools'. When the latter acquire 'incorporated' status, they follow the official syllabuses and curricula and the general regulations applying to state schools; they are subject to supervision by the ministerial authorities and their end-of-year examinations must be held with the assistance of a ministerial inspector. The Council of Secondary and Vocational Education includes two heads of incorporated private secondary schools among its members; similarly, private schools are represented on almost all the advisory committees, such as the Educational Reform Committees.

The structure of the school system is shown in the diagram on page 935.

THE DEVELOPMENT OF SECONDARY EDUCATION

Both situated in Asunción, Paraguay's two principal secondary schools—one for boys and the other for girls—were legally established by a Decree of 7 March 1870, enacted by the Provisional Government set up after the War of the Triple Alliance; this decree did not, however, come into force until 1877. In 1889, national secondary schools (*colegios nacionales*) were opened in other parts of the country.

The Secondary and Higher Education Law was passed on 24 September 1889. Article I of this law reads: 'The main objective of secondary education is to equip young people with a knowledge of science and art which will give them a basis for embarking on a career and for acquiring sound and specialized knowledge in their subsequent vocational training.'

This law also established the Council of Secondary and Higher Education, which was abolished in 1929, when secondary education was brought directly under the Ministry of Education; this situation lasted until 1931, when a financially and administratively autonomous body, known as the 'Council of Secondary Education', was set up 'to supervise and administer secondary schools'.

Other innovations introduced by the Law of 1889 were the creation of the post of Inspector responsible for the general supervision of secondary schools, and the establishment of the diploma of Bachelor of Science and Arts (*Bachiller en Ciencias y Letras*), obtainable upon completion of the 6-year general secondary school course, and of equivalent diplomas for students having completed special courses in accountancy or other technical branches.

In December of the same year, regulations containing clauses on secondary and commercial education were issued

GLOSSARY

ciclo básico: lower cycle of general secondary studies common to nearly all types of school at secondary level; may be organized as a separate *liceo* (lower general secondary school) or as a department of a 6-year school.

ciclo de bachillerato: upper cycle of general secondary studies leading to the secondary leaving certificate (*bachillerato*).

colegio de humanidades: complete general secondary school.

colegio nacional de agronomía: vocational secondary school of agriculture.

escuela de comercio: vocational secondary school of commerce.

escuela de prácticos agrícolas: vocational training school of agriculture.

escuela de técnicos industriales: vocational secondary school preparing for industrial occupations.

escuela normal: teacher training school.

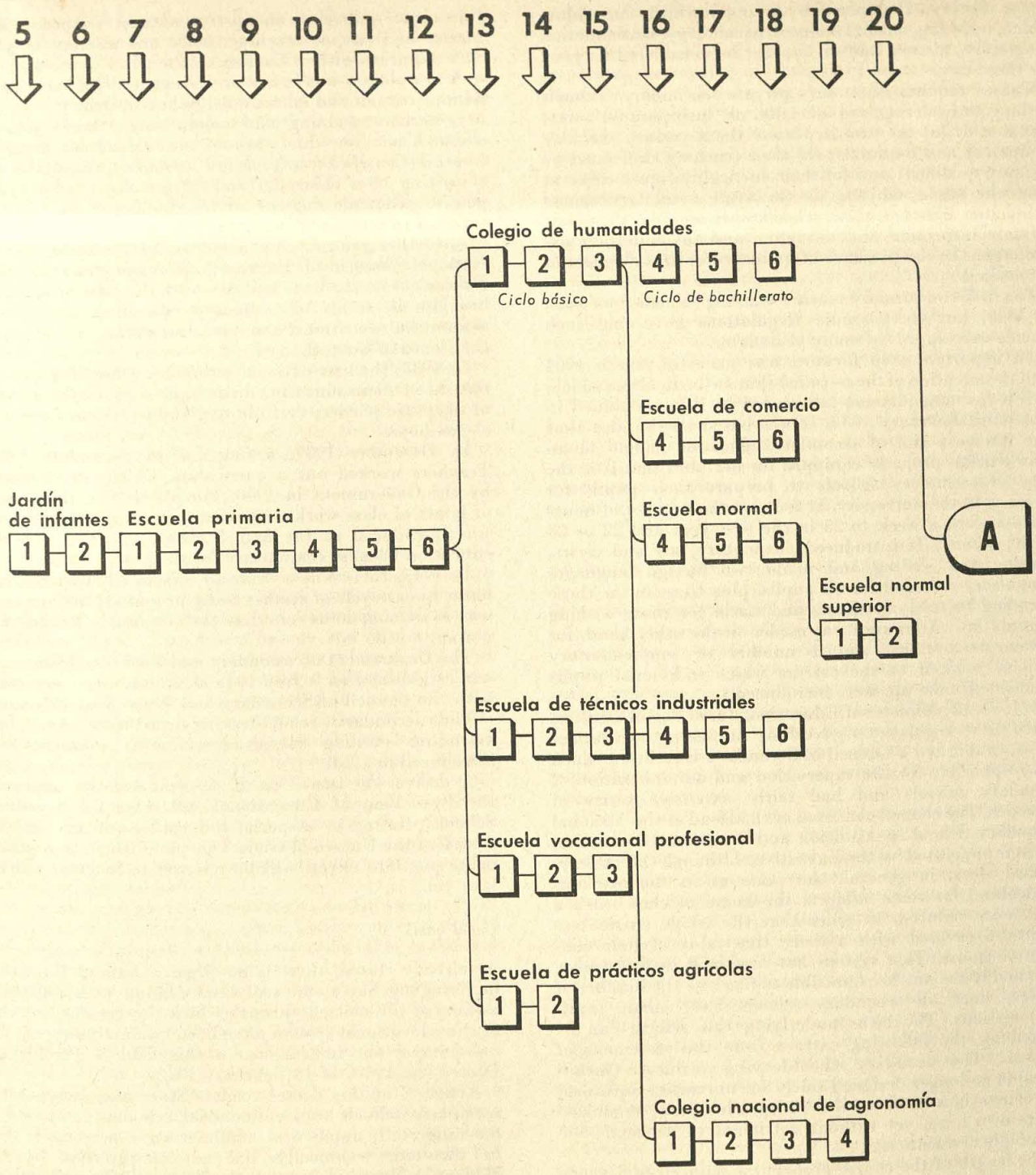
escuela normal superior: teacher training college.

escuela primaria: primary school; grades 1 to 3 form an *e.p. inferior*, grades 1 to 5 an *e.p. media* and grades 1 to 6 an *e.p. superior.*

escuela vocacional profesional: vocational training school for industrial occupations.

jardín de infantes (kindergarten): pre-primary school.

A. *Universidad Nacional:* The National University, with Faculties of Philosophy, Law and Social Sciences, Economics, Physics and Mathematics, Chemistry and Pharmacy, Medicine, Dentistry, Agronomy and Veterinary Science, Architecture.


5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Jardín de infantes
Escuela primaria
1 2 1 2 3 4 5 6
Colegio de humanidades
1 2 3 4 5 6
Ciclo básico
Ciclo de bachillerato
Escuela de comercio
4 5 6
Escuela normal
4 5 6
Escuela normal superior
1 2
A
Escuela de técnicos industriales
1 2 3 4 5 6
Escuela vocacional profesional
1 2 3
Escuela de prácticos agrícolas
1 2
Colegio nacional de agronomía
1 2 3 4

under this law. They began by laying down the curriculum which, including natural sciences, psychology, mathematics, geography, history and civics, can be considered as good for those days.

Three requirements for private secondary schools wishing to be recognized officially, or 'incorporated', were introduced: (a) they must possess the necessary teaching equipment and materials; (b) their teaching staff must be suitably qualified; and (c) their curriculum must cover at least the same subjects as the state secondary school curriculum. Further, these schools were required to submit to state inspection and discipline and to hold their examinations in the presence of an inspector or a delegate of the council.

The first two primary teacher training schools date back to 1896, but the Organic Regulations governing such schools were approved many years later.

An important step forward was made in March 1904 with the adoption of the so-called Franco Curriculum, which, with a few amendments introduced in 1915, remained in force until February 1931. It was based on the idea that 'the foremost aim of secondary education should be to train citizens properly equipped for life' and that it is the duty of secondary schools to prepare their pupils for entrance to the university. It reduced the number of hours of class work a week to 25 in the first year and 22 or 23 in the second. It introduced elementary law and civics, drawing and writing and made two foreign languages compulsory—French for all pupils, plus German for those intending to study medicine and Latin for those wishing to study law. Allowance was made, on the other hand, for certain exemptions, and a number of supplementary subjects, related to the careers which individual pupils intended to take up, were introduced.

In 1931, the Minister of Education, Justo Pastor Benítez, issued new regulations governing secondary education. These established a Council of Secondary Education which was responsible for the supervision and administration of secondary schools and had fairly extensive terms of reference. The council consisted of the Head of the National Secondary School in Asunción and four secondary school teachers appointed by the Executive. Although the subjects studied were, in general, the same as in the previous curriculum, for some subjects the hours of class work a week were reduced, in order that the whole curriculum might be covered with a daily time-table of four consecutive hours. This system has remained in force since then and it has not been possible to increase the number of classes, since all secondary schools have single (half-day) sessions. The ideas underlying this reform can be judged by the following extract from the statement of reasons: 'The secondary school-leaving certificate (*bachillerato*) is no longer designed solely for university entrance; the course is a more or less independent one, organized on its own lines, yet without detriment to its connexion with higher education . . .'.

The length of the course proper was reduced to 5 years, but, over and above this, a sixth 'preparatory' year, divided into two streams, was introduced. These two streams were as follows: (a) humanistic studies—world literature, Latin, general history, logic, composition and exposition, and the teaching of humanistic studies; (b) science—physics, chemistry, natural science, mathematics and science teaching. Only one modern language was required—either English or French.

A new decree was issued on 6 August 1936, bringing the administration and educational policy of primary, secondary, teacher training and commercial schools under a single head; for this purpose, an Education Board of Control (*Consejo Directivo de la Enseñanza*) was established, consisting of a chairman and 10 members, who had to possess academic degrees, or be qualified accountants or teachers in teacher training schools.

A further reform, in November 1937, established the National Council of Education (*Consejo Nacional de la Educación*) on the lines laid down by the Law of 1899, and brought all forms of secondary education, i.e. general, commercial, vocational and special secondary schools, under the Board of Control.

In 1938, the first national secondary school for girls was opened in Asunción; the curriculum, save for the addition of domestic science, first aid and child care, was the same as for boys.

In December 1939, a Congress of Secondary School Teachers worked out a curriculum which was approved by the Government in 1940. For all classes, the number of hours of class work a week was raised to 30, and Latin was introduced in the first 5 classes. Further, physical education became compulsory for the whole 6 years.

In 1945, there was a drive to reform the curriculum, a basic 4-year cycle of studies being proposed; the oppostion was so strong, however, that the proposed changes were not approved.

The Department of Secondary and Vocational Education was established on 9 July 1945 as a body for co-operation with the Council of Secondary and Vocational Education.

The secondary school-leaving certificate for pupils attending evening classes (*bachillerato nocturno*) was introduced in 1951.

A decree was issued on 27 December 1956, approving the New Plan of Educational Activities for Secondary Schools, drafted by a special Reform Committee with the advice of the Unesco Mission. This plan, which is gradually being put into effect, will be referred to in greater detail later on.

Legal basis

As already stated, there is no Organic Law of Education in Paraguay but a series of laws dealing with particular aspects of the matter, through which the various branches of the educational system have been gradually shaped. The most important instrument in this field is Presidential Decree No. 11089 of 18 February 1942.

Article 2 of this decree reads: 'State and incorporated secondary schools and commercial schools, composed of teaching staff, pupils and administrative personnel, shall be directed, technically and administratively, by the Education Board of Control, the Teachers' Council and the head of each institution'.

Under Article 3, the aforesaid schools are subject to supervision by a Council of Secondary and Vocational Education and come under the jurisdiction of the Department of Secondary and Vocational Education.

The board is composed of the following members: the Director of the Department of Secondary and Vocational Education, as chairman, the head of the National Secondary School in Asunción, the head of the Vocational School in Asunción, two heads of incorporated secondary schools, a secondary school teacher, elected as representative of teachers serving in state secondary and vocational schools, a representative of the National Council of Physical Education, a representative of the Ministry of Public Health and Social Welfare, a representative of the parents.

Since the period of compulsory schooling ends at 14 years of age and begins at the age of 7 for children resident in the towns and 9 for those living in the country, it does not, in practice, extend beyond primary education and does not influence enrolment and attendance at secondary schools. However, although the percentage of pupils going on to a secondary school after completing the primary course is still small, there is a general desire among the public, especially since the recent educational reform, to have an establishment offering at least the basic (lower) secondary school course in every population centre of a certain size.

Administration

The general direction of secondary education is the responsibility of the Ministry of Education, acting through the Department of Secondary and Vocational Education and the Council of Secondary and Vocational Education. In addition, there are various boards and advisory committees to which technical questions are referred. The most important of these is the Secondary Education Reform Committee, which has been operating for about 4 years and which, with the advice of the Unesco Mission, has worked out the New Plan of Educational Activities for the *colegios de bachillerato* (schools preparing pupils for the secondary school-leaving certificate), as well as for commercial and teacher training schools. Assisted by sub-committees, these committees have drawn up the syllabuses for the various subjects and are coming to be regarded as standing committees for the constant study and revision of curricula and syllabuses.

There are also special sub-committees for the study of textbooks, each consisting of three teachers specializing in the subject concerned; authors are obliged to make any changes proposed by the committees.

The Ministry of Education, through the Department of Secondary Education and various inspectors, is responsible for the general supervision of education. There are no regional or local educational authorities. In each secondary school there is a teachers' council, which is responsible for the school's general educational policy and discipline, a headmaster, and a deputy head. Some secondary schools and courses come under other ministries or institutions, such as: farming courses, which at present come under the university's Faculty of Agriculture and Veterinary Surgery; the Social Service School, which operates under the supervision of the Ministry of Public Health and Social Welfare and trains nurses, midwives and social workers; the Solano López Military Academy and the Acosta Nú Military School, which are under the Ministry of Defence; and the José Eduvigis Díaz Police School, which comes under the Ministry for Home Affairs.

The inspection of schools is carried out by a body of inspectors specializing in particular branches of secondary education. There are no regulations laying down criteria for the selection of the inspectorate and the executive is therefore free to appoint such persons as it deems appropriate to discharge such duties, which merely amount in practice to keeping a check on the technical aspects of secondary schools' work. In addition, they have to report to the Ministry on the administrative aspects.

For the financing of secondary education, the main source of funds—indeed practically the only source—is the national budget, i.e., the public funds allocated annually by the Government. The only other funds available are those provided by the school co-operatives constituted by the parents, who contribute, as their means allow, towards the improvement of school buildings, school equipment and other expenses.

Practically all school buildings are state property. Teachers' salaries are calculated on the basis of teaching hours, at the rate of 60 guaranis an hour.

Small enrolment and examination fees, payable by every pupil in state and incorporated schools alike, add to the schools' financial resources.

TYPES OF SECONDARY EDUCATION

Secondary education in Paraguay is provided by the following types of schools:

Liceos (basic secondary schools). The term *liceo* is now applied to schools which provide only the 3-year basic cycle, common to all secondary schools and following on immediately after the primary school. The *liceo* is not in fact a special type of school; it merely provides the basis for pupils who subsequently proceed to the various other types of secondary schools at which the full secondary course can be taken.

Colegios de bachillerato o de humanidades (complete general secondary schools leading up to the secondary school-leaving certificate or providing pupils with a classical education). The course at these schools lasts 6 years. They prepare pupils, to some extent, for university studies but, under the Reform Decree, the instruction provided is an end in itself: the aim is to educate adolescents.

Commercial schools. These schools provide a specialized training for office workers, bank clerks, cashiers, correspondents, commercial managers, custom-house brokers, etc. This is also a 6-year course; the first 3 years are occupied with the basic course, after which the remaining 3 years are devoted to a general education similar to that provided by the previous category of schools, plus vocational training for the various careers and types of work mentioned above.

Teacher training schools. These again provide a 6-year course for training primary teachers for service in urban or rural schools. As in the commercial schools, the first 3 years are devoted to the basic course, while the last 3 are taken up by vocational training and instruction designed to supplement the general education acquired during the first 3 years.

Vocational guidance to determine the type of secondary education for which pupils are best fitted is only at its beginnings.

All the above-mentioned types of schools are institutions pursuing their own particular aims without being obliged to serve as a basis for higher education; but they do in fact lead to university careers since the faculties are, in general, open to students from any type of secondary school.

The school year begins on the first working day of March and ends during the first fortnight of October, without any intervening holidays, since the winter holiday has been abolished from 1959 onwards. The holiday months are December, January and February. The final examinations are held in November.

There are six periods of class work a day. Save in the case of certain schools which have no classes on Saturdays, classes are held on the six weekdays. The length of each period is 40 minutes. Most schools are organized as single units holding classes in the morning, in the afternoon or in the evening, but there are schools, like the National Secondary School in Asunción, which have three units. There are also some schools—but they are exceptional—which divide up their classes between the morning and afternoon.

General secondary schools

Paraguay possesses only one type of secondary school which does not set out to train pupils for any particular career—the *colegio de bachillerato*. The purpose of these schools is to provide adolescents with such instruction as meets 'the requirements of a modern, democratic and active education and promotes the full and harmonious development of each adolescent's personality', the ultimate objective being 'to raise the cultural level of the Paraguayan people, improving their knowledge both in breadth and in depth'.

The subjects taught, listed in Article 18 of Decree No. 24063 approving the New Plan of Educational Activities for secondary schools, are shown in the following time-table.

The results of school work are assessed by an examination system, the main features of which are as follows:

1. There are two categories of examinations: final examinations, covering the year's work and held at the end of the school year, and two periodical examinations, covering four months' work and held, since 1956, in the second fortnight of June and October.
2. The final examinations are oral and public and last for about 7 to 15 minutes for each pupil. The periodical examinations are generally written, but may consist of practical tests should the nature of the subject permit.
3. For final examinations in state schools, the board of examiners consists of the teacher of the subject concerned and another member of the staff, teaching the same or a similar subject. In incorporated secondary schools, the board of examiners is composed of two state inspectors, one of whom acts as chairman, and the teacher of the subject in the incorporated school, who is entitled to take part in the examination, but who may not give marks exceeding the average of those obtained in the periodical examinations. The examinations are held on the premises of the schools concerned.
4. It is not explicitly stipulated that periodical examinations shall be conducted by the teacher of the subject concerned; however, since incorporated schools are required to send in their pupils' marks and the record of their absences at four-month intervals, and also, at the end of the year, the general averages and failures so that they can be taken into account in the final examinations, it is assumed that the teacher of the relevant subject is allowed to conduct the periodical examinations by himself in state or incorporated schools.
5. In order to sit for the final examination in November, a pupil must be still enrolled at the school—enrolment lapsing if he fails to attend classes—and must have obtained an average of at least 4 (out of 10) in the periodical examinations.
6. The final examinations are marked by the board of examiners, but the marks may not exceed the annual

TIME-TABLE FOR GENERAL SECONDARY SCHOOLS
(in periods per week)

Subject	Basic cycle (year)			*Bachillerato* cycle (year)		
	1	2	3	4	5	6
Language studies						
Spanish	5	5	5	4	3	3
English, French, German or Italian	–	–	–	4	4	4
Latin	–	–	–	4	4	4
Science studies						
Arithmetic	5	–	–	–	–	–
Natural science	3	–	–	–	–	–
Algebra	–	3	3	–	–	–
Geometry	–	3	2	–	–	–
Trigonometry	–	–	–	3	–	–
Botany	–	–	3	–	–	–
Anatomy, physiology	–	–	–	3	–	–
Zoology	–	–	–	2	–	–
Biology	–	–	–	–	3	–
Chemistry	–	–	–	–	4	3
Physics	–	–	–	–	4	4
Geology	–	2	–	–	–	–
Psychology	–	–	–	–	–	3
Cosmography	–	–	–	–	–	2
Social and philosophical studies						
Geography	3	3	3	3	2	–
History	3	3	3	3	3	–
Civics and morals	–	–	3	2	–	–
Philosophy	–	–	–	–	3	2
Political economy	–	–	–	–	–	2
History of culture	–	–	–	–	–	3
Cultural history of Paraguay	–	–	–	–	–	2
Artistic studies						
Music	2	2	2	–	–	–
Drawing, painting	2	2	2	–	–	–
Other activities	3	3	2	2	–	–
Physical education and other activities	2	2	2	2	2	–
Total	28	28	30	32	32	32

average by more than 3 points, or be more than 5 points under it, except in the case of total lack of knowledge on the part of the pupil.

Teaching staff. It may be said that, for the time being, there is really no such thing as a career of secondary school teacher, since the only qualification required for teaching in a secondary school is a university degree or the diploma of a bachelor of science and arts or of a public accountant or the equivalent. Nevertheless, some attempts are being made to establish secondary school teaching as a profession. For example, a course of further study for those who have already obtained the diploma of certificated primary school teacher (*maestro normal*) and wish to become secondary school teachers (*profesor normal*) has been introduced in certain teacher training schools. Further, Decree No. 3935 of 5 June 1944, establishing the Escuela Superior de Filosofía, Ciencias, Lettras y Educación (Higher School of Philosophy, Science, Arts and Education) stipulated that one of the purposes of the school was to train secondary school teachers and staff for teacher training schools. To this end, the school, which has now become a university faculty, is divided into five sections, all with a 5-year course of training for secondary school teachers, leading up to a master's degree or doctorate in philosophy, arts, history, mathematics or educational science.

Moreover, the National Institute of Physics and Chemistry, founded two years ago, provides a 3-year course of training (which it is proposed to increase to 4 years) for secondary school physics and chemistry teachers. Lastly, the New Curriculum for Teacher Training Schools, approved by Decree No. 35516 of 13 August 1958, makes the senior teacher training schools responsible for training secondary school teachers of education and psychology, teaching methods and practice, and mathematics, natural sciences, social studies and Spanish in the basic secondary school cycle.

Vocational and technical schools

Commercial schools. The present curriculum includes book-keeping, commercial arithmetic, mathematics, Spanish, English, geography, legal practice, commercial correspondence, civil law, commercial law, finance, administrative law, political economy, and history of civilization and trade.

A new curriculum has been approved by the Reform Committee and now only awaits the approval of the executive. The general trend of the new curriculum is to broaden the general education imparted and to provide an adequate intermediate commercial training (office assistants, book-keepers, etc.), leaving it to the university or a senior college to provide more advanced professional training for public accountants.

Vocational schools for girls. There are many schools, academies and courses providing training in shorthand and typing, secretarial work or handicrafts, domestic science, machine-embroidery, cutting-out and dress-making, etc. These schools do not conform to any definite pattern, the number of courses and years of study and the quality of the teaching varying considerably from one to another. They generally specialize in activities or careers for girls, for which there is at present hardly any requirement, or provision, as regards general educational background.

Agricultural schools. There are five schools which aim at turning out practical farmers. The length of the course is 2 years and candidates for admission are required to have completed their primary schooling.

Of a higher standard but still at the secondary education level is the National College of Agronomy at San Lorenzo, a few miles from the capital city. The course here lasts 4 years; the curriculum for each year, and the number of hours per week allotted to each subject are as follows:

1st year: Geography of Paraguay, 2 hours per week; Spanish, 3; Arithmetic, 4; General botany, 3; Zoology, 3; Inorganic chemistry, 3; History of Paraguay, 2; Physics and meteorology, 3; Artistic and geometrical drawing, 2.

2nd year: Hygiene and first aid, 2; Animal anatomy and physiology, 3; Special botany, 3; Organic chemistry, 3; General agriculture, 3; General zootechnics, 3; Topography, 2; Rural economy (accountancy and rural administration), 3.

3rd year: Special agriculture, 3; Special zootechnics, 3; Aviculture and apiculture, 3; Horticulture and gardening, 3; Soil conservation, 3; Plant pathology and entomology, 4; Rural buildings, 2.

4th year: Fruit growing, 3; Practical veterinary surgery, 3; Forestry, 2; Dairy farming, 3; Rural industries, 3; Agricultural machinery, 2; Animal nutrition, 3.

Technical schools. For technical and industrial studies, Paraguay has two types of establishment the Vocational Technical School and the School of Industrial Technology. The former, which operates in co-operation with the Servicio Cooperativo Interamericano de Educación (SCIDE) (Inter-American Educational Co-operative Service), trains specialized workers in the following fields: leather work, graphic arts, auto mechanics, cabinet-work, electricity, blacksmithing, general mechanics, plumbing, radio, refrigeration. In addition, the school provides courses in mathematics, algebra, drawing, Spanish and physical training for all the students.

At the School of Industrial Technology, there is a basic cycle of 3 years, followed by another 3 years of vocational training. The following four branches of technology are open to trainees: (a) chemical industries— at the end of this course and after a year's practical work in a factory, trainees qualify as chemical technicians; (b) building industry—a course which leads, after 1 year's practical experience in building, to the qualification of master builder; (c) mechanical engineering—upon completion of the course and after 1 year's practical experience in a workshop, trainees qualify as mechanics; and (d) electricity —on the same basis as the preceding courses, this one enables trainees to qualify as electrical technicians.

Teacher training schools

For the training of primary teachers, there are teacher training schools which, in accordance with the curriculum

approved on 13 August 1958, provide a 3-year course of specialized studies for prospective teachers, following on from the basic cycle (6 years of secondary education in all); kindergarten teachers, after taking their teachers' diploma, are given a special training lasting 1 year. All that has been said applies also to teacher training schools at the secondary level. The basic cycle covers the same subjects and hours of work as in secondary schools in general.

The curriculum for the special course leading to the primary teachers' diplomas is set out below, together with the number of hours per week allotted to each subject.

4th year: Spanish, 2 hours per week; English or French or German, 4; Human anatomy and physiology, 3; Zoology, 2; Geography of Asia, Africa and Oceania, 3; History of Rome and the Middle Ages, 3; Civics and ethics, 2; Art education and other activities, 2; Physical education, 2; Observation of teaching, 4; General psychology, 3.

5th year: Spanish, 3; English or French or German, 4; Biology, 3; Chemistry, 3; Physics, 3; Modern and contemporary history, 3; Physical education and other activities, 2; Pedology, 2; Child psychology, 3; Scientific bases of education, 2; Observations and experiments in educational psychology, 4.

6th year: Spanish, 3; English or French or German, 4; Chemistry, 3; Physics, 2; Cosmography, 2; Political economy, 2; Theory and practice of teaching, 5; Educational sociology, 3; School organization, 3; History of education, 3.

At these schools, the rules governing examinations, admission, teaching staff, etc., are the same as in general secondary schools.

Other specialized schools

The Paraguayan Government has not established any academies of music or fine arts schools which could be classified among secondary education establishments. However, it should be mentioned that a Fine Arts School, where painting is taught, has been operating, as part of the National University in Asunción, since 1957. Further, since 1950, the Municipality of Asunción has been running a School of Dramatic Art, which provides a 4-year course of theoretical and practical training for dramatic art students.

On the other hand, there are many state-aided private academies, schools, courses, and so on, which offer a wide variety of opportunities for training in art.

TRENDS AND PROBLEMS

In the movement for educational reform, encouraged and assisted by the Unesco Mission, particular attention has been devoted to secondary education. With the introduction of the new curricula, secondary education is ceasing to be a mere step towards university entrance and has become an end in itself. The authorities have succeeded in extending and democratizing the secondary school system to such an extent that every community of any size now has, or is clamouring for, at least the basic 3-year cycle. The number of pupils is growing annually, as is also the number of secondary schools, particularly private ones. There is much eagerness to improve the material resources of secondary schools and to see that they are provided with well-trained, efficient teachers. Although there is still room for improvement in the new curricula, they are more in keeping with Paraguay's particular conditions and needs and provide for more practical studies; at the same time, however, a large part of their content remains purely educational. There is an increasingly strong demand for a specialized training which will produce teachers properly qualified both in their own subjects and in educational psychology. It is obviously important to extend the network of vocational training schools by opening new ones. In the near future, when the results of the educational reforms introduced three years ago have been experienced throughout a complete cycle, it will be possible to rectify certain details so as to improve and consolidate school organization.

[*Text prepared in November 1959 by Emilio Uzcátegui and approved by the Paraguayan National Commission for Unesco.*]

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STATISTICS

Population (mid-year 1958 estimate): 1,677,000.
Area: 157,047 square miles; 406,752 square kilometres.
Population density: 11 per square mile; 4 per square kilometre.

Summary of school statistics, 1953–57. Total enrolment at all levels of education from kindergarten to university was 309,732 pupils in 1957 representing about 19 per cent of the estimated population. Of the total enrolment nearly 93 per cent were pupils in kindergarten and primary schools, 2.6 per cent in general secondary, 2 per cent in technical secondary schools, 0.5 per cent in secondary teacher

training schools and just over 1 per cent in higher teacher training schools and at the National University respectively. Girls made up 46 per cent of enrolment at primary schools, 36 per cent in general secondary schools, nearly 90 per cent in all teacher training courses and 23 per cent at the National University. The entire teaching staff at all levels numbered 12,858 in 1957. The proportion of women teachers in primary schools was nearly 93 per cent in 1955, the latest year for which data are available. In 1957 women teachers formed 42 per cent of the total staff in general secondary schools, and 79 per cent in all teacher training courses but only 3 per cent of university lecturers. The average pupil-teacher ratio was 28 in pre-primary and primary schools, 7 in general secondary schools including part-time staff and 7 in all teacher training courses. Compared with 1953, enrolment increased by 19 per cent in primary schools, 110 per cent in general secondary schools, 98 per cent in teacher training schools and by 53 per cent at the national university. Enrolment appears to have declined at vocational schools over the period under review. (See Table 3.)

Enrolment trends in secondary schools, 1950–57. Over this 8-year period, enrolment at general secondary schools more than trebled but the proportion of girls declined slightly from 39 per cent in 1950 to 36 per cent in 1957. Enrolment fluctuated in vocational schools and fell rather sharply in 1957 compared with the previous year. Teacher training schools at the secondary level continued to expand steadily over the whole period, girls forming between 80 and 90 per cent of enrolment. Between 1950 and 1957 the rate of secondary enrolment to the 15 to 19 age group rose from 8 to 10. (See Table 1.)

Educational finance, 1957. Total expenditure by the Ministry of Education in 1957 (fiscal year beginning in January) was 276,014,640 guaranis, representing approximately 165 guaranis per inhabitant. (See Table 2.)

Sources. Paraguay: Ministerio de Educación y Culto, reply to Unesco questionnaire; Dirección General de Estadística y Censos, *Boletin estadístico del Paraguay*, No. 9, April 1959.

1. TRENDS IN SECONDARY EDUCATION, 1950–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1950	2 636	39	6 487	23	562	97			
1951	2 855	37	7 617	24	371	94			
1952	3 201	39	7 812	24	447	92	11	141	*8*
1953	3 752	38	7 435	24	574	94			
1954	4 416	36	7 682	22	700	...			
1955	4 941	34	7 822	22	929	93			
1956	5 883	34	7 774	22	1 161	92	15	155	*10*
1957	7 885	36	6 325	21	1 243	85			

2. EDUCATIONAL FINANCE, 1957 (in guaranis)[1]

Expenditure by purpose	Amount		Per cent
Total expenditure[2]		**276 014 640**	**100.0**
Central administration		26 975 280	9.8
Instruction		[3]249 039 360	90.2
Primary education	150 001 200		54.3
Secondary education	8 282 400		3.0
General and teacher training	1 840 080		0.7
Vocational	6 442 320		2.3
Higher education	86 387 760		31.3
National universities and colleges	58 016 520		21.0
Teacher training	28 371 240		10.3
Religious schools	4 368 000		1.6

1. Official exchange rate: 1 guarani = 0.016 (approx.) U.S. dollar.
2. Budget estimate of the Ministry of Education and Culture only.
3. Of this sum, expenditure for teachers' salaries, etc. amounted to 226,105,680 guaranis.

3. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1957	3	8	1	143	78
	Pre-primary classes in primary schools, public	1957	29	...	...	1 520	792
	Pre-primary classes in primary schools, private	1957	45	...	...	1 533	795
	Total	**1957**	**77**	[1]**8**	[1]**1**	**3 196**	**1 665**
	„	1956	42	[1]8	[1]—	2 005	1 008
	„	1955	41	[1]7	[1]—	1 752	866
	„	1954	37	[1]7	[1]—	1 846	1 004
	„	1953	[1]3	...	...	1 215	615
Primary	Primary schools, public	1957	1 937	[2]9 927	...	264 226	131 480
	Primary schools, private	1957	103			19 627	
	Total	**1957**	**2 040**	[2]**9 927**	**...**	**283 853**	**131 480**
	„	1956	1 985	[2]9 523	...	273 449	125 987
	„	1955	1 907	[2]9 111	8 473	265 891	122 303
	„	1954	1 778	[2]8 284	...	252 272	116 009
	„	1953	1 691	[2]7 582	...	237 553	108 535
Secondary							
General	Secondary schools, public	1957	9	[3]318	[3]136	2 956	1 006
	Secondary schools, private	1957	46	[3]786	[3]335	4 929	1 835
	Total	**1957**	**55**	[3]**1 104**	[3]**471**	**7 885**	**2 841**
	„	1956	37	[3]840	[3]358	5 883	1 992
	„	1955	27	[3]724	[3]308	4 941	1 696
	„	1954	26	[3]707	...	4 416	1 594
	„	1953	19	[3]562	...	3 752	1 431
Vocational	Commercial schools, public	1957	7	249	110	3 675	830
	Vocational schools, public	1957	1	24	—	320	—
	Industrial schools, public	1957	1	29	—	256	—
	Commercial schools, private	1957	33	483	182	2 074	503
	Total	**1957**	**42**	**785**	**292**	**6 325**	**1 333**
	„	1956	46	826	288	7 774	1 674
	„	1955	43	813	277	7 822	1 705
	„	1954	45	[4]780	[4]279	7 682	1 648
	„	1953	34	[4]644	...	7 435	...
Teacher training	Teacher training schools, public	1957	12	161	124	1 035	856
	Teacher training schools, private	1957	5	61	46	208	200
	Total	**1957**	**17**	**222**	**170**	**1 243**	**1 056**
	„	1956	18	226	167	1 161	1 069
	„	1955	15	181	133	929	863
	„	1954	...	...	...	700	...
	„	1953	11	90	68	574	...
Higher							
Teacher training	Teacher training schools, public	1957	11	360	281	2 869	2 667
	Teacher training schools, private	1957	6	113	96	877	872
	Total	**1957**	**17**	**473**	**377**	**3 746**	**3 539**
	„	1956	15	432	342	2 727	2 613
	„	1955	14	389	313	2 378	2 282
	„	1954	...	...	...	2 129	...
	„	1953	10	343	278	1 949	1 842
General and technical	National University						
	Total	**1957**	**1**	**347**	**10**	**3 484**	**808**
	„	1956	1	251	...	2 113	...
	„	1955	1	226	...	2 142	...
	„	1954	1	226	...	2 110	...
	„	1953	1	226	...	2 280	...

1. Public kindergartens only.
2. Including kindergarten teachers.
3. Including part-time teachers.
4. Commercial schools only.

PERU

THE EDUCATIONAL SYSTEM

The following articles of the Constitution (29 March 1933), still in force, refer to education.

'The protection of the child's physical, mental, and moral health is a primary duty of the State. It defends the child's right to home life, education, vocational guidance and to full assistance in case of abandonment, sickness or misfortune. The State confides the carrying out of the above to suitable technical organizations.' (Article 52.)

'The technical management of education is the responsibility of the State.' (Article 71.)

'Primary education is compulsory and free.' (Article 72.)

'There must be at least one school in every place with a school population of 30. A full primary education shall be provided in every provincial and district capital.' (Article 73.)

'Schools which function in industrial, agricultural or mining centres shall be maintained by the respective owners or undertakings as the case may be.' (Article 74.)

'The State shall foster free education at the secondary and higher levels.' (Article 75.)

'In every territorial department there must be at least one technical school.' (Article 76.)

'The State shall foster the technical training of workers.' (Article 77.)

'The State shall encourage and help maintain pre-primary and post-primary education and schools for retarded or abnormal children.' (Article 78.)

'Moral and civic instruction for children is compulsory and must be inspired by considerations of national advancement and human solidarity.' (Article 79.)

'The State guarantees professional freedom.' (Article 80.)

'Teaching is a public career and enjoys such rights as are fixed by law.' (Article 81.)

'Archaeological, artistic and historical treasures are under state protection.' (Article 82.)

'The law shall fix the minimum revenue to be allocated to education and what annual increases should be envisaged.' (Article 83.)

Role of public authorities

The Minister for Education is the supreme authority in educational matters and is responsible for ensuring compliance with the various statutes, regulations, decrees and resolutions relating to the educational services.

The National Council for Education comprises the Minister of Education, who acts as President, a representative of university teaching elected by the state universities, four representatives appointed by the Government to represent vocational training, primary education, teacher training and secondary education, respectively, together with a doctor and an engineer specializing in educational matters, who are also appointed by the Government. Among its other duties, the council is responsible for maintaining unity in educational matters, including the desired harmony and co-ordination between the various grades and branches. It approves curricula and syllabuses, sanctions the books for use in schools and establishments of higher education, authorizes the inauguration of private schools, etc.

The Ministry of Education comprises the following departments: Department of Primary Education; Department of General Secondary Education; Department of Teacher Training and Special Education; Department of Fundamental and Adult Education; Department of Technical Education and Development of Craftmanship; Department of Administration and Public Relations; Department of Physical Education and Recreation; Department of Culture, Archaeology and History; Department of Equipment and Supplies; and a planning department.

Other bodies concerned with education are the Permanent Advisory Commission for National Education, councils for primary, fundamental, vocational education and the Commission for the Preservation of Archaeological Monuments. Since 1959, there has also been a national educational information and documentation centre.

THE DEVELOPMENT OF SECONDARY EDUCATION

So-called 'intermediate education' (*instrucción media*) had its origin in the law of 1902, which defined its structure and content.

In 1906 the Ministry of Education published a report on secondary education, in two volumes, in which are to be found the adverse opinions on the 4-year system, then in operation, expressed by nearly all the heads and teaching staff of the 'national colleges' (*colegios nacionales*), i.e., the state secondary schools. In 1918 the course of study was increased to 5 years.

Reform of secondary education started in 1948 when, by a Decree of March of that year, the Colegio Nacional 'Nuestra Señora de Guadalupe', a boys' school, was turned into an experimental institution and organically and functionally remodelled, with the establishment of departments for psychotechnology, educational guidance, practical training, examinations, a medico-physical and a welfare service.

By Resolution No. 253 of 11 August 1956, a commission was set up to draft proposals for the reform of secondary studies. It was also decided to reorganize vocational training and to this end a commission was appointed to deal with the following subjects: training in agriculture and animal husbandry, industrial training of boys and girls and commercial education.

The reforms relating to secondary education and vocational training have been applied progressively since

1957. This means that the first-year classes in all secondary schools of the Republic on 1 April 1957 followed the new curriculum, and that the application of the latter is being gradually extended in the following years to cover the whole 5 years of the secondary course. This curriculum and the corresponding syllabuses are of an experimental nature and subject to adjustment at the end of each introductory year. At the end of this process the syllabus for each year of study will become final.

Legal basis

Decree No. 10 of 15 March 1957 defines the nature, aims and objects of secondary education, as well as its duration, structure and the subjects to be studied; it also deals with co-curricular educational activities and the direction and guidance of the student.

The reform of technical secondary education, its objects and structure were approved by Resolution No. 108 of 20 March 1957.

Plans for the reorganization of the various types of vocational secondary education and the corresponding curricula were approved as follows: industrial education for boys—Resolution No. 100 of 15 March 1957; industrial education for girls—Resolution No. 114 of 27 March 1957; commercial education—Resolution No. 115 of 27 March 1957; agricultural education—Resolution No. 116 of 27 March 1957.

By Decree No. 12 of 23 April 1957 approval was given to the plan for the reform of teacher training and its curriculum.

Administration

Control of educational work is in the hands of the Department of Secondary Education, which delegates its functions to inspectors and heads of schools. Financial control is exercised by the Department of Economic Control and Budgets. The department appoints *administradores de bienes y rentas* (bursars) for each institution; these bursars are jointly responsible with the head teachers for the administration of their property and revenue. Auditors of the Department of Economic Control and Budgets pay periodical visits to the country's educational centres.

Supervision and inspection. Decree No. 24 of 19 July 1957 established a system of secondary school inspection. Regulations for the supervision of secondary schools were adopted by Ministerial Resolution No. 5054. Under this resolution the national territory is divided into five regions each headed by a *supervisor de región.*

In order to qualify for appointment as regional supervisor, candidates must be Peruvian by birth; be more than 35 years of age; hold the grade of teacher (first category) in the register of secondary school teachers; have specialized in school inspection; have held the post of head of a comprehensive school (*gran unidad escolar*) or of a Class A national college, for 5 years; have a satisfactory record in educational work; have served for at least 15 years as a teacher in state secondary schools; and have been accepted by a selection board.

Under the above resolution, the staff of regional offices is to comprise, in addition to the supervisor, teachers seconded for service with the inspectorate, the head of the printing and publications department, as well as secretarial staff and other assistants. The clause regarding secondment of teachers means that the heads of comprehensive schools and of national colleges and the senior members of the staff are, in addition to their normal duties, required to collaborate with the supervisor in his work. Furthermore, these heads of establishments are under an obligation to collaborate directly with the supervisors in the duties assigned to them under the regulations in regard to other public and private institutions.

Among other duties, the regional supervisor is required to: (a) ensure compliance with the regulations and all existing laws and provisions on general secondary education; (b) visit the establishments under his jurisdiction at least once a year; (c) render monthly reports to the Department of Secondary Education on those visits; (d) exercise due control over public and private educational establishments; (e) decide on the most appropriate steps for obviating any deficiencies and issue instructions for improving the teaching and administrative practices of educational establishments; (f) foster a team spirit by stimulating the initiative of parents' associations and encouraging cultural and social institutions to take an interest in educational work.

Finance. Under Article 83 of the Constitution, the minimum amount to be appropriated in the national budget for the maintenance and development of education and the percentage of annual increment are laid down by law.

The sources of scholastic funds are as follows: the sums earmarked by the budget of the Republic, which must amount to 12 per cent at least of the national revenue; endowment income; the sums received by national institutions for higher education in the form of ground rents or from perpetual leases; the proceeds of taxes and levies assigned to education; grants by municipalities and other public and private institutions; fees and payment for board and lodging received from pupils at state educational institutions; fines for breaches of the educational laws and regulations.

Buildings and equipment. The Department for School Building is responsible for the design and planning of school buildings and for putting the plans into effect, which is done with money from the national educational fund. Building standards, whether of a technical or educational nature, are laid down by this Department.

School welfare services. Secondary schools have ancillary services, which function in the following fields: social welfare, health and physical education, laboratories, etc., teaching equipment and audio-visual aids (not in general use). Activities under this head are also carried out by parents' associations and old pupils' societies.

TYPES OF SECONDARY EDUCATION

The first three experimental years of the reform scheme, which were concerned with the first or basic cycle of secondary education, have now been completed. This

scheme continues into 1960 with the inauguration of the second cycle, with differentation of studies. Through the Higher Council for Secondary Education, the educational authorities are studying the results obtained as regards the first basic cycle, and are proceeding with the reform scheme in conjunction with other professional bodies. It is hoped that in about five years' time secondary education will be co-ordinated with pre-vocational and technical instruction in a way which will best serve the basic interests, needs, bent and abilities of Peruvian students.

The school year begins on 1 April and ends on 15 December. It comprises 165 working days, with 5½ days of classwork per week.

General secondary schools

General secondary education is provided in national colleges, private colleges, evening and night schools and in the comprehensive schools (*grandes unidades escolares* or GUE). These GUE are intended to meet all the scholastic requirements of the school population of the area they serve, and provide, in addition to a primary and general secondary education, vocational secondary education of a commercial, industrial or agricultural nature, depending on the special character and needs of the district in question. In other words, no one shall be under the necessity to leave his home district in order to obtain the schooling he desires.

In order to qualify for entry into a secondary school the intending pupil must be between 12 and 16 years of age as at his birthday in the year in which he seeks admission, and as attested by his birth certificate, and submit an official certificate attesting the satisfactory completion of the sixth year of primary education. He must pass a test of mental maturity in accordance with the standards laid down by the Decree of 15 February 1949, present a certificate of good conduct, signed by the headmaster of his former school, and be in possession of a certificate of good health issued by the School Health Service.

In accordance with Decree No. 10 (15 March 1957), secondary education constitutes a stage in scholastic education to which every Peruvian adolescent has a right, inasmuch as it represents an important element in his complete training as a human being and as a member of society; it also qualifies him for entry into a profession or for some other gainful occupation.

From the point of view of training an adolescent for a future career, the aim of secondary education should be to bring out his bent or interests, discover where his vocation lies and direct his abilities to the occupation in adult life for which he is best suited by his qualifications and in which he can be of real service to the community.

In the organization of secondary education, the adolescent's personal and scholastic interests should be the decisive factor. One of its main aims should be to teach the pupil to think, that is to say to develop his capacity to observe and reason, to express himself clearly, and to acquire the habits of work and study.

Secondary studies should also pursue the following practical objectives: to provide all adolescents with the general basic culture needed to fit them into Peruvian life; to prepare young people for posts in community services and in commerce; to develop and widen, for those that desire it, the necessary background for more advanced studies.

Secondary education covers a period of 5 years and embraces two study cycles, the first basic and general, which lasts for 3 years, and the second specialized, which lasts for 2 years. The latter contains provision for arts (cultural history, sociology, geography) or science (mathematics, biology, physics, chemistry) or commerce and administration (book-keeping, office practice, correspondence, elementary law). The time-table for all general secondary schools is as follows.

TIME-TABLE OF GENERAL SECONDARY COURSE
(in periods per week)

Subject	Basic cycle (year)			General subjects included in specialization cycle (year)	
	1	2	3	4	5
Spanish and Spanish literature	4	4	4	4	2
Mathematics	5	4	4	4	
Foreign language	3	3	3	3	3
History of Peru	3	3	3	3	–
World history	–	3	3	–	–
Geography of Peru	3	–	–	–	–
Natural science	–	4	4	–	–
Civics	–	–	2	–	3
Religion	1	1	1	1	1
Applied physio-chemistry	–	–	–	2	–
Political economy	–	–	–	–	3
Elementary psychology, logic, ethics	–	–	–	–	4
World geography	3	–	–	–	–
Fine arts	3	3	3	3	3
Handicrafts	2	2	2		
Physical training	2	2	2	2	2
Pre-military training or domestic science	2	2	2	2	2
Pupil guidance	1	1	1	1	1
Guided studies and educational activities as per syllabus	6	6	4	5	4
Specialized course in arts or science or commerce and administration	–	–	–	8	10
Total	38	38	38	38	38

Guided studies take the following main forms: practical work during the hours allotted to each subject; organized study in the hours allotted to the library with the assistance of the librarian and the advisory teachers; group studies and instruction on efficient study methods.

With a view to completing the normal curriculum of secondary school education, a flexible programme of co-curricular studies is to be laid down covering the following subjects: sociology, civics, religion, fine arts, science, and sport and recreation, without any one of them predominating.

Achievement testing. Assessment of scholastic achievement, school reports, promotion and examinations are the joint responsibility of the directors of studies, assistants, heads of courses and the teachers assigned to the psycho-pedagogic sections (responsible throughout for pupil guidance), and of the educational standards and social welfare sections in each school.

Scholastic proficiency is assessed by means of mental and pedagogic tests designed by the psycho-pedagogic sections with the assistance of classroom teachers. Standardized mental and educational tests are used in Peru to determine intelligence and scholastic progress quotients and for determining the pupil's mental and scholastic efficiency.

At the end of each of the five grades of secondary education, decisions as to the promotion of pupils depend on an appreciation based on objective pedagogic tests, psychological probing, oral and written examinations and other tests applied and assessed by the teachers in the light of the requirements of each subject or speciality.

At the end of his course of specialized study, and provided he has passed in all subjects included in the curriculum, the student receives a *certificado de secundaria completa* (certificate of completion of secondary studies), which qualifies him for admission to any establishment of higher education.

Teaching staff. The training of general secondary school teachers is undertaken, for men, by the Enrique Guzmán y Valle teacher training college at Chosica, and for women by the Monterrico teacher training college; and also by the state universities of Mayor de San Marcos, Arequipa, Trujillo and Cuzco. In addition the Pontificia Catholic University of Peru also gives secondary school teacher training in the different subjects.

In teacher training colleges it takes 4 years to qualify as a secondary school teacher, and the student must previously have successfully completed the secondary school course. At the universities, graduation as a secondary school teacher takes 5 years, 2 in arts or science schools and 3 of specialization. In both cases a thesis must be submitted.

At the end of the 5-year course at the universities, teachers can stay on for a further year to study for their doctorate and thus qualify, after submission of a thesis, for the degree of doctor of education.

Candidates for entry into the teaching profession are admitted annually by teacher training colleges or the universities on the basis of an entrance examination consisting of oral and written tests of their secondary school grounding, supplemented by psycho-pedagogic tests, personal interviews and specific investigation of their outlook, inclinations and aptitude for the teaching profession. In appointments to the state educational service, preference is given to graduates of the teacher training colleges, since their training has been paid for by the State by means of a system of departmental scholarships. Graduate teachers from the universities also undertake to serve in public secondary schools.

Vocational and technical schools

Vocational and technical education is the responsibility of the Technical Education and Craftsmanship Development Department of the Ministry of Education. It enjoys the direct assistance and advice of the Servicio Cooperativo Peruano Norteamericano de Educación, whose specialists assist in carrying out a variety of programmes.

In 1957 a start was made with the application, to the first year of the study cycle, of the reform scheme for vocational secondary education in its four branches, to wit, industrial education for boys; industrial education for girls (home training); agricultural education; commercial education. The institutions providing these courses are known as *institutos* (or *colegios*) *industriales*, *institutos* (or *colegios*) *agropecuarios* and *institutos* (or *colegios*) *comerciales* respectively.

Successful completion of the sixth year of primary studies qualifies for admission to the first year of a vocational secondary course.

The principle of flexibility of syllabuses applies in all four branches. They should be adapted to pupil requirements and the special characteristics of the district in which the school is located.

As is the case with general secondary education, the specialized course takes 5 years, divided into 2 cycles, the first of which provides a 3-year course in basic vocational training for skilled workmen, while the other, which is specialized and takes 2 years, is intended for the training of technicians.

Each of the cycles in vocational education now carries the same weight as the corresponding cycle on the general side. Hence, the general cultural subjects forming part of the basic cycle are the same in both branches, subject to adaptation to the needs of the special course in question.

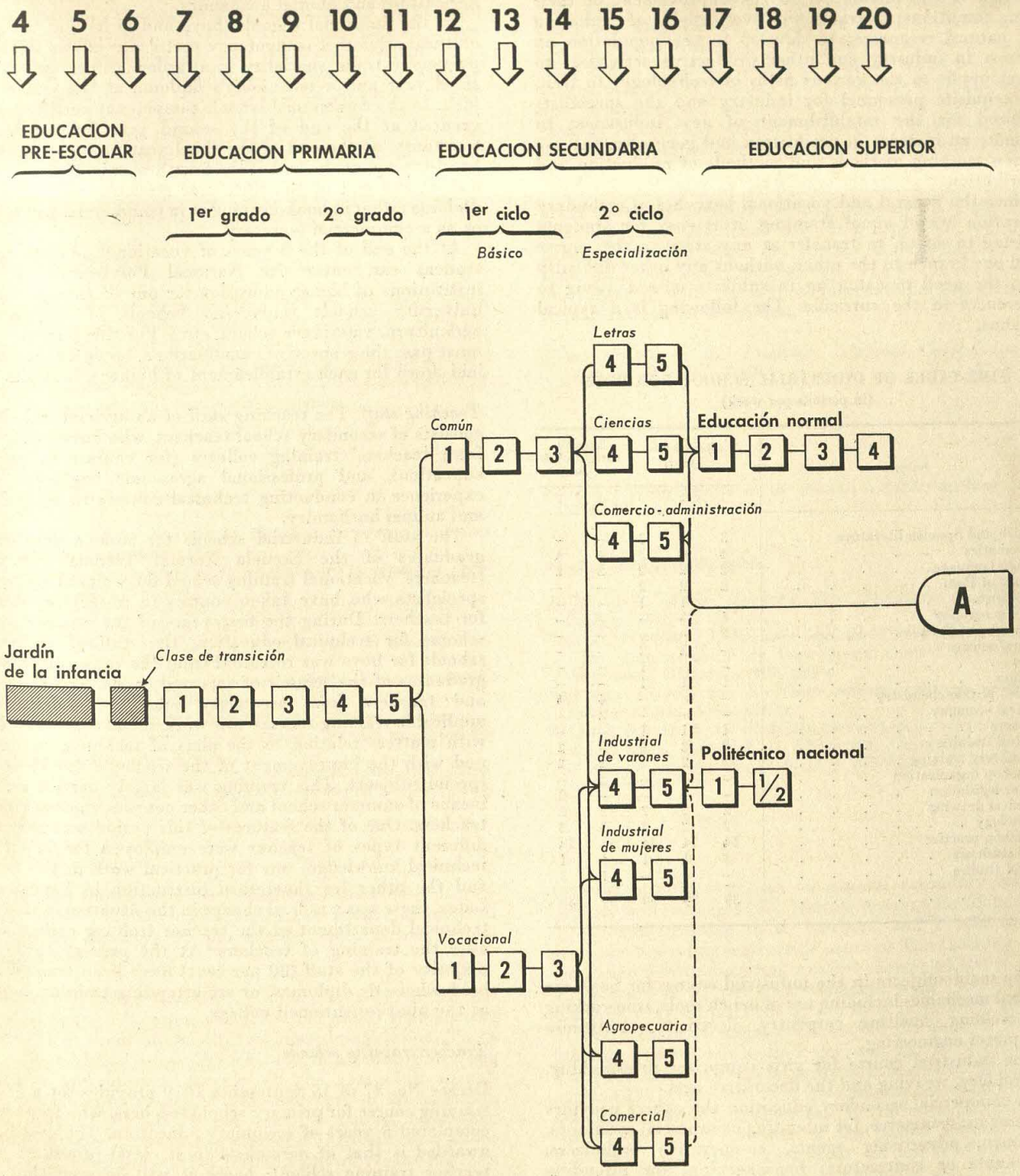
Among the aims of vocational secondary education,

GLOSSARY

NOTE. The accompanying diagram omits various specialized schools including schools of music and art.

agropecuaria: agricultural course.
ciencias: science course in upper cycle of general secondary school.
clase de transición: infant class forming a transition from kindergarten to formal schooling.
comercial: commercial course.
comercio-administración: course in commerce and administration in upper cycle of general secondary school.
común: general secondary education.
educación normal: teacher training.
educación pre-escolar: pre-primary education.
educación primaria: primary education comprising a first and second stage (*grado*) of 3 and 2 years respectively.
educación secundaria: secondary education, organized in a first or basic cycle (*ciclo básico*) of 3 years and a second cicle of differentiated studies (*ciclo de especialización*) of 2 years.
educación superior: higher education.
industrial de mujeres: technical course for girls.
industrial de varones: technical course for boys.
jardín de la infancia: kindergarten.
letras: literacy course in upper cycle of general secondary school.
Politécnico Nacional (National Polytechnic): advanced vocational training school.
vocacional: vocational secondary education.

A. Universities and colleges.


4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
EDUCACION PRE-ESCOLAR
EDUCACION PRIMARIA
EDUCACION SECUNDARIA
EDUCACION SUPERIOR
1er grado
2° grado
1er ciclo
Básico
2° ciclo
Especialización
Letras
Común
Ciencias
Educación normal
Comercio - administración
A
Jardín de la infancia
Clase de transición
Industrial de varones
Politécnico nacional
Industrial de mujeres
Vocacional
Agropecuaria
Comercial

mention may be made of the following: to direct the energies of the population to the improvement of their living conditions; to train executives capable of exploiting our natural resources; to develop in the population an interest in industry and other productive activities; to direct pupils to the various fields of technology; to train the requisite personnel for industry and the specialists required for the establishment of new industries; to promote an increase in production and generalize the use of new working methods and methods of production and distribution.

Since the general and vocational branches of secondary education are of equal standing, it is easy for students desiring to do so, to transfer at any stage in the course from one branch to the other, without any other difficulty than the need to catch up in subjects missed owing to differences in the curricula. The following is a typical syllabus.

TIME-TABLE OF INDUSTRIAL SCHOOL FOR BOYS
(in periods per week)

Subject	Basic cycle (year)			Specialization cycle (year)	
	1	2	3	4	5
Spanish and Spanish literature	3	3	3	–	–
Mathematics	4	4	3	4	4
Foreign language	2	2	2	2	2
History of Peru	2	2	2	–	–
World history		1	1	–	–
World geography	1	–	–	–	–
Geography of Peru	2	–	–	–	–
Natural science	–	2	2	–	–
Civics	–	–	1	–	–
Religion	1	1	1	–	–
Applied physio-chemistry	–	–	–	4	4
Political economy	–	–	–	2	–
Fine arts	1	1	1	–	–
Physical training	2	2	2	2	2
Pre-military training	2	2	2	2	2
Workshop organization	–	–	–	2	–
Labour legislation	–	–	–	–	2
Technical drawing	2	2	2	2	2
Technology	2	2	2	3	3
Workshop practice	14	14	14	14	14
Pupil guidance	1	1	1	1	1
Guided studies	–	–	–	1	3
Total	39	39	39	39	39

The main subjects in the industrial course for boys are general mechanics including use of bench tools, ironworking and welding, smelting, carpentry, electricity, electronics and motor engineering.

The industrial course for girls comprises dressmaking, embroidery, weaving and the decorative arts.

In commercial secondary education the course provides training in: commerce, for intending commercial assistants, salesmen, advertising agents, co-operative organizers, merchants or contractors; book-keeping, for intending cashiers, assistant book-keepers, day book-keepers, book-keepers; secretary-correspondents, as shorthand and copy-typists and commercial secretaries.

The agricultural secondary course comprises training in agriculture and animal husbandry.

In the industrial schools (boys and girls) and the agricultural schools a competency certificate in the student's particular trade speciality is awarded at the end of the third year and a technician's diploma at the end of the fifth. In the commercial schools competency certificates are granted at the end of the second year for commercial assistants, at the end of the third year in copy- or shorthand-typing, at the end of the fourth year in book-keeping, and at the end of the fifth year students may obtain a diploma either in book-keeping or in commercial technology or as a commercial secretary.

At the end of the 5 years of vocational education, the student can enter the National Polytechnic, certain institutions of higher education, or one of the specialized university schools (university schools of engineering, agriculture, veterinary school, etc.). For this purpose they must pass the respective examinations, based on standards laid down for each establishment of higher education.

Teaching staff. The teaching staff of an agricultural school consists of secondary school teachers, who have graduated from teachers' training colleges (for courses in general education), and professional agronomic engineers with experience in conducting technical courses in agriculture and animal husbandry.

The staff of industrial schools for women consists of graduates of the Escuela Normal Técnica Femenina (teachers' vocational training school for women) and other specialists who have taken courses in in-service training for teachers. During the first years of the reorganization scheme for technical education, the staff of vocational schools for boys was recruited from the ranks of artisans, graduates of the schools of arts and crafts, and engineers and teachers from secondary schools. A universally applicable training scheme was worked out concerned both with matters relating to the aims of technical education and with the improvement of the teacher's knowledge of special subjects. This training was largely carried out by means of summer school and other courses, run for serving teachers. One of the features of this period was that two different types of teacher were employed for imparting technical knowledge: one for practical work in the shops, and the other for theoretical instruction in handicrafts. Later, there was a radical change in the situation in that the technical department of the teacher training college took over the training of teachers. At the present time, the majority of the staff (80 per cent) have been trained and hold scholastic diplomas, or are attending training courses at the above-mentioned college.

Teacher training schools

Decree No. 37 of 15 September 1959 provides for a 3-year training course for primary school teachers, who must have completed 5 years of secondary education. The certificate awarded is that of *normalista* (first class) (graduate of a teacher training school); hence it will be seen that the former differentiation between urban and rural teacher training schools is completely eliminated.

Other specialized schools

The Instituto Nacional de Perfeccionamiento Magisterial (continuation school for schoolteachers), which comes under the Department for Teacher Training Schools, is responsible for the in-service and refresher training of serving schoolteachers of all grades. In conjunction with the National Psycho-Pedagogic Institute this body undertakes the in-service training of teachers in psycho-pedagogics; they are required to take a course of at least 2 years. There are also specialized courses in pre-primary school work, pupil guidance and other special subjects required by the Peruvian educational system.

Out-of-class activities

Out-of-class tuition is provided, more particularly during the holiday months, at vacation colonies run by teachers who have specialized in recreational activities and mental and physical health. Radio and television programmes are arranged throughout the school year with the assistance of teachers from non-governmental agencies.

TRENDS AND PROBLEMS

The State, through the Ministry of Education, has laid particular emphasis on the further development of initial and in-service training for primary school teachers, and on refresher courses. There is a marked trend toward the decentralization of primary school teacher training centres and to arrange for courses in the different parts of the country to meet the teachers' wishes for a more convenient implementation of the Basic Scheme for Primary Education.

This trend aims at producing within a comparatively short time duly qualified teaching personnel. Technical and administrative problems still crop up, but are being gradually solved with the further development of the technical assistance programmes which the authorities are initiating with the help of international organizations for educational co-operation.

[*Text revised by the Peruvian National Commission for Unesco in December 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 10,213,000.
Area: 496,223 square miles; 1,285,215 square kilometres.
Population density: 21 per square mile; 8 per square kilometre.

Summary of school statistics, 1953–57. In 1957, enrolment at all levels of education was 1,364,100 pupils representing about 14 per cent of the total estimated population. There were in addition some 209,000 adults attending evening primary and literacy courses. Of the non adult school-going population nearly 87 per cent were in kindergarten and primary schools, 8 per cent in general secondary schools, under 2 per cent in technical institutes and about 2 per cent in higher teacher training and university courses. Under half of 1 per cent were pupils in special schools for handicapped children. Girls made up 42 per cent of enrolment at primary schools in 1957 against 40 per cent in 1953 and 36 per cent in general secondary schools, slightly less than in 1953. Women account for 55 per cent of students training to be teachers, and 21 per cent of students attending university courses. The teaching staff, excluding adult education, numbered over 44,600 in 1957, an increase of 23 per cent compared with 1953. Women teachers were 66 per cent of the total in primary schools, 37 per cent in secondary schools, 44 per cent in teacher training courses but only 5 per cent in the universities. The pupil-teacher ratio in primary schools was unchanged at 38 in 1957 compared with 1953, and in general secondary schools, including part time staff, the ratio was 16 compared with 14 at the beginning of the period under review. Enrolment increased strongly at all levels of education between 1953 and 1957 and in particular by 17 per cent in primary schools, 33 per cent in general secondary schools, 38 per cent in vocational institutes, 35 per cent in teacher

training courses and by 59 per cent at universities. (See Table 2.)

Enrolment trends in secondary education, 1947–57. Over the 11-year period for which data are available, average enrolment in all secondary education increased from 71,000 over the years 1947–49 to 101,000 from 1955–57. Enrolment in general secondary schools doubled between 1947 and 1957 and tripled in vocational education over the same period. The ratio of secondary enrolment to the school age population 15–19 years old rose from 9 to 12 during the years under review. (See Table 3.)

Educational finance, 1957. Expenditure on education by the Ministry of Education in 1957 (fiscal year beginning January) was 802,539,580 soles, representing about 81 soles per inhabitant. Of this sum, approximately 12 per cent was for capital expenditure; the distribution of recurring expenditure by level of education is not available, but details of amounts spent on salaries, subsidies and supplies are given in Table 1.

Sources. Peru: Ministerio de Educación Pública. Dirección de Estudio y Planeamiento, Departamento de Estadística Escolar, reply to Unesco questionnaire; *Anuarios Estadísticos del Perú.*

1. EDUCATIONAL FINANCE, 1957 (in soles)[1]

Expenditure by purpose	Amount	
Total expenditure[2]		**802 539 580**
Recurring expenditure		[3]793 128 046
Salaries to teachers and other instructional expenditure	479 433 090	
Subsidies, etc.	[3]290 713 967	
Supplies and equipment	[3]16 787 093	
Miscellaneous	6 193 896	
Capital expenditure		9 411 534

1. Official exchange rate: 1 sol = 0.053 U.S. dollar (approx.).
2. Expenditure by the Ministry of Education only.
3. Includes some expenditure for capital outlay.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergarten, public	1957	191	577	577	24 100	12 371
	Kindergarten, private	1957	7	21	21	730	376
	Total	**1957**	**198**	**598**	**598**	**24 830**	**12 747**
	„	1956	170	527	527	22 382	11 657
	„	1955	161	509	509	20 895	10 723
	„	1954	148	479	479	19 448	10 070
	„	1953	146	463	463	19 570	9 741
Primary	Primary schools, public	1957	11 239	23 500	16 082	979 779	414 892
	Primary schools attached to secondary and teacher training schools, public	1957	42	207	99	7 275	2 973
	Primary pre-vocational schools, public	1957	316	3 170	1 216	79 976	21 347
	Primary schools, private	1957	644	1 942	1 422	58 685	28 060
	Primary schools attached to secondary schools, private	1957	215	1 684	1 178	45 059	26 205
	Total	**1957**	**12 456**	**30 503**	**19 997**	**1 170 774**	**493 477**
	„	1956	12 277	30 069	19 736	1 148 880	475 498
	„	1955	11 911	28 237	18 381	1 074 575	435 551
	„	1954	11 708	27 562	18 132	1 036 653	422 019
	„	1953	11 375	26 035	17 302	999 442	402 839
Secondary							
General	Secondary schools, public	1957	152	[1]3 534	[1]1 173	[2]65 434	[2]19 925
	Secondary schools, private	1957	273	[1]3 529	[1]1 455	[2]45 269	[2]20 031
	Total	**1957**	**425**	**[1]7 063**	**[1]2 628**	**[2]110 703**	**[2]39 956**
	„	1956	389	[1]6 868	[1]2 536	[2]101 060	[2]37 553
	„	1955	348	[1]6 366	[1]2 211	[2]92 098	[2]33 716
	„	1954	325	[1]5 951	[1]2 025	[2]87 423	[2]31 527
	„	1953	318	[1]5 786	[1]1 956	[2]83 344	[2]30 624
Vocational	Industrial institutes, public	1957	68	[1]1 626	[1]627	[2]10 798	[2]4 356
	Agricultural institutes, public	1957	28	[1]263	—	[2]2 110	—
	Commercial institutes, public	1957	35	[1]1 011	[1]366	[2]9 578	[2]3 706
	Industrial institutes, private	1957	2	[1]19	—	[2]184	—
	Commercial institutes, private	1957	35	[1]453	[1]213	[2]2 974	[2]1 737
	Total	**1957**	**168**	**[1]3 372**	**[1]1 206**	**[2]25 644**	**[2]9 799**
	„	1956	149	[1]3 095	[1]1 313	[2]21 907	[2]8 346
	„	1955	143	[1]2 720	[1]1 038	[2]20 065	[2]7 620
	„	1954	138	[1]2 420	[1]983	[2]17 166	[2]7 026
	„	1953	149	[1]2 457	[1]1 015	[2]18 533	[2]8 151

1. Including part-time teachers.
2. Including pupils in evening courses.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Higher							
Teacher training	Teacher training schools, public	1957	23	290	120	2 119	1 122
	Teacher training schools, private	1957	5	58	32	451	284
	Total	**1957**	**28**	**348**	**152**	**2 570**	**1 406**
	,,	1956	25	317	135	2 313	1 289
	,,	1955	25	320	144	2 384	1 366
	,,	1954	25	305	135	2 105	1 242
	,,	1953	25	282	136	1 905	1 010
General and technical	Universities and institutes, public						
	Total	**1957**	**7**	**2 398**	**117**	**23 234**	**4 931**
	,,	1956	7	2 286	85	20 188	4 123
	,,	1955	7	2 225	112	16 789	2 813
	,,	1954	7	1 921	65	15 547	2 428
	,,	1953	7	1 078	63	14 594	2 506
Special	Schools for handicapped children						
	Total	**1957**	**23**	**339**	**190**	**6 345**	**2 159**
	,,	1956	22	292	133	5 352	1 549
	,,	1955	21	279	156	5 275	1 568
	,,	1954	19	232	109	4 764	1 136
	,,	1953	19	210	91	4 765	1 330
Adult	Primary evening courses, public	1957	232	778	282	28 674	8 135
	Primary evening courses, private	1957	35	106	13	3 314	44
	Literary courses[3]	1957	2 819	9 181	5 417	177 118	100 958
	Total	**1957**	**3 086**	**10 065**	**5 712**	**209 106**	**109 137**
	,,	1956	266	791	201	28 177	6 465
	,,	1955	252	728	155	26 860	5 646
	,,	1954	243	710	183	24 754	4 775
	,,	1953	229	653	135	23 059	4 012

3. Beginning in 1957.

3. TRENDS IN SECONDARY EDUCATION, 1947–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1947	55 346	37	8 472	22	1 766	63	71	778	*9*
1948	57 775	38	12 207	32	1 983	63			
1949	57 527	39	16 093	44	1 760	62			
1950	63 398	36	16 668	38	1 758	64	[2]92	842	*11*
1951	63 498	36	16 056	36	[1]—	—			
1952	78 213	36	16 086	44	[1]—	—			
1953	83 344	37	18 518	44	[1]—	—			
1954	87 423	36	17 148	41	[1]—	—			
1955	92 098	37	20 065	38	[1]—	—	[2]124	995	*12*
1956	101 060	37	21 907	38	[1]—	—			
1957	110 703	36	25 644	38	[1]—	—			

1. From 1951 all teacher training is post-secondary.

2. General and vocational education.

PHILIPPINES

THE EDUCATIONAL SYSTEM

The Constitution of the Philippines provides that the Government shall establish and maintain a 'complete and adequate system of education' with provision for free public primary instruction and for optional religious instruction in the public schools. By constitutional mandate, all schools are dedicated to the development of enlightened, morally upright and vocationally useful citizens who can understand and participate effectively in the functions of a democratic society.

Several factors have, in one way or another, affected the implementation of this statutory measure for education. In view of the number of vernaculars spoken in the different regions and of the growing sense of nationalism among the people, the question of the medium of instruction in schools has given rise to many problems. Again, in the course of its history the Philippines has come under various regimes, each one characterized by a distinctively different government system with its own ideology and educational goals. With each new historical phase the educational system has been re-adapted to the changing political, social, and economic situations in the country.

As provided in the Constitution, all educational institutions are 'under the supervision of and subject to regulation by the State'. The enforcement of this provision is carried out through the Department of Education, which delegates the exercise of its functions to the Bureau of Public Schools and the Bureau of Private Schools. The municipal and provincial governments co-operate with the officials of the Bureau of Public Schools in the promotion of elementary and secondary education. The Bureau of Private Schools sees to it that private universities, colleges, and schools fulfil requirements as regards curricula, grounds, buildings and library facilities, equipment, and qualifications of teachers.

Each general or vocational secondary school makes use of community resources which include government, religious, social and economic organizations. The parent-teacher associations help to provide funds needed to carry out school projects and supply teachers with information of guidance value. The Church also contributes to the guidance of young people and to the development of desirable behaviour patterns. The co-operation of factories, business firms, and other government departments may be enlisted in the implementation of the vocational guidance programme of the school.

The structure of the school system is shown in the diagram on page 953.

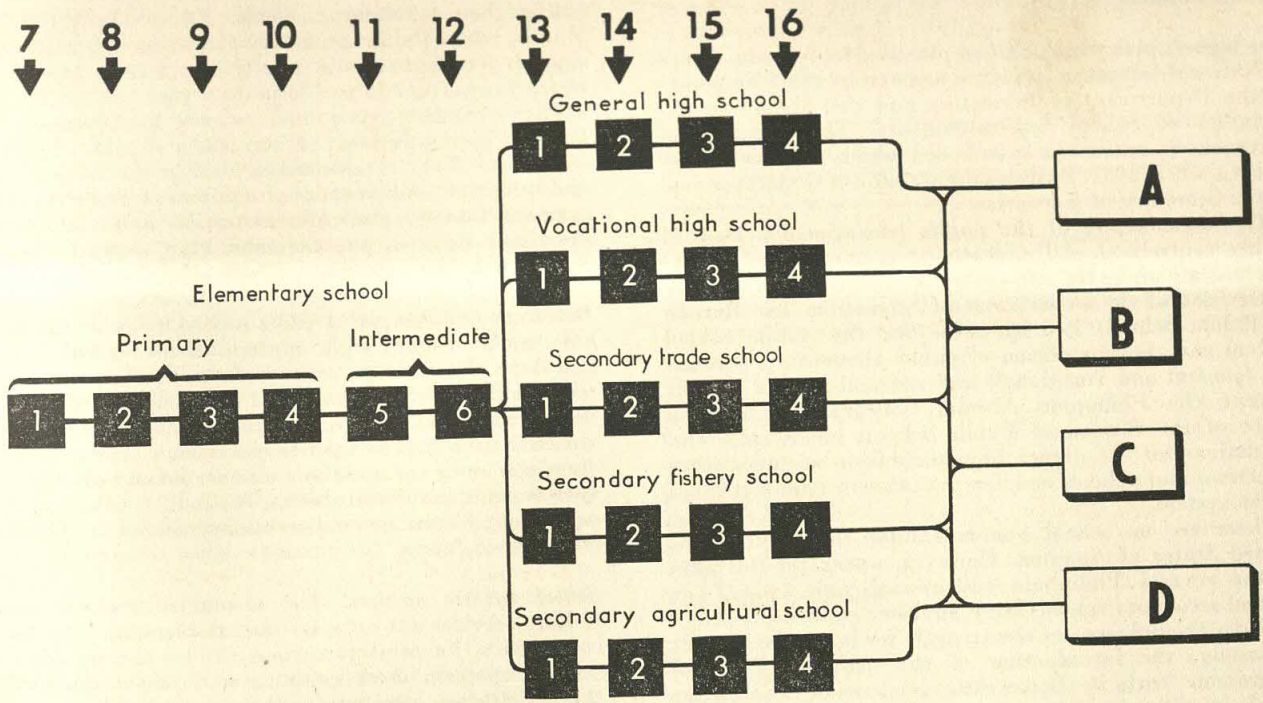
THE DEVELOPMENT OF SECONDARY EDUCATION

The Philippine Commission laid the foundation of the public system of secondary education when it passed on 2 March 1902 Act No. 372, entitled 'A general Act for the organization of a Provincial Board to establish free secondary instruction of pupils resident in the province, and to provide for the payment of all expenses of maintaining such public school or schools of secondary instruction'. By virtue of this Act the first high schools, on the pattern of similar schools in the United States of America, were established in 1902. The secondary school curriculum was predominantly academic because of the demand of the students for a course leading to higher education, because of the traditional concept of education in the country, and because of the opportunities such education offered for employment in government service.

After the academic high schools had been in existence for some thirty years, the Monroe Survey Commission pointed out the defects of their curriculum and recommended the establishment of vocational schools to meet the needs of Philippine society. It was found that many students who graduated from the high schools did not have the intelligence or aptitude to profit from college education, yet they had developed a deep aversion to productive labour. While children crowded into the academic high schools in the belief that the type of education they provided was an avenue to power and influence and a badge of membership of the social aristocracy, the vocational secondary school attracted very few students because the curriculum was rigid and failed to provide non-specialized vocational experience. It was generally thought that the students in the vocational schools were weaker intellectually than those in the academic high schools, and this led to social distinctions which were inimical to the democratic way of life. Even the graduates of the vocational schools sought non-manual jobs instead of engaging in the occupations for which they had been trained at school.

Such a condition called for a redefinition of social values. A Committee on the Reorganization of Secondary Education was created in 1931. It recommended the adoption of the general high school (comprehensive high school) embracing all curricula and constituting one unified organization. In an experiment, the Type A curriculum in which exploratory vocational and home economics courses were offered as required subjects received general acceptance. (In the Type B curriculum exploratory vocational and home economics courses were optional.) The Conference on Secondary Education and the Thirty-sixth Annual Convention of Division Superintendents approved resolutions endorsing the Type A general curriculum, and the latter was finally adopted for the first and second years of high school in 1945 and for the third and fourth years in 1946.

The granting of independence to the Philippines and the social and economic changes which affected Philippine life as a result of the World War II called for the further revision not only of secondary education but of the entire educational system. The Board of National Education,



GLOSSARY

elementary school: primary school.
general high school: secondary school with mainly general but partly vocational curriculum.
secondary agricultural school: vocational secondary school of agriculture.
secondary fishery school: vocational training school for the fishing industries.
secondary trade school: vocational training school for industry and trades.
vocational high school: vocational secondary school with multilateral course.

HIGHER EDUCATION

A. University of the Philippines.
B. Non-degree-granting colleges of agriculture, arts and trades, commerce and teacher training, administered by Bureau of Public Schools.
C. Degree-granting public colleges.
D. Private universities and colleges.

which was created by Republic Act No. 1124, recommended a 2-2 plan for the general secondary schools. Under this plan a common general curriculum is offered in the first and second years and a differentiated curriculum—college preparatory course and technical vocational course—in the third and fourth years. The 2-2 plan in the revised Philippine educational programme was adopted when the Department of Education issued Department Order No. 1 (1957).

Vocational education. The improved economic condition of the country at the beginning of the period of American occupation led to the organization of vocational and teacher education alongside the liberal and cultural education provided in the secondary schools. A normal curriculum had been introduced in 1903 to meet the demand for an army of teachers in the expanding public school system. In 1916, 2-year and 4-year normal curricula were adopted. The secondary normal school supplied the bulk of the public school teachers until it was finally replaced by normal schools at collegiate level. The growth of commerce and business led to the organization of vocational courses in this field which were conducted either separately or together with the academic curriculum.

Along with the organization of agricultural schools on an experimental basis in 1904, trade schools were also established in some provincial capitals. Since World War II many more vocational schools have been established, and in view of the importance attaching to vocational education all vocational schools have been nationalized. There are now 52 agricultural schools and 48 trade-industrial schools.

The first school of fisheries was established in 1948 under the Bureau of Fisheries in response to the need for better methods of fishing to conserve the rich fishery resources of the country. In 1957 the 7 schools of fisheries under the Bureau of Fisheries were transferred to the Bureau of Public Schools. There are now 13 schools of fisheries strategically located throughout the islands.

The home economics courses which were introduced in 1918 are now offered in the general high schools, agricultural high schools, trade schools, and fishery schools.

Administration

The highest policy-making and planning body is the Board of National Education, which is assisted by the Directorate of the Department of Education and the Philippine Association of School Superintendents. The selection of textbooks is entrusted to a board which was set up by Act No. 139 in 1937; its decisions are subject to the approval of the Secretary of Education.

The organization of the public educational system is highly centralized. All educational activities and school interests are under the administrative control and executive supervision of the Department of Education. The Bureau of Public Schools is responsible for the public school system and the supervision of public elementary, secondary (general and vocational) and regional normal schools (except the Philippine Normal College). The General Office of the Bureau of Public Schools issues rules and regulations for the proper implementation of educational objectives and policies and for the efficient administration of the system.

There are no school boards similar to those in the United States of America. However, under the 2-2 plan in the revised Philippine educational programme, the general secondary schools have advisory councils.

Under the influence of the struggle for local government autonomy, the introduction of the community school programme with its democratic tendencies, and newer trends in education, there has been a move towards the democratization of school administration. It is believed that the varying conditions existing in the different parts of the country do not warrant the promulgation of uniform rules and regulations. As a result, the field school officials now enjoy a certain degree of independent authority in the administration of the schools under them. Much of the success in the administration of the secondary schools rests upon the secondary school principals, whose position is unique in the school system.

Supervision. The Bureau of Public Schools, through its General Office, closely supervises instruction in the secondary schools. The divisions of instruction, curriculum, research and evaluation, adult education, and vocational education are directly concerned in the supervision of the secondary schools. The General Office maintains a staff of general supervisors, subject supervisors, specialists and curriculum writers who visit schools and render consultant services.

The general and field supervisors are drawn from experienced and successful school administrators and classroom teachers. They must at least hold the degree of Bachelor of Science in Education and must be eligible for appointment as senior teachers.

Finance. By virtue of Section 2111-1/2 of the Revised Administrative Code, general secondary schools are supported by provincial, city or municipal governments with transfers made from the general local authority funds, there being no special tax for secondary education. However, the amount of aid which each high school receives from the local government varies according to the availability of funds and at present very few of the provinces are aiding their secondary schools. Except in the city of Manila, where public secondary education is free, the main support for high schools usually comes from tuition fees, which range from 40 to 135 pesos a year.

The secondary vocational schools are financed from national appropriations, tuition fees and sales of products and assets. They receive aid in kind in the form of books and scientific and vocational equipment from the International Co-operation Administration and the National Economic Council, the Colombo Plan, Unesco, and the Reparations Commission.

Buildings and equipment. Most secondary school buildings have been financed from appropriations for public works and from the contingent fund of the President, especially when it has been a question of replacing school buildings destroyed by national calamities. Some have been constructed from parent-teacher association funds. There are standard plans for academic classes, home economics and vocational or industrial classes. The industrial and scientific equipment in the general secondary schools is purchased from school funds.

School welfare services. The secondary schools provide welfare services not only for the students but also for the community. As projects carried out by the students, the schools operate lunch counters and retail stores where the articles are selected for their nutritional or practical value and sold on a non-profit-making basis. From the school nurseries, selected seedlings are either given free or sold at cost to the public. The schools help in the improvement of community hygiene and sanitation, immunization of animals, and in the dissemination of useful information. School programmes and community assemblies are sponsored by the schools for their social and cultural values.

TYPES OF SECONDARY EDUCATION

Secondary education in the Philippines is classified into general and vocational-technical. The general secondary schools, as has been described in the preceding pages, follow the 2-2 plan prescribed in the revised Philippine educational programme. The revised programme came into effect for first and second year classes in 1957/58, for third-year classes in 1958/59, and for other classes in 1959/60. Some schools have, however, been allowed to postpone implementation of the third and fourth year programmes.

The vocational-technical high schools are grouped as schools of arts and trades, agricultural schools, and fishery schools. Trade and industrial education is offered in the national schools of arts and trades, the nautical school, and the national trade schools. Agricultural education is given in the regional agricultural schools and the agricultural high schools. The national schools of arts and trades and the regional agricultural schools offer both collegiate and secondary courses.

Guidance and counselling services are provided in both the elementary and the secondary schools. Guidance starts as an auxiliary service in the elementary school, but in the secondary school it becomes an integral part of the curriculum. The guidance and counselling programme is the

joint concern of all the teachers, guidance counsellors, school principal, parents, and the community.

Secondary school leavers may go on to college or may enrol in special vocational schools which give short-term courses to prepare them for certain occupations. Fifty-four different vocational courses are being offered in 537 special vocational schools in the Philippines.

The school year in secondary schools is from June to March and is divided into two semesters. The opening and closing dates may vary from year to year, but the total number of school days must remain practically the same (197 or 198). The school week for secondary schools consists of 5 days—Monday to Friday. Official holidays are either fixed by law or established by Executive Order of the President of the Philippines. The fixed or legal holidays include Independence Day (4 July), Bonifacio Day (30 November), Christmas Day, Rizal Day (30 December), New Year's Day, Holy Thursday, Good Friday, Labour Day (1 May) and, varying for each municipality, the town fiesta. There are special occasions, such as Book Week, Mental Health Week, etc., during which classroom activities are synchronized with appropriate programmes and activities.

General secondary schools

The aims of the general secondary schools are based on the fundamental objectives of education as indicated in the revised Philippine educational programme approved by the Board of National Education, to wit: (a) to inculcate moral and spiritual values inspired by an abiding faith in God; (b) to develop an enlightened, patriotic, useful and upright citizenry in a democratic society; (c) to instil habits of industry and thrift, and to prepare individuals to contribute to the economic development and wise conservation of the nation's natural resources; (d) to maintain family solidarity, to improve community life, to perpetuate all that is desirable in our national heritage, and to serve the cause of world peace; (e) to promote the sciences, arts and letters for the enrichment of life, and the recognition of the dignity of the human person.

In conformity with the above philosophy and mandate of the Constitution, the general secondary schools in the Philippines aim to: (a) continue the work of social unification begun in the elementary schools; (b) discover the varying abilities, interests and aptitudes of young people, and offer courses in the different fields of productive endeavour corresponding to such abilities, interests and aptitudes and to the needs of the community; (c) initiate a programme designed to develop community leadership.

The secondary schools should develop vocational efficiency and should also offer courses to the students who will continue their studies in colleges and universities.

Only pupils who have completed elementary school are eligible for enrolment at a secondary school. Some schools, particularly the vocational schools and the secondary schools in Manila, also hold competitive entrance examinations and prescribe other local requirements for enrolment. In each of the 4 years of the secondary school course the students are grouped in sections, the maximum enrolment allowed for each section being 44 for the first year and 50 for the second, third or fourth. Grouping may be based on the ability, social maturity, particular interests or the expressed choice of the pupil.

The general pattern of the 2-2 curriculum in general secondary schools is shown in the following table.

TIME-TABLE OF GENERAL SECONDARY SCHOOLS

(in 40-minute periods per week; where two figures are given, e.g. 3/2, they refer to first and second semesters respectively)

Subject	Common basic course	College preparatory course		Vocational course	
	1st and 2nd years	3rd year	4th year	3rd year	4th year
English	4	9	9	4	4
Character training	1	1	1	1	1
Filipino language	5	5	5	3/2	3/2
Social science[1]	5	5	5	5	5
Mathematics	5	10	–	5	5
General science	5	–	–	–	–
Biology	–	10	–	–	–
Chemistry or physics	–	–	10	–	–
Applied chemistry	–	–	–	6	–
Applied physics	–	–	–	–	6
Practical arts[2] or home economics[3]	10	–	–	–	–
Vocational specialization for boys[4] or home economics[3]	–	–	–	20	20
Health and physical education[5]	5	5	5	2/3	2/3
Electives[6]	–	–	10	–	–
Total[7]	40	45	45	46	46

1. Covers Philippine community life (1st year of course), Philippine history and government (2nd year), Philippine problems (3rd year) and world history (4th year); the subject also includes one period a week for each year on current events.
2. Agricultural, industrial and commercial arts.
3. Courses available include foods and cookery, food preservation, food service, dressmaking and design, tailoring, laundering, cleaning and dyeing services, handicrafts, home nursing, etc.
4. Chosen from various subject areas including woodwork, practical electricity, horticulture, agronomy, poultry and pig farming, automotive mechanics, retail merchandising, etc.
5. In the third and fourth years includes one period a week of pre-military training for boys.
6. Any two of a large range of subjects, including law, education, oriental history, United States history and government, economics, journalism, engineering, medicine, etc.
7. Religious instruction may be offered as an additional optional subject for three 30-minute periods a week.

No particular method of teaching is prescribed. The principal and the heads of the subject departments help to improve the teaching techniques through classroom visits, conferences with the teachers, and in-service training programmes.

Locally produced standardized achievement tests are administered in the high schools. Evaluative criteria adapted to the conditions existing in Philippine secondary schools have also been prepared. As from the school year 1959/60, national examinations are administered to all fourth year students in public and private secondary schools under the direction of the Department of Education.

On the basis of these examinations, the quality and extent of their class participation and the performance of projects and various classroom and home work, the students

are given periodic ratings in the different subjects. They also are rated on their personal, social and character traits. These ratings are recorded on the monthly report cards which have to be signed by the parents or guardians and returned to the respective teacher advisers. To pass in any subject students must obtain an average mark of at least 75 per cent.

Teachers of academic subjects in the secondary schools are required to possess at least the degree of Bachelor of Science in Education and must pass the Senior Teacher Civil Service examination in order to be given a regular appointment. In the absence of fully qualified applicants there is provision for employment with temporary status. Teachers of vocational subjects should be graduates of a 4-year vocational college (teacher education curriculum, with specialization in courses they are going to teach). Other 2-year or 4-year college graduates may be assigned to teach vocational subjects in the high school if qualified teachers are unavailable. Emergency teachers, employed in the absence of qualified applicants, are required to take courses in some professional subjects in summer classes in order to be retained in the service.

Vocational and technical schools

Preparation for a vocation or occupation may be obtained in schools offering regular vocational courses, such as the trade and technical schools, the fishery schools and the agricultural or rural schools.

Trade and technical schools. The programme is at two levels, secondary and technical. For the secondary trade programme, entrants must be at least 14 years of age and have completed the 6-year general elementary course. The students undergo a 4-year course, specializing in any of the following trades: woodwork and building, metal trades, electricity and electronics, mechanical trades, ceramics, printing and draughtsmanship. On successful completion of this course students may continue their training under the technical education programme. There are 14 secondary trade schools and 33 schools of arts and trades at present. The 4-year secondary trade curriculum is shown in the above table.

TIME-TABLE FOR SECONDARY TRADE SCHOOLS

(in 40-minute periods per week)

Subject	Year			
	1	2	3	4
Shop work	15	15	20	20
Trade drawing and blueprint reading	5	5	5	–
English	3	3	3	3
Filipino language	3	3	3	–
Social science	–	3	–	3
Arithmetic	3	–	–	–
Algebra	–	3	–	–
Geometry	–	–	3	–
Industrial mathematics	–	–	–	3
General science	3	–	–	–
Materials	–	3	–	–
Chemistry	–	–	3	–
Physics	–	–	–	3
Economics and management	–	–	–	3
Health and physical education[1]	3	3	3	3
Total	35	38	40	38

1. Includes pre-military training for boys. These subjects are given on Saturdays. Under certain conditions scouting is accepted as a substitute for pre-military training and physical education.

Fishery schools. The 4-year secondary fishery curriculum includes English, Filipino language, social science, mathematics, general science, biology, chemistry, physics, fishery, fishery economics and management, health, physical education and pre-military training. Students also spend a minimum of 200 hours per semester (in the first and second years) and 300 hours (in the third and fourth years) in practical work. The course is a terminal one designed to prepare skilled workers for the fishery occupations on a self-employment basis.

Agricultural and rural high schools. The secondary agricultural course lasts 4 years and is open to students who have completed the 6-year elementary school, who are at least 14 years of age and who have passed entrance and aptitude tests. Instruction in the secondary agricultural schools consists of the usual cultural subjects which take up roughly 50 per cent of the time spent in school. The rest is devoted to agricultural courses for the boys and home-making courses for the girls. The boys are given general agricultural training in agronomy or farm crops, horticulture, animal husbandry, and farm mechanics. Only those elementary school graduates who have qualified in entrance and aptitude tests are admitted to the agricultural and rural high schools.

Secondary school graduates who have taken agricultural courses in the high school and have qualified in appropriate entrance tests are enrolled in the 2-year technical agriculture curriculum or in the 4-year agriculture teacher-education curriculum. In the case of the 1-year post-graduate course in farm mechanics, only graduates of the secondary agriculture curriculum who have shown aptitude for this type of work are enrolled.

The Philippine Poultry School, the only school of its kind in the country, located in Sta. Maria, Bulacan, is a secondary agricultural school offering special courses in poultry raising. The curriculum is on the same lines as that of the 4-year secondary agricultural course, agricultural instruction being replaced by courses related to poultry raising. There are plans to convert this school into an animal husbandry school (secondary level) to include courses related to the raising of other animals.

Work experience programmes. Co-operative work experience programmes are available in many secondary schools. Local employers co-operate with the schools in providing opportunities for the students to earn while they learn, by letting them work in shops or other business establishments during their vocational education periods on certain days of the week. To implement the work experience programme more effectively, either the morning or the afternoon session is devoted to academic subjects and the other session to vocational subjects. The scheme leads to the acceptance by vocational teachers and the managers

of industries of joint responsibility in the training of the students who, upon graduation from secondary school, are given first preference for employment in the concerns where they have been trained. Although work experience programmes are still new in the general secondary schools they are rapidly gaining the approval of school administrators, parents and students.

The vocational courses offered in general secondary schools are selected on the basis of the needs, resources and interests of the students and the community. The advisory council to the principal (all high schools are required to organize such councils), consisting of laymen representing different fields of activities in the community, conducts surveys of community resources and helps the principal and the vocational teachers in the choice of the courses to be offered.

Private vocational schools. A total of 27,631 students, consisting of 8,467 boys and 19,164 girls, are enrolled in vocational courses at private schools. These courses cover an extremely wide range of trades and occupations.

Teacher training schools

Teacher education is now at college level. The old secondary normal schools have been converted into collegiate normal schools conferring the degree of Bachelor of Science in Elementary Education; only two schools in Mindanao still offer a 2-year course leading to the Elementary Teachers Certificate.

Other specialized schools

There are no specialized institutions in music and arts at the secondary level in this country. Music courses are being offered in some general secondary schools as electives in vocational education. Courses include choral and instrumental (orchestra and band) music. Art instruction is part of the domestic economy courses for girls and of the handicrafts work in vocational education for boys.

Special secondary schools provide education for the deaf and blind. For the mentally bright students a special curriculum with emphasis on the sciences and mathematics is being offered; this, however, is still at the experimental stage.

There are six experimental-demonstration high schools in the Secondary Education Improvement Sub-Project under the International Co-operation Administration and the National Economic Council assistance programme.

Out-of-class activities

Secondary school students run student governments in their respective schools under the supervision of teachers. Class organizations are also under student leadership. From time to time the student leaders are permitted by the school administrators to participate in the planning, executing, and evaluating of some school policies and projects. Subject clubs and civic organizations are also encouraged in the schools; among them are the Boy Scout and Girl Scout movements, Junior Red Cross, Junior Puroks, pen pal clubs, science clubs, debating clubs, etc.

In addition to group games, mass callisthenics and folk dancing, competitive athletics are also given due emphasis. Divisional, regional, and interschool athletic meetings are held regularly by the Bureau of Public Schools to encourage friendly competitive games. Regional and national athletic meetings as well as interschool competitions are also held by the private schools.

Other co-curricular activities participated in or sponsored by secondary schools are literary and musical programmes, excursions, picnics, camping, field trips, school papers, activi- or balls, community development projects, and civic parties ties. Parents sometimes participate in these activities.

TRENDS AND PROBLEMS

Mention has already been made of the trend towards a more democratic school administration. At the same time the participation of parents and other members of the community is being sought in planning, executing and evaluating school policies and activities, and in curriculum building.

Attention is being given to various ways of raising the standard of teaching, e.g., by increased use of local instructional materials, greater emphasis on functional learning, fuller recognition of the problems and interests of the learners, more effective organization of subject matter, increased use of community resources, etc. Greater emphasis is being given to the teaching of science and mathematics.

One of the great problems in Philippine education is how to establish an effective and stable system of financing general secondary schools. The inadequacy of the present arrangements is attended by such difficulties as lack of suitable buildings, equipment and instructional materials, shortage of staff and overburdening of the teachers in service.

[*Text prepared by the Bureau of Public Schools, Manila, in May 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 24,010,000.
Area: 115,600 square miles; 299,404 square kilometres.
Population density: 208 per square mile; 80 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment (not including university students, or adults in evening classes) may be estimated at 4.6 million pupils or about 20 per cent of the total population. Of these pupils, 81 per cent were in primary and intermediate schools; 12 per cent in secondary schools; 2 per cent in vocational schools; less than 1 per cent in teacher training schools; 4 per cent in some form of higher education. The proportion of girls was 48 per cent in primary education, 46 per cent in general secondary education, 41 per cent in vocational education, 82 per cent in teacher training, and 39 per cent in higher education. Women teachers constituted 71 per cent of the teaching staff in public primary and intermediate schools. The pupil-teacher ratio in primary education was 38.

Between 1953 and 1957 pupil enrolment increased by 7 per cent, the highest rate of increase being in higher education, where the number of students in 1957 was one and a half times that of 1953. (See Table 3.)

Enrolment trends in secondary education, 1930–57. Table 4 shows that between 1930 and 1957 enrolment in general and vocational secondary education rose steadily. The replacement of teacher training schools (at the secondary level) by teacher training colleges explains the decline in enrolment at the former. The proportion of girls seems to have decreased in general secondary schools but increased in vocational schools. Despite the disappearance of teacher training pupils, the average total enrolment in the period 1955–57 was more than three and a half times that in the period 1930–34; this increase was not simply due to population growth, for the secondary enrolment ratio doubled over the same period.

Examination results in secondary education, 1953–57. The year 1954/55 set a record in the number of diplomas and certificates granted, the total for 1957 being only 85 per cent of the total for 1954. However, if the 1957 figures are compared with those for 1953, it will be seen that there was an increase of 15 per cent in the number of general secondary school certificates, of 12 per cent in the certificates from arts and trades schools, and of 17 per cent in agricultural and fishery school diplomas. The proportion of girls receiving certificates and diplomas in 1957 was 47 per cent in general secondary education, 27 per cent in arts and trades schools, and 33 per cent in agricultural and fishing schools. More than half of the commercial school diplomas were received by girls. (See Table 2.)

Educational finance, 1957/58. For the fiscal year beginning in July 1957, total recurring expenditure for public schools only (not including universities) amounted to 225 million pesos, averaging 10 pesos per inhabitant. (See Table 1.)

Source. Philippines: Department of Education, reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1957/58 (in pesos)[1]:
(Public schools only)

Recurring expenditure by level and type of education	Amount		Per cent	
Total recurring expenditure[2]		**225 268 324**		**100.0**
Primary education		188 750 230		83.8
Secondary education		35 115 259		15.6
General	18 221 898		8.1	
Vocational	16 893 361		7.5	
Higher education[4]		1 119 030		0.5
Adult education		166 210		0.1
Philippine-Unesco National Community School Training Centre		117 595		

1. Official exchange rate: 1 peso = 0.50 U.S. dollar.
2. Not including expenditure for universities.
3. Includes higher vocational education.
4. Teacher training only.

2. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
General secondary school certificate	28 036	13 429	37 423	17 726	36 788	16 414	32 365	14 602	32 222	15 036
Certificates from schools of arts and trades	4 055	1 063	5 532	1 494	4 377	1 070	4 032	1 001	4 526	1 216
Commercial high school diploma	—	—	—	—	—	—	137	67	86	50
Agricultural and fishery schools diplomas	2 182	846	3 417	1 040	2 491	739	2491	772	2 561	841
Teacher training certificate	16	8	4	2	—	—	—	—	—	—

3. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergarten, public	1957/58	3	6	3	81	47
	Kindergarten, private	1957/58	173	315	...	12 566	6 228
	Total	**1957/58**	**176**	**321**	**...**	**12 647**	**6 275**
	,,	1956/57	177	282	...	10 868	5 275
	,,	1955/56	168	250	...	9 669	...
	,,	1954/55	155	541	...	9 051	...
	,,	1953/54	144	137	...	8 626	...
Primary	Primary schools, public	1957/58	19 986	64 956	50 186	2 831 271	1 344 370
	Intermediate schools, public	1957/58	8 056	30 300	17 299	744 079	361 332
	Primary schools, private	1957/58	605	2 445	...	115 134	56 270
	Intermediate schools, private	1957/58	547	1 554	...	45 173	22 765
	Total	**1957/58**	**29 194**	**99 255**	[1]**67 485**	**3 735 657**	**1 784 737**
	,,	1956/57	28 194	95 398	[1]64 319	3 673 814	1 747 988
	,,	1955/56	27 043	92 058	[1]61 939	3 498 777	1 670 625
	,,	1954/55	26 404	88 157	[1]59 571	3 442 855	1 638 223
	,,	1953/54	26 190	86 868	[1]59 130	3 499 436	1 671 004
Secondary *General*	Secondary schools, public	1957/58	276	[3]9 013	[3]5 484	181 543	80 761
	Secondary schools, private	1957/58	[2]1 278	[3]*11 299	...	[4]350 818	[4]161 620
	Total	**1957/58**	**[2]1 554**	**[3]20 312**	**...**	**[4]532 361**	**[4]242 381**
	,,	1956/57	[2]1 565	[3]20 510	...	[4]527 560	[4]238 049
	,,	1955/56	[2]1 544	[3]20 248	...	[4]521 833	[4]234 149
	,,	1954/55	[2]1 533	[3]18 682	...	[4]539 788	[4]244 308
	,,	1953/54	[2]1 544	[3]16 288	...	539 676	243 162
Vocational	Agricultural schools, public	1957/58	42	[5] ...	[5] ...	14 091	3 992
	Fishery schools, public	1957/58	7	[5] ...	[5] ...	1 119	508
	Arts and trade schools, public	1957/58	40	[5] ...	[5] ...	27 879	7 364
	Technical school, private	1957/58	[5] ...	[5] ...	[5] ...	1 448	101
	Commercial schools, private	1957/58	[5] ...	[5] ...	[5] ...	2 746	1 068
	Agricultural schools, private	1957/58	[5] ...	[5] ...	[5] ...	515	201
	Fishery schools, private	1957/58	[5] ...	[5] ...	[5] ...	572	259
	Other vocational special schools, private	1957/58	484	1 155	...	46 953	25 976
	Total	**1957/58**	**...**	**[5] ...**	**...**	**95 323**	**39 469**
	,,	1956/57	...	[5] ...	...	96 200	39 920
	,,	1955/56	...	[5] ...	...	106 337	45 759
	,,	1954/55	...	[5] ...	...	102 939	42 853
	,,	1953/54	...	[5] ...	...	85 316	33 640
Teacher training	Teacher training courses, public						
	Total	**1957/58**	—	—	—	—	—
	,,	1956/57	—	—	—	—	—
	,,	1955/56	—	—	—	—	—
	,,	1954/55	1	[5] ...	[5] ...	30	17
	,,	1953/54	1	[5] ...	[5] ...	95	43
Higher *Teacher training*	Teacher training college, public	1957/58	...	...	...	4 060	2 689
	Teacher training college, private	1957/58	[6] ...	[6] ...	...	31 791	26 735
	Total	**1957/58**	**[6] ...**	**[6] ...**	**...**	**35 851**	**29 424**
	,,	1956/57	[6] ...	[6] ...	...	36 040	29 671
	,,	1955/56	[6] ...	[6] ...	...	31 078	25 216
	,,	1954/55	[6] ...	[6] ...	...	38 122	30 480
	,,	1953/54	[6] ...	[6] ...	...	48 636	37 563

1. Public schools only.
2. Including vocational private schools.
3. Including public and private secondary vocational schools and in 1953 and 1954 public secondary teacher training.
4. Not including pupils in night private secondary schools, as follows: 1957/58—8,186 (F.1,991); 1956/57—5,920 (F.1,398); 1955/56—8,011 (F.1,925); 1954/55—5,039 (F.1,450).
5. Included in general secondary schools.
6. Included in higher general and technical.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
General and technical[7]	Agricultural schools, public	1956/57				251	58
	Schools of art and trades, public	1956/57				3 286	461
	Nautical school, public	1956/57				77	—
	Liberal arts courses, private	1956/57				43 100	18 818
	Fine arts courses, private	1956/57				5 485	2 529
	Social studies courses, private	1956/57	[8]389	[8]9 439	...	58 059	26 950
	Natural science courses, private	1956/57				1 566	1 053
	Engineering courses, private	1956/57				27 154	1 012
	Medical courses, private	1956/57				21 187	14 916
	Agricultural courses, private	1956/57				2 967	186
	Law courses, private	1956/57				11 079	1 157
	Total	**1956/57**	[8]**389**	[8]**9 439**	...	**174 211**	**67 140**
	"	1955/56	[8]380	[8]8 249	...	150 244	56 098
	"	1954/55	[8]382	[8]4 034	...	123 259	43 496
	"	1953/54	[8]405	[8]3 308	...	113 421	37 116
Special	Primary school for deaf and blind, public	1957/58	1	17	15	218	98
	Intermediate school for deaf and blind, public	1957/58	1	7	4	14	1
	Secondary school for deaf and blind, public	1957/58	1	5	4	33	10
	Total	**1957/58**	**3**	**29**	**23**	**265**	**109**
	"	1956/57	3	27	22	260	104
	"	1955/56	3	18	14	219	81
	"	1954/55	3	14	11	188	68
	"	1953/54	3	18	14	155	58
Adult	Adult classes, public						
	Total	**1957/58**	**888**	**888**	...	**62 840**	...
	"	1956/57	708	708	...	91 182	...
	"	1955/56	1 621	1 621	...	121 584	...
	"	1954/55	1 618	1 618	...	121 364	...
	"	1953/54	927	927	...	86 280	...

7. Not including public and private universities; in 1954/55 there were 96,929 students in these institutions, including 18,000 in public universities.

8. Including higher teacher training.

4. TRENDS IN SECONDARY EDUCATION, 1930–57 (Public schools only)

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	51 483	37	17 683	35	6 046	66			
1931	43 257	...	17 551	...	5 974	...			
1932	36 371	...	15 060	...	4 151	...			
1933	34 747	...	15 609	...	2 466	...	61	1 428	*4.3*
1934	35 967	...	16 497	...	1 752	...			
1935	40 869	...	16 930	...	1 273	...			
1936	51 859	...	11 834	...	1 013	...			
1937	55 238	...	18 181	...	705	...			
1938	54 491	...	17 244	...	676	...	72	1 603	*4.5*
1939	65 615	...	23 216	...	781	...			
1940	77 144	...	23 843	...	868	...			
1945	138 321	47	17 176	23	291	60	102	1 712	*4.8*
1946	137 893	48	17 607	24	288	77			
1947	150 666	47	17 989	23	277	61			
1948	169 666	49	23 647	21	312	61	176	2 012	*8.8*
1949	179 102	48	28 298	23	341	62			
1950	165 112	48	30 318	22	334	54			
1951	162 882	47	30 696	23	296	60			
1952	161 471	47	33 846	23	177	60			
1953	179 738	44	41 163	25	95	45	207	2 434	*8.5*
1954	183 693	44	45 109	25	30	43			
1955	176 194	43	42 748	26	—	—			
1956	180 553	44	43 398	27	—	—	223	2 435	*9.1*
1957	181 543	44	43 089	28	—	—			

POLAND

THE EDUCATIONAL SYSTEM

The Polish educational system comprises in principle three levels, with three corresponding types of educational establishment: primary schools, general secondary schools or secondary schools for vocational training, and higher educational establishments. There are also kindergartens, which admit children from the ages of 3 to 6, and are attended by about 12 per cent of the children of pre-primary age; institutions of this type are run by the educational authorities, by business or industrial concerns and by social organizations. The structure of the Polish educational system is shown in the diagram on page 963.

Article 61 of the Constitution stipulates that citizens of the Polish People's Republic have a right to education, and enumerates the means by which the exercise of this right is safeguarded.

The current educational system reflects the political and social developments which occurred in Poland towards the end of World War II. The democratization of education went along with socialist inspired changes in political, economic and social relations. The process was marked by the tendency to generalize education, by the expansion of primary schooling, by efforts to facilitate the access of pupils from working and peasant backgrounds to secondary schools, by the institution of all forms of adult education, the trend towards 'unified schooling', the elimination of all traces of privilege and discrimination in education, and finally by fundamental changes in the ideological and educative content of the teaching and in the guiding principles of school curricula.

The Decree of 1956 on compulsory school attendance stipulates that this shall begin in the year in which the child reaches the age of 7 and shall continue until completion of 7 years of primary education, but that it shall not extend beyond the age of 16. (Before the war, the age limit was 14, irrespective of the class in which the pupil was studying when he reached that age.) In exceptional cases, a child may be allowed to begin his schooling either a year earlier or a year later. Children who are unable to attend a normal primary school are obliged to attend a special school.

Under the provisions of the Law of 7 July 1958, adolescents between 14 and 16 who are employed in a business or industrial concern in order to learn a trade or to carry out a period of preliminary work, and who have not completed the 7-year cycle of primary studies, must do so in a primary school for workers. Education is free in all public teaching establishments, irrespective of level. There are very few private schools.

Polish schools are lay schools. The curriculum does not include religious instruction among compulsory subjects and aims at providing young people with a scientific concept of the world. Religion is taught as an optional subject to those children whose parents so desire.

Although national minorities constitute only a small fraction of the population, the State encourages their cultural and educational activities, and provides them with special schools. Schools exist at present for children from the Byelorussian, Ukrainian, German, Slovak, Jewish, Lithuanian and Czech minorities, in principle providing education in the mother tongue of the pupils. Polish is not taught as a separate subject until the second year. Moreover, in certain schools where Polish is the language of instruction but in which there are groups of more than seven children of other nationalities, teaching of their mother tongue may be included in the curriculum at the request of the parents.

Role of the public authorities

The Government of the Polish People's Republic (Council of Ministers) is the supreme executive and administrative organ of the central authorities. It is appointed and dissolved by the Diet, which passes laws and controls the other executive and administrative organs of the State.

The Council of Ministers co-ordinates and directs the activity of the ministries and other bodies under its control; it approves and submits to the Diet the draft economic plans and state budget, and supervises the execution of laws, the carrying out of the national economic plan and the application of the state budget. On the basis of the laws and with a view to their execution, the Council of Ministers passes decrees or adopts resolutions, supervises their application, and directs the work of the presidiums of the People's Councils.

The People's Councils direct the economic, social and cultural activity of the districts for which they are responsible, relating local needs to the general objectives of national policy. Each People's Council elects a presidium, which is an executive and administrative body. It also appoints commissions to deal specifically with its different fields of activity. These commissions maintain permanent and close contact with the population; they mobilize the latter for participation in the accomplishment of tasks set by the council, exercise a social control on its behalf, and submit suggestions to the council and its organs.

For administrative purposes Poland is divided into voivodships and cities with voivodship status, and the voivodships are sub-divided into districts and towns with district status. In the voivodships and in the two largest cities of Poland—Warsaw and Lodz—education comes under a 'curator' who is responsible to the presidium of the People's Council for all matters related to instruction and education in his region. In districts, and in towns constituting districts, as well as in the various quarters of the largest towns, these duties are entrusted to inspectors of education. The curators and inspectors are thus the respective heads of the school regions and school districts. Each inspector organizes and directs the activities of the

most commonly found schools, notably primary schools and schools and courses of general education for adults, but is not concerned with secondary schools. The curator of a school region and his permanent assistant—the assistant curator, who is responsible for technical education—are appointed or dismissed by the Minister of Education, after consultation with the presidium of the competent People's Council. The curator organizes and directs the activity of general secondary schools, teacher training schools, training schools for kindergarten teachers, teacher training courses, technical schools and courses, general secondary correspondence schools and special schools and institutions. He also supervises the work of inspectors, and is the educational supervisor of schools and educational institutions which come under other ministries or non-governmental institutions (with the exception of those directed by the Ministries of Culture and Arts, Agriculture, and Health).

Private education

All primary schools are state controlled and run in conformity with the constitutional principle of universal and free primary education. There are, however, a small number of private secondary schools, which provide general or vocational education (trade schools or domestic science schools).

Private schools are under the supervision of the Ministry of Education. Authorization to open a private school is subject to certain conditions for its satisfactory operation, as defined in a law passed in 1932.

Private schools, which apply appropriate curricula in conformity with the directives and instructions of the Ministry of Education, enjoy the same rights as public schools, and their pupils and former pupils have the same rights as their counterparts in public primary schools of the same level. Private schools are directed by Catholic congregations or by private associations.

Co-operative education

Co-operative education is rapidly developing under the direction of the Central Office of Labour Co-operatives and the Central Office of Agricultural Co-operatives.

The role of the Union of Polish Teachers

The Union of Polish Teachers is the only professional organization in Poland which has the right, and is legally obliged, to act in an advisory capacity in connexion with education and educators. Article 47 of the Law of 1956 states: 'For all questions concerning teachers, the competent school authority shall act in agreement with the Union of Polish Teachers'. This provision applies in particular to the in-service training of teachers and the evaluation of their professional work, to their living and working conditions, service relations, salaries, etc.

THE DEVELOPMENT OF SECONDARY EDUCATION

After the three successive partitions of Poland between Russia, Prussia and Austria (1772–95), the Polish Commonwealth ceased to exist and the population found itself without national schools. Conditions were worse in the territories annexed to Prussia and Russia, where the schools were transformed into instruments for the Germanization or Russification of Polish youth. For its part, and particularly after 1892, the Austrian Government followed a relatively liberal policy towards the Poles in matters of education and culture.

After World War I, when Poland regained its independence, the educational system had to be rebuilt from practically nothing and in the face of great difficulties. Not all the population felt the need for education, and the percentage of illiterates was very high, particularly in rural districts. There was a lack both of teachers and of schools. In 1934–35, more than a million children were not attending school. Again, it was general secondary education whose development was, relatively speaking, better, the first establishments for such education having been created in the early years of the twentieth century in the territories occupied by Russia. These were private secondary schools, whose system was fundamentally classical, and which were, moreover, almost inaccessible to young workers and peasants.

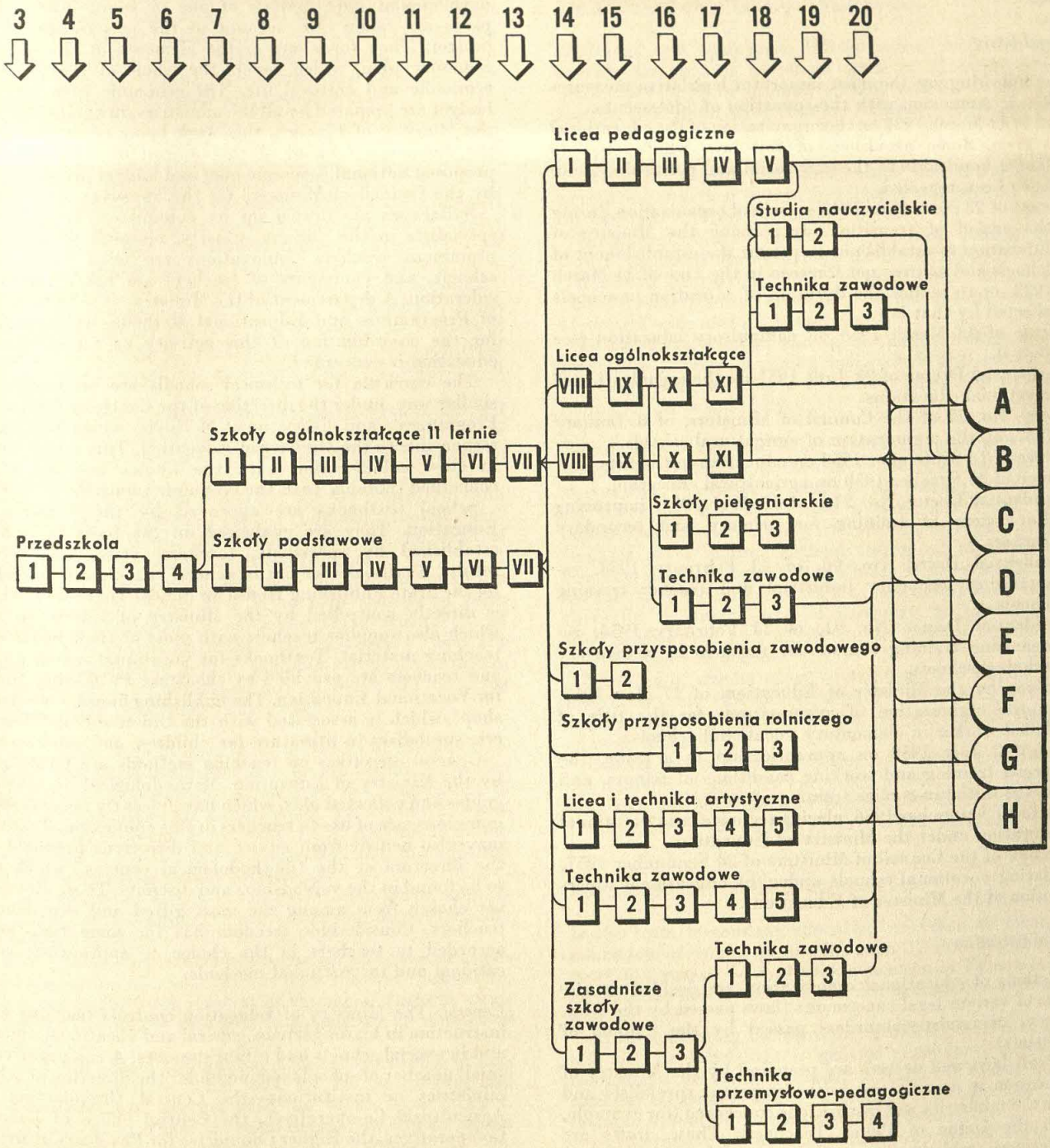
In the development of technical education the emphasis was on the opening of elementary trade schools and secondary schools of economics. There was also a large number of

GLOSSARY

licea i technika artystyczne: vocational secondary school of fine and applied art.
licea ogólnokształcące: general secondary school.
licea pedagogigczne: teacher training schools.
przedszkola: pre-primary school.
studia nauczycielskie: post-secondary teacher training courses.
szkoły ogólnokształcące 11 letnie: 11-year schools providing a course of general education covering primary and secondary levels.
szkoły pielęgniarskie: vocational training schools of nursing.
szkoły podstawowe: primary schools.
szkoły przysposobienia rolniczego ('agricultural guidance schools'): vocational training schools of agriculture.
szkoły przysposobienia zawodowego ('vocational guidance schools'): vocational training schools of industry.
technika zawodowe: vocational (technical) secondary schools.
technika przemysłowo-pedagogiczne ('industrial pedagogical schools'): teacher training schools for teachers in vocational and technical schools.
zasadnicze szkoły zawodowe: elementary vocational training schools.

HIGHER EDUCATION

A. Academy of Medicine.
B. College of Education.
C. University.
D. College of Technology.
E. College of Economics.
F. College of Agriculture.
G. College of Physical Education.
H. College of Fine Arts.


3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Licea pedagogiczne
I II III IV V
Studia nauczycielskie
1 2
Technika zawodowe
1 2 3
Licea ogólnokształcące
VIII IX X XI
Szkoły ogólnokształcące 11 letnie
I II III IV V VI VII
VIII IX X XI
Szkoły pielęgniarskie
1 2 3
Przedszkola
1 2 3 4
Szkoły podstawowe
I II III IV V VI VII
Technika zawodowe
1 2 3
Szkoły przysposobienia zawodowego
1 2
Szkoły przysposobienia rolniczego
1 2 3
Licea i technika artystyczne
1 2 3 4 5
Technika zawodowe
1 2 3 4 5
Technika zawodowe
1 2 3
Zasadnicze szkoły zawodowe
1 2 3
Technika przemysłowo-pedagogiczne
1 2 3 4
A
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E
F
G
H

complementary schools for young employees in trades, commerce or industry. There were no other types of school. Technical education did not develop on any scale until 1945.

Legal basis

The following are the most important legislative measures taken in connexion with the education of adolescents.

Law of 11 March 1932 on the organization of the educational system. Some provisions of this law, which were no longer applicable to the new social and political system, have been repealed.

Decree of 23 November 1945 on school organization during the period of transition, authorizing the Minister of Education to establish or to permit the establishment of schools and courses not foreseen in the Law of 11 March 1932, or to reduce the duration of education in schools affected by that law.

Decree of 23 March 1956 on compulsory education (see above).

Presidential Decree of 23 June 1951 on the organization of vocational educations.

Decree No. 17 of the Council of Ministers, of 8 January 1957, on the organization of agricultural schools.

Decree of 16 September 1953 on education in the arts.

Decree of 26 October 1950 on agricultural education.

Presidential Decree No. 276, of 18 May 1954, improving the system of training for primary and secondary teachers.

Presidential Decree No. 90, of 23 February 1954, reorganizing secondary industrial and teacher training schools.

Presidential Decree No. 91, of 23 February 1954, reorganizing training courses for teachers in elementary technical schools.

Decision by the Minister of Education, of 17 May 1957, on the organization of examinations for the title of skilled worker in elementary vocational schools.

Law of 2 July 1958 on apprenticeship to a trade, the special training and working conditions of minors, and on the initial in-service training of workers.

Law of 10 September 1956, placing technical and vocational education under the Ministry of Education.

Decision of the Council of Ministers of 20 September 1957, placing vocational schools under the educational supervision of the Minister of Education.

Administration

Questions of educational organization are decided on the basis of various legal enactments (laws passed by the Diet, decrees or ministerial orders passed by the Council of Ministers).

Draft laws and decrees are prepared by the Ministry of Education in consultation with competent specialists and with the ministries and institutions concerned (for example, with the Union of Polish Teachers). These drafts are sometimes publicly discussed in the educational press, examined at congresses and conferences of teachers and educational administrators and studied at meetings between senior staff of the Ministry of Education and representatives of the Union of Polish Teachers and of the Pedagogical Institute.

The Ministry also prepares draft plans for educational development over periods of one or more years; these plans are taken into account in the preparation of the budget. They form one of the elements of the national economic plan, which covers the whole of the country's economic and cultural life. The economic plan and the budget are prepared by all the ministries, in agreement with the Ministry of Finance, this work being co-ordinated by the Economic Council of the Council of Ministers. The proposed national economic plan and budget are submitted by the Council of Ministers for the approval of the Diet.

Syllabuses are drawn up by committees composed of specialists in the various subjects, research workers and prominent teachers. Innovations are tried out in the schools, and comments of teachers are taken into consideration. A department of the Ministry—the Department of Programmes and Educational Methods—is responsible for the co-ordination of this activity as far as general education is concerned.

The curricula for technical schools are prepared in a similar way, under the direction of the Centre of Vocational Programmes and Educational Methods, which is directly responsible to the Minister of Education. This centre works in close collaboration with the bodies and ministries concerned (notably with the economic ministries).

School textbooks are approved by the Ministry of Education. They are evaluated on the basis of criteria established by specialists, teachers' views and school results. Textbooks for use in general schools are published by the State Publishing House for School Textbooks, which is directly controlled by the Ministry of Education and which also supplies teachers with most of their books and teaching material. Textbooks for vocational school pupils and teachers are provided by the State Publishing House for Vocational Education. The publishing house 'Our Bookshop', which is associated with the Union of Polish Teachers, specializes in literature for children and adolescents.

General directives on teaching methods are formulated by the Ministry of Education. Methodological documents, guides and collected aids, which have recently become more numerous, are of use to teachers in this connexion. Teachers may also benefit from advice and directions provided by the directors of the 'methodological centres' which are to be found in the voivodships and districts. These directors are chosen from among the most gifted and experienced teachers. Considerable freedom has for some time been accorded to teachers in the choice of appropriate educational and instructional methods.

Control. The Ministry of Education controls teaching and instruction in kindergartens, general and vocational schools and in special schools and establishments. A comparatively small number of schools remain under the direction of other ministries or institutions—the Central Organization of Agricultural Co-operatives, the Central Office of Labour Co-operatives, the Higher Committee for Physical Culture—but educational control of these establishments is vested in the Minister of Education. The Law of 10 September 1956, placing technical and vocational education under the Ministry of Education, reflected the trend towards a

centralized administration of all branches of vocational and general education.

Of all the schools dependent on the Ministry of Education, only the higher teacher training establishments are under its direct control. The others, whilst applying the directives of the Ministry, are administered and controlled by the People's Councils—in voivodships, districts, towns or quarters—which exercise these functions through their technical bodies (curatoria and inspectorates).

Supervision and inspection. Primary schools are controlled by the school inspectors, who head the inspectorates of education, by their assistants and their staffs.

General secondary and vocational schools are inspected by 'visitors' and by the heads of the services coming under the curator of the educational region. These heads of services are responsible for the activities of schools of a particular type, for example, those of general secondary schools, of schools for workers or of vocational schools (sometimes even for the activities of vocational schools of a particular speciality). Some highly specialized vocational schools are inspected by specialists from the Ministry of Education.

'Visitors' must, under all circumstances, have completed their advanced studies, and must have taught for a longer period than that required for the educational staff of the inspectorates.

Schools may also be inspected by the education committees of the competent People's Councils, although these do not attend classes, nor do they evaluate the work of teachers or make recommendations to them.

Parents' committees do not have the right to supervise school activities. Their task is to help schools to solve educational problems—in particular those arising out of the family situation of pupils. Their assistance takes the form, for example, of help to orphans and needy children, the distribution of additional school meals, the ensuring of satisfactory conditions of hygiene, etc.

Finance. The state budget is, at all levels of the administration, the major source of funds for education. Nevertheless, parents' committees, as well as the committees of guardians organized for some schools by various business or industrial concerns or by institutions, may make voluntary grants of small sums to establishments, in particular for the purchase of school equipment.

The population assists the State in other ways, notably by helping in the construction of school buildings, especially in country districts.

Every secondary school has a budget to cover its needs over the period of a year. Funds from the state budget are deposited in the bank account of the school (usually twice a term). The school principal is authorized to dispose of these funds.

Funds for school buildings and for the furnishing of new buildings constitute what are known as 'centralized investments', and are provided out of the state budget. Funds for the purchase of school equipment and for minor construction work constitute what are known as 'decentralized investments'. These are in principle provided from the state budget, but may be supplemented by voluntary contributions from the population.

The state budget provides the necessary funds for teachers' salaries. Salaries are graded in accordance with the degree and length of service of those concerned, and also the type of establishment in which they teach.

Education is free in all public schools.

Buildings and equipment. Official norms and directives provide for an area of school space of 21 to 38 square metres per pupil in primary schools and 38 to 46 square metres per pupil in secondary schools; classroom area is to be calculated on the basis of 1.25 to 1.45 square metres per pupil.

Provision is made for each school to have a garden permitting practical lessons in biology, and special rooms for chemistry, physics, handicrafts, etc.

Vocational schools should be provided, among other things, with separate workshops for all the subjects taught.

Almost all primary school gymnasiums are 9 metres wide and 18 metres long; secondary school gymnasiums are 11 metres wide and 22 metres long.

In all urban schools, and in the largest village schools there is a kitchen, a dining hall, which also serves as a common room, a library, a medical office and two staff rooms for the school personnel.

School welfare services. The school hygiene and health service is organized in health sections by district and voivodship. Provision is made in all schools for a doctor for every 2,000 children and a nurse for every 1,000. School doctors and nurses work full-time and their working week is of 42 hours. Medical treatment of pupils and teaching staff is not the responsibility of the school doctor; his task is to examine the state of health of pupils, to send them for treatment, and, if necessary, to provide them with medical aid and advice in the case of accidents or sudden illness at school.

Workers in almost every occupation, and pupils, in so far as they are children of workers, have a right to free medical attention, and pay only 30 per cent of the cost of medicaments.

Official norms make provision in boarding schools for one full-time doctor for every 400 pupils. They also make provision for one school or inter-school dentist for every 1,000 children; the dentist has a working week of 36 hours.

TYPES OF SECONDARY EDUCATION

If the term 'secondary education' is taken to mean the education of young people between 12 and 18, then the most widespread form of such education in Poland is that given in the sixth-year and seventh-year classes of primary schools.

After completing their primary studies, pupils may enter one of the following: a general secondary school, an elementary vocational school, a technical school or vocational secondary school, a teacher training school or a training school for kindergarten teachers.

Furthermore, adults and minors who are at work, and who have completed their primary cycle (7 years), may continue their studies, but without interruption of their work, either in a general secondary evening school for

workers or in a general secondary correspondence school, in an elementary vocational school for workers, a technical or vocational secondary school for workers, in an evening course or in a correspondence course for the training of primary school teachers.

Adults who have not completed their primary studies have the opportunity to do so in primary evening schools for workers (a preparatory class and the fifth-, sixth- and seventh-year classes of the primary school).

One of the essential tasks of primary education is to prepare pupils to choose their future studies and occupations. Different measures are employed for this purpose: discussions, collective or individual interviews with pupils or their parents, visits to vocational schools and business or industrial concerns, exhibitions, meetings with workers from different sections of the economy, films and other activities which enable pupils to obtain a better understanding of all types of schools and occupations. To this end, the committees of parents collaborate closely with the teaching staff.

In the same way, special centres for vocational education, which have been established in the large towns, provide assistance to pupils in this field.

On the completion of their studies in a general secondary school, a technical or vocational secondary school or a teacher training school, pupils who have gained their baccalaureate may enrol at university, or in other institutions of higher education providing technical, agricultural, economic, medical, educational or physical training courses.

The secondary school year begins on 1 September and ends between 20 and 25 June. The school year is divided into three terms, and marks are awarded four times during the year. The division of the year into two semesters exists only in education for workers.

The long vacation is of about 70 days (last days of June and the months of July and August); the winter holiday is from 22 December to 6 January, and the spring holiday consists of 7 to 10 days at Easter.

Classes are held every day except Sunday and national holidays, and begin in principle at 8 a.m. The daily number of hours of classes varies according to establishment and class.

Sixth- and seventh-year primary classes

The task of the primary school is to teach the fundamentals of general education. It should, in particular, provide pupils with basic notions concerning the laws and phenomena of nature and social evolution, and should educate them in a spirit of patriotism, internationalism and socialist humanism.

The weekly distribution of hours between the different subjects taught in the final 2 years (sixth and seventh) of primary schools is as follows: Polish language, 6; foreign language, 3; history, 3 (2 or 3 in the seventh year); biology, 2; geography (3 or 2 in the seventh year); mathematics, 6 (4 in the seventh year); physics, 3; chemistry, 2 (seventh year only); drawing, 1; handicrafts, 1; singing, 1; physical education, 3.

In order to move up into the next class, the pupil must have obtained, at the end of the school year, satisfactory marks for all compulsory subjects as well as for conduct. Pupils who have received unsatisfactory marks for one or two compulsory subjects must pass a repeat examination at a later date, which is fixed by the educational council, unless such marks are due to prolonged and justified absence. This type of examination does not exist for seventh-year pupils.

Between 1951 and 1956 promotion examinations were organized in the upper classes of primary schools and in general secondary schools, in order to raise the educational level. These examinations have been abolished on the unanimous advice of teachers and school authorities, as not securing the desired results. Similarly, the final examination in primary schools was abolished some years ago. A primary school leaving certificate awarded to pupils furnishes sufficient proof that they have fulfilled their educational obligations.

Primary school teachers receive training in 5-year teacher training schools, which admit candidates who have completed the primary cycle, or in primary teacher training courses of 2 years, open to candidates possessing the baccalaureate.

General secondary schools

From the point of view of its curriculum, the 4-year secondary school is a continuation of the primary school. The two frequently form a composite general school of 11 years, comprising primary classes from the first to the seventh year and secondary classes from the eighth to the eleventh year.

The general secondary school prepares adolescents for a continuation of their studies in an institution of higher education (of 4, 5 or 6 years) or in a higher vocational school of shorter duration. The secondary school also prepares adolescents for occupations which require a general secondary education and which provide for the acquisition of professional knowledge and skill during employment.

The eighth-year class admits pupils from 13 to 16 who have completed their primary studies, and passed an entrance examination which includes Polish and mathematics and, in schools in which teaching is not provided in Polish, the mother tongue of the pupils.

Recruitment of pupils is facilitated by the extension of the secondary school network into rural regions and by aid which the State accords pupils in the form of scholarships and places in boarding schools.

With the exception of private establishments, almost all secondary schools are co-educational.

The secondary curriculum is uniform, although differentiation is envisaged as the result of studies undertaken some time ago with a view to reforming the educational system. The curriculum of general secondary schools includes 15 compulsory subjects. The weekly allocation of hours for these 15 subjects is given in the following table.

In addition to compulsory subjects, secondary schools may, and do with increasing frequency, organize the study of optional subjects.

These subjects comprise foreign languages, shorthand, mechanical and electrical engineering, agronomy, domestic science, the history of art, music, etc.

BASIC TIME-TABLE FOR GENERAL SECONDARY SCHOOLS
(in hours per week)

Subject	Year			
	8	9	10	11
Polish	5	5	5	5
Russian	3	2–3	3	3
Third modern language or Latin	3	3	3	3
History	3	3	3	3
Study of the Constitution	–	–	–	2
Biology	–	2–3	3	2
Geography	2	3	2	–
Astronomy	–	–	–	1
Mathematics	5	4	4	4
Logic	–	–	–	1
Physics	4	3	3	3
Chemistry	2	2	2	–
Drawing	2	1	–	–
Physical education	3	2	2	2
Pre-military training	–	2	2	2
Total	32	33	32	31

The recently introduced curricula and textbooks are better adapted than their predecessors to the potentialities, needs and interests of pupils. They create the necessary conditions for the application of improved educational methods which encourage pupils to think for themselves.

In secondary education, the principles which govern the classification of pupils and their promotion into higher classes are the same as in primary education, and are defined by a common system of regulations.

Secondary studies end with a written examination in Polish and mathematics and with oral examinations in Polish, mathematics, Polish history, general modern history and one of the following subjects: physics, chemistry, biology, geography, Russian, English, German or Latin. Successful pupils receive a proficiency certificate, possession of which is a requisite for admission to higher education.

Training of secondary school teachers is provided by the higher teacher training school (5 years of study) and by the universities. Except in physics and mathematics, the number of teachers is sufficient and only about 4 per cent of them have not received full training. Teachers must carry out a teaching programme of 22–26 hours per week.

General education for adults

Primary schools for workers. Since the 1957/58 school year, the primary schools for workers have had separate classes for minors (from 16 to 18) and for adults, so that account may be taken of differences in interests and experience between these two categories of pupils, and so that suitable educational methods may be applied to each category.

Primary schools for workers comprise preparatory class and the fifth-, sixth- and seventh-year classes. In principle they apply the same curriculum as that for the ordinary primary school, with the exception of technical and artistic subjects and physical education.

Secondary schools for workers. These provide courses in the evening. Secondary schools for workers admit candidates who have completed primary education and passed the entrance examination. In principle, the curriculum is the same as that for ordinary secondary schools, but in view of the age of the pupils, their occupational duties and their experience, and also because of the reduced hours of teaching, the courses in Polish language, history, mathematics and physics have been shortened, and the curriculum does not include artistic or technical subjects or physical education.

Pupils of the eleventh-year class (the final class in these secondary schools) take a final examination for the award of a diploma equivalent to that awarded in ordinary general secondary schools. Unlike primary and ordinary general secondary schools, general secondary schools for adults hold regular promotion examinations for their pupils in view of the special organization of work in this type of establishment, the less regular attendance of pupils and the reduced hours of teaching.

Secondary correspondence schools. This type of school assists pupils by providing them with study material and by organizing for their benefit lectures, consultations and symposia. The aim of the lectures is to help pupils to arrange in systematic fashion concepts they have acquired at home and to relate what they have already learned to the material presented by the lecturers. Consultations enable pupils to carry out the more difficult exercises under the direction of competent teachers, to clear up doubtful points and to correct any mistakes they may have made.

Technical and vocational schools

Elementary vocational schools. These train skilled workers and craftsmen. Studies are of 3 years' duration and follow on from primary education. The curriculum includes general and vocational subjects, together with a practical introduction to the chosen occupation. Practical training takes place in the school workshops or in factories, under the direction of qualified teachers.

Candidates for elementary vocational schools must pass an entrance examination in the Polish language and mathematics (from the primary curriculum). Candidates for arts and crafts must also pass an examination in freehand drawing. Scholarships are awarded to pupils who have achieved good results and who have a record of good conduct, but who are in material difficulties. Many of the pupils are boarders.

Elementary vocational schools for young workers are of a complementary character; they are intended for minors between the ages of 14 and 18. Pupils have 18 hours of theory each week, these hours being included in their working day. The first-year class is open to candidates already at work, or who will be employed within the coming 6 months. Large business or industrial concerns also maintain schools of this type for their employees.

The occupations for which elementary vocational schools provide training are grouped as follows: the building trades (first-year classes have a uniform curriculum; specialization in the different crafts of this category—reinforced concrete, carpentry, roofing, plumbing, painting, masonry, etc.—begins only in the second year); chemistry; woodwork (cabinet making, joinery) and basket work; electrical

engineering, photography and cinematography; mining; telecommunications; mechanical engineering (tinsmithing, milling, precision engineering, fitting, welding, lathe work, agricultural mechanics, watchmaking, automobile mechanics, etc.); minerals (pottery, laboratory glass-blowing, optical glass polishing, etc.); textiles; tertiary sector (hairdressing, hotel and restaurant trades); navigation; business (salesmanship, shorthand and typing); domestic activities.

The following table shows, as an example, the distribution of weekly hours between the different subjects in the curriculum of an elementary vocational school for electrical fitters.

TIME-TABLE OF ELEMENTARY VOCATIONAL SCHOOL
(Electrical fitters)
(in hours per week)

Subject	Year		
	1	2	3
Practical			
Mechanical workshop	12	–	–
Electrotechnical workshop	–	12	18
Theoretical			
Electrical installations	–	4	4
Electrical machines	–	2	2
Principles of electrotechnics	2	4	–
Electricity laboratory	–	–	3
Craft technology	2	2	2
Technical drawing	4	2	–
Management	–	–	2
Auxiliary subjects			
Mathematics	4	2	2
Physics	3	–	–
Hygiene	–	1	–
General			
Polish language	3	3	2
History and knowledge of Poland	2	2	2
Russian language	2	2	–
Physical education	2	2	2
Total	36	38	39

Pupils who have completed their studies in an elementary vocational trade school, in one of the sections featured on the list of trades, sit for an examination for the award of the skilled worker's diploma, which is thus additional to their school leaving certificate. They may then continue their studies in a technical secondary school.

There are also elementary vocational schools for pupils who have completed their general secondary studies and who are not employed. Courses last for one year. These schools train for the following occupations: fitter in the chemical industry, chemical assistant, laboratory glass-blower, salesman. It is planned to extend this type of school to the graphic arts, radio-technics and other specialized occupations.

After graduating from an elementary vocational school, pupils must carry out a preliminary period of work and training in a business or industrial concern, before taking up their occupations as qualified workers.

Technical secondary schools. The majority of these are open to pupils who have completed their primary studies. Technical secondary schools coming under the Ministry of Education are divided, according to speciality, into the following groups: chemistry; metallurgy; wood and paper; transport (road, rail and river); electricity; photography and cinematography; surveying; telecommunications, radio and television; geology; mineralogy; graphic industries (typography, chemigraphy, offset, photographic reproduction, etc.); mechanical engineering (metal machining, machine building, thermal energy, refrigeration, etc.); leather; textiles; foodstuffs; navigation; domestic activities; economics.

The Ministry of Agriculture runs 5-year technical secondary schools open to pupils who have completed their primary studies; instruction is given in the following specialities: agriculture, horticulture, agricultural machinery, irrigation, and agricultural book-keeping.

TIME-TABLE OF TECHNICAL SECONDARY SCHOOL
(Speciality: electricity)
(in hours per week)

Subject	Year				
	1	2	3	4	5
Practical					
Mechanical workshop	4	4	–	–	–
Electrotechnical workshop	–	–	3	3	–
Theoretical					
Electrical installations	–	–	2	2	7
Electrical grids	–	–	–	2	4
Electrical machines and motors	–	–	–	2	5
Surveys and calculations	–	–	2	2	–
Principles of electrotechnics	–	3	6	4	–
Electricity workshop	–	–	3	3	6
Elements of telecommunications	–	–	–	–	2
Electrical equipment	–	–	–	2	–
Machinery (including plant)	–	–	–	2	2
Technical mechanics	–	2	3	–	–
Technology of machining	2	–	–	–	–
Technical drawing	4	3	2	–	–
Business management	–	–	–	2	2
Hygiene and protection against accidents	–	–	–	–	2
Auxiliary subjects					
Mathematics	6	6	4	2	2
Physics	3	3	2	2	–
Chemistry	3	2	–	–	–
Hygiene	–	1	–	–	–
General					
Polish language	4	3	3	3	3
History and knowledge of Poland	3	3	2	2	–
Geography	3	2	–	–	–
Russian language	2	2	2	2	–
Physical education	2	2	2	2	2
Pre-military training	–	–	2	2	2
Total	36	36	38	39	39

The Ministry of Forests and the Wood Industry runs technical schools of forestry, which are attended by workers from the state forests, and also technical schools of the forest industries, which train their pupils for work in the mechanical woodwork industry. Courses in these schools last 5 years.

Young people who are not employed in production may be admitted to these schools if they have completed the 7 years of primary school, are between the ages of 14 and 16 and have passed an entrance examination in Polish and mathematics. To be admitted to a technical school directed by the Ministry of Agriculture, they must also have passed an examination in biology, chemistry and physics, based on the primary school syllabus. In the technical schools of forestry, the examination, which is also compulsory, is in history and biology and, in the technical schools of the forest industries, in history, chemistry and physics.

Technical schools have a final qualifying examination; successful candidates obtain the title of technician, and may proceed to advanced studies. On completion of their studies, pupils who go into production must carry out a preliminary period of work. Those of them who have completed their industrial studies are temporarily employed as workers. After this preliminary stage, they may occupy the post of technician. The period of practice lasts in principle several months, and from 1 to 2 years in some specialities.

Most technical schools accept boarders. Pupils are accommodated on payment of a fee.

In technical schools admitting former pupils of general secondary schools, courses are of 2, 2½ or 3 years' duration, according to speciality. These schools organize courses in different specialities which are grouped as follows: chemistry, electrical energy, mining, metallurgy, transport, postal services, mechanical engineering, minerals, the graphic industries, foodstuffs, navigation, the hotel industry and domestic arts, and commerce.

Vocational schools for workers. These comprise 5-year technical schools (ordinary and evening schools) open to pupils who have completed the primary cycle; 5-year technical schools (ordinary and evening schools) open to pupils who have continued their studies up to and including the ninth-year class of general secondary school; 2, 2½ or 3-year technical schools (ordinary and evening schools) open to pupils who have completed the general secondary cycle; 1-year schools for foremen (ordinary schools) open to pupils who have completed the primary cycle and who have 4 or 5 years of practical experience.

Various selection procedures are applied for the recruitment of pupils for vocational schools for workers, e.g., a request for references from employers, the organization of psycho-technical examinations in specialized vocational centres. Candidates may enter any class in a section of these schools, with the exception of the final class. They may enter one of the higher classes if they have passed an examination in all the subjects taught in any of the classes below, and if they have acquired practical experience in a sector corresponding to the speciality of the school. (This practical experience is not required of former pupils in elementary vocational schools.)

Technical evening schools are designed for candidates above the age of 16, who are employed in an occupation corresponding to one of the specialities of these schools. Their courses are of 5 years' duration (10 terms).

In addition to the vocational and technical schools open to candidates who have completed the primary cycle, there are technical schools for workers who have completed their studies in an elementary vocational school. These schools, which train foremen for small-scale industries give instruction for the building, clothing, metal-working, woodwork and leather trades. To be admitted to one of these schools, candidates must present the skilled worker's diploma, and must pass an examination in Polish, mathematics and drawing, of the same standard as that required of pupils who have completed their studies in a corresponding elementary school. Courses in technical schools for workers who have studied in a general secondary school last from 2 to 3 years. Classes are at present being conducted for certain specialities in the groups of electric power, building and commerce. There are also technical correspondence schools for workers who have attended a general secondary school.

Members of the teaching staff of these various vocational schools must have completed a full programme of advanced training in their chosen speciality. Teachers in the professions (engineers, economists) must follow teacher training courses which are organized for them. Teacher training courses are also to be organized in the near future in the polytechnical schools, for engineers who wish to become teachers.

Secondary schools of medical training. These schools, which come under the Ministry of Health, are classed as vocational secondary schools. They comprise schools for the specialized training of nurses, midwives, medical and pharmaceutical assistants, physiotherapists, dieticians, etc. Candidates must have completed their studies in a general secondary school or equivalent establishment, and must have passed an entrance examination (in chemistry or physics or biology, or in subjects related to the chosen speciality).

Teacher training establishments

Teacher training schools. Studies last 5 years. These establishments are open to candidates between the ages of 13 and 16 who have completed the primary cycle (7 years) and who are successful in a written and oral entrance examination in Polish and mathematics. Candidates must also pass a medical examination. Their hearing, too, is tested.

Various forms of state aid—free places in boarding establishments, scholarships etc.—play an important part in the recruitment and selection of candidates. The curriculum includes general education (the same programme as in general secondary schools), pedagogical subjects and special subjects (drawing, handicrafts, singing, music and physical education). Studies are terminated by an examination with written papers in Polish and mathematics, and oral examinations in Polish, mathematics, pedagogics, psychology, elementary teaching methods and one of the following subjects: history, physics, biology, geography or Russian language. Successful students receive a certificate qualifying them to teach in primary schools.

Schools for kindergarten assistants. In general, the principles of recruitment and selection are the same as for training schools for primary teachers. During the first 3 years, the curriculum is the same as that of the latter, but in the fourth- and fifth-year classes, teaching methods for primary schools and teaching methods for special subjects are replaced by eurhythmics and pre-primary teaching methods. The latter form the subject of an oral examination as a part of the qualifying examination.

Teacher training courses. These courses, which are of 2 years' duration, train primary school teachers in one of the subjects of the primary curriculum. There are also an infant education section, which trains kindergarten assistants and primary school mistresses for the younger classes (first to fourth year), and a section which trains the necessary staff for child welfare establishments and primary teachers specialized in singing, handicrafts, biology or physical education. Candidates for teacher training courses should have the qualifying certificate of a general secondary school or a teacher training school, and must pass an entrance examination in the subject in which they are to specialize. Their hearing is also tested, together with their ability to draw.

The 2 years of study are divided into 4 semesters. After passing all examinations, and having taken part in the symposia included in the programme and completed the requisite periods of teaching experience, which are compulsory on completion of their studies, students must prepare a thesis on a given subject, and must pass the examination for the diploma.

These post-secondary training courses provide better training for future teachers than the teacher training schools at secondary level. For this reason they will in a few years' time become the main method of training primary school teachers; teacher training schools are gradually losing their paramount role in the system of teacher training.

Since the school year 1958/59, separate groups (one year of study) reserved for the in-service training of teachers and educators have been set up alongside teacher training courses. Teachers admitted to these groups receive one year's leave with pay.

There are also teacher training correspondence courses which enable in-service teachers to improve their professional knowledge. These courses, which last 3 years, have the same curriculum as the ordinary teacher training courses. Students take part in educational seminars during two sessions: in winter (9 days) and in summer (30 days).

Teachers for training courses for primary school teachers are chosen from the most distinguished secondary school teachers, noted for their wide experience, their interest in the science and methods of teaching and for research work. Authors of textbooks and research workers in higher education may also take part in these courses as instructors.

Vocational teacher training schools. These schools, in which studies are of 4 years' duration, forming a sequel to the elementary vocational school cycle, train teachers for special subjects in vocational schools. Their curriculum includes pedagogical subjects as well as general and vocational subjects. Candidates must pass an entrance examination in Polish and mathematics and a practical examination in their chosen speciality. They must also have had at least one year of practice in this speciality; where this is lacking, they must carry out this year of practice at the end of their studies and before they begin to teach.

Other specialized schools

Schools for training in the arts, which come under the Ministry of Culture and Arts, are divided into primary schools (schools of music) and secondary schools (schools of music, plastic arts and techniques, theatre schools and schools of dancing). Higher schools of art (music, the plastic arts and the theatre) are also dependent on this ministry, as are secondary schools for librarians and schools for culture and education (which provide trained staff for cultural centres, etc.). Some of these schools, such as the primary schools of music and the various specialized secondary schools, provide general as well as special education; the others provide only special training.

Out-of-class activities

Independent class committees, composed of pupils, are organized in secondary schools. Their task is to introduce pupils to team work, to develop their activity and independence and to instil in them a sense of discipline.

The role of these committees, in classes from the first to the fourth year, consists mainly in organizing teams of pupils responsible for classroom order, the preparation of class material, co-operation in the organization of outings, the decoration of classrooms, etc. The committees also initiate activities in the field of hygiene and economy, cultural and artistic activities.

Besides these committees, schools have co-operatives of pupils, Polish Red Cross groups and other school groups of an educational character. The Polish Union of Scouts organizes attractive forms of activity (discussions, games, outings, camps, jamborees, etc.).

The Union of Socialist Youth and the Union of Peasant Youth are political organizations whose activities extend to secondary schools. The first acts through 'activities groups', the second through school groups made up mostly of children of peasant origin.

Various out-of-school activities are also organized in general secondary schools and in vocational schools. These activities are optional, and take the form of competitions, exhibitions, discussions, collective outings, games, dance evenings, sporting events, etc.; they may also take the form of permanent clubs for pupils sharing the same interests—clubs of botanists, bee-keepers, rabbit breeders, model aircraft and ship builders, photographers, or art, dramatic, literary and musical clubs, etc.

One particularly interesting form of inter-school activity is constituted by the 'olympiads' in mathematics, physics and chemistry. These olympiads are organized at the national level and enjoy great popularity among young people. They provide the occasion for the discovery of numerous talents in fields of all kinds. In this connexion, full credit must be given to the Polish Mathematics Society which, since 1949, has organized annual olympiads in mathematics.

TRENDS AND PROBLEMS

For some time now there has been lively discussion in Poland about school reform. Teachers, research workers and educational administrators have been taking part, along with active members of educational and social organizations.

All are of the opinion that under the present conditions of rapid cultural and technical development, which makes ever heavier demands on workers of all categories, the general education provided by the 7-year primary school is not sufficient. At the same time, this school, which pupils leave in principle at the age of 14, does not meet the case of young people who do not continue their studies in a secondary or vocational school and who are too young to start work.

Work and studies undertaken with a view to reforming the school system have been concentrated on three major solutions, namely: the extension of primary education either to 8 or 9 years, or the organization of compulsory general education lasting 10 years. Another solution, which would extend secondary education by one year, has also been considered.

Bearing in mind the large increase in the number of primary school pupils and the difficulties in the matter of capital investment and the recruitment of the necessary teachers, the Ministry of Education tends to favour an 8-year primary cycle. This plan may be implemented in the last stage of the 5-year plan for 1961–65.

Further, the work of extending the compulsory complementary education of minors who do not attend secondary schools and who are not employed will soon be completed. According to present provisions, this obligation concerns only minors who are employed in a business or industrial concern, and is aimed at preparing them for an occupation or at submitting them to a period of preliminary practice.

The Ministry of Education is already organizing 2-year vocational schools: beginning with the 1959/60 school year, minors who have completed their primary studies will be obliged to attend such schools to improve their theoretical knowledge and to receive a practical introduction to the main elements of productive work. The role of these schools is to prepare minors for work or to induce them to continue their education in the concerns in which they are employed. Minors who have not completed their primary studies by the age of 16 will be obliged to continue their education up to the age of 18 under the above programme.

One of the most difficult of present educational tasks—in primary education in particular—is to ensure that all children of school age have the possibility of attending school. Owing to the big rise in the birth-rate in post-war years the number of primary school pupils is constantly increasing. In 1960, children between 7 and 13 will increase in number by 1,282,500 (38 per cent) over the 1955 figure. In the period 1960–65, the number of young people between 14 and 17 will have increased by 910,000 (53 per cent). This increase in the number of pupils calls for more teachers. So, too, large sums will have to be set aside for school investment, all the more because the present situation is already unsatisfactory in this respect (in the majority of urban primary schools, classes take place by rotation).

To meet the most urgent needs in school buildings, 45,000 classrooms will be built between 1958 and 1965; 27,000 of these are to be built between 1960 and 1965 financed by state funds, and about 15,000 financed by social organizations. In celebration of Poland's millenary, the population is making gifts towards the construction of schools and providing voluntary labour on building sites.

Revision of the secondary school curricula is one of the Ministry's most urgent and important tasks. Work to this effect aims at establishing a closer relationship between the school and modern life, particularly by laying greater stress on technology. Changes introduced will enable schools to provide young people with a better preparation for life in the modern world, the main feature of which is the rapid advance of technology, to furnish these young people with the indispensable technical and technological concepts, to inculcate in them the habit of physical work and the corresponding skills and acquaint them with the principal processes of industrial and commercial production. In the curriculum of general secondary education, greater importance will in future be given to handicrafts and drawing. Radical changes will be introduced in the mathematics and natural science syllabuses. In consequence, pupils will not only learn to understand the main laws and phenomena, they will also be introduced to the application of these laws in daily life and in the field of technology.

The planned changes in the curricula will not however restrict the role, importance and scope of general education.

Efforts must be continued to raise the professional level of teachers by improving their training facilities and their means of adding to their knowledge. The Ministry of Education, in collaboration with the Union of Polish Teachers, is striving to raise the status of teachers and to improve their working and living conditions. The Law of 1956 on the rights and obligations of teachers, the 1958 increase in teachers' salaries, and the reduction in the number of teaching hours required of each teacher, represent the first stages along this road.

[*Text prepared by the Polish National Commission for Unesco in August 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 28,783,000.
Area: 120,359 square miles; 311,730 square kilometres.
Population density: 239 per square mile; 92 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58 total enrolment at all educational institutions from kindergarten to university level numbered about 5.2 million, representing 18 per cent of the total population. There were, in addition, some 209,000 people, including 65,000 women, attending adult education courses of a general or practical nature.

Of the school-going population, 8 per cent were in kindergartens, nearly 77 per cent in primary schools, under 4 per cent in general secondary schools, 6 per cent in vocational schools, about 1.5 per cent in all teacher training colleges and 3 per cent at universities and higher educational institutions. The remainder, less than 1 per cent, were pupils in special institutions for handicapped children. Girls made up just under half the enrolment at primary schools, 60 per cent at general secondary schools, 37 per cent at vocational courses, 81 per cent at secondary teacher training schools and 45 per cent at higher teacher training colleges. At universities and other higher educational institutions, women were about one-third of total enrolment.

The teaching staff at all levels, excluding adult education, numbered nearly 200,000 in 1957/58, an increase of about 23 per cent over 1953/54. Details of the proportion of women teachers are not available except for higher teacher training and universities in which women represented about a quarter of the total staff in 1957/58. The average pupil-teacher ratio in primary schools was unchanged compared with 1953/54 at about 33 but in general secondary schools the ratio was 17 compared with 20 at the beginning of the period under review. Compared with 1953/54, enrolment had increased by 27 per cent at primary schools and by 4 per cent in general secondary schools. There was, however, a marked decline in enrolment in technical and vocational schools by about 23 per cent over the 5-year period. In teacher training schools and in university institutions the peak enrolment was in 1955/56 or 1956/57, although in both cases enrolment in 1957/58 was higher than in 1953/54. (See Table 1.)

Enrolment trends in secondary education, 1932–57. Table 2 gives enrolment figures in secondary education for pre-war and post-war periods which are not comparable in coverage. In the 8 years preceding 1939, general secondary enrolment in pre-war Poland increased steadily but did not do much more than keep pace with the rising population. The general secondary enrolment ratio moved from 5 to 6 over this period. From 1945 to 1954, all sectors of secondary education made considerable progress, though enrolment in vocational schools declined sharply from a peak of over half-a-million students in 1951. During the period 1950–54, the ratio of secondary enrolment to the estimated age group 15–19 years old was 27. This ratio was unchanged in the succeeding 3 years 1955–57. (See Table 2.)

Examination results in secondary education, 1953–57. The number of certificates awarded in general secondary education showed little change over this period. Diplomas of vocational and technical schools, however, declined sharply in many cases between 1953 and 1957; this trend is in accordance with the declining enrolment in these schools in recent years. According to the figures in Table 4, some 84,687 certificates were awarded in all sectors of secondary education in 1957/58 as compared with 142,588 corresponding certificates in 1953/54.

Educational finance, 1957. Total expenditure on education in 1957 (fiscal year beginning January) was 12,782 million złotys, averaging about 452 złotys per inhabitant. Of this sum, 12 per cent was for capital expenditure. (See Table 3.)

Sources. Poland: Central Office of Statistics, reply to Unesco questionnaire; other official sources.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools and kindergartens, public						
	Total	**1957/58**	**8 427**	**16 545**	...	**416 066**	...
	"	1956/57	10 696	17 435	...	474 814	...
	"	1955/56	10 872	16 259	...	471 260	...
	"	1954/55	10 715	15 458	...	474 168	...
	"	1953/54	...	14 513	...	417 222	...
Primary	Primary schools, public						
	Total	**1957/58**	**24 502**	**119 791**	...	**3 924 179**	**1 893 009**
	"	1956/57	23 726	109 618	...	3 654 604	...
	"	1955/56	23 223	102 501	...	3 386 431	...
	"	1954/55	23 103	96 156	...	3 202 675	...
	"	1953/54	23 208	93 271	...	3 087 191	1 514 119
Sécondary *General*	*Lycées*, public and private[1]						
	Total	**1957/58**	**824**	**11 433**	...	**195 091**	**118 083**
	"	1956/57	816	11 006	...	202 713	120 768
	"	1955/56	799	10 412	...	201 421	118 207
	"	1954/55	792	9 977	...	195 113	112 792
	"	1953/54	773	9 586	...	188 261	106 930
Vocational	Technical and commercial schools[2]	1957/58	2 175	26 359	...	251 058	82 128
	Agricultural schools[2]	1957/58				23 860	8 067
	Public health and physical education schools[2]	1957/58				[4]14 568	[4]12 880
	Schools of fine arts and music[2]	1957/58	218	2 063	...	24 599	13 091
	Total	**1957/58**	**2 393**	[3]**28 422**	...	**314 085**	**116 166**
	"	1956/57	2 075	[3]27 903	...	344 727	124 559
	"	1955/56	1 878	[3]27 258	...	364 659	135 869
	"	1954/55	1 847	[3]26 783	...	380 658	138 428
	"	1953/54	1 924	[3]27 224	...	408 128	143 302
Teacher training	Teacher training *lycées*, public	1957/58	217	[5]...	...	56 843	47 167
	Teacher training schools, public	1957/58	26	314	...	4 838	2 701
	Total	**1957/58**	**243**	[5]...	...	**61 681**	**49 868**
	"	1956/57	243	[5]...	...	64 428	53 336
	"	1955/56	246	[5]...	...	64 918	53 704
	"	1954/55	225	[5]...	...	63 341	52 114
	"	1953/54	216	[5]...	...	58 281	46 978
Higher *Teacher training*	Higher teacher training schools, public	1957/58	8	726	201	7 332	3 214
	Pedagogical faculties, public	1957/58	...	...	...	1 567	752
	Total	**1957/58**	[6]**8**	[6]**726**	[6]**201**	**8 899**	**3 966**
	"	1956/57	[6]8	[6]681	...	7 902	3 562
	"	1955/56	[6]10	[6]761	[6]203	9 696	4 358
	"	1954/55	[6]10	[6]660	[6]170	8 823	3 793
	"	1953/54	[6]10	[6]558	[6]165	8 551	3 695
General and technical	Universities, public	1957/58	9	3 592	1 073	30 713	13 977
	Higher technical institutions, public	1957/58	58	4 948	3 609	121 559	37 548
	University, private	1957/58	1	117	27	1 509	591
	Total	**1957/58**	**68**	**18 657**	**4 709**	**153 781**	**52 116**
	"	1956/57	68	18 515	...	162 429	53 363
	"	1955/56	68	17 573	4 172	147 769	46 399
	"	1954/55	74	16 603	4 003	146 604	45 596
	"	1953/54	72	14 551	3 683	131 434	41 233
Special	Schools for handicapped children						
	Total	**1957/58**	**471**	**3 385**	...	**44 884**	...
	"	1956/57	464	3 134	...	43 224	...
	"	1955/56	444	3 061	...	42 123	...
	"	1954/55	432	2 966	...	39 437	...
	"	1953/54	406	2 630	...	38 126	...

1. There were only 16 private schools in 1957/58 with 2,750 pupils. In 1954/55 there were 19 schools with 2,435 (F.1,935) pupils.
2. Including private schools with 2,040 pupils in 1957/58 of whom 1,373 in technical and vocational schools and 667 in fine arts schools.
3. Including teaching staff for some adults taking vocational courses and pupils in teacher training *lycées*.
4. Students training in physical education numbered 739 (F.355) in 1957/58.
5. Included with technical and vocational schools.
6. Higher teacher training schools only. Figures of the pedagogical faculties are included in higher education.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Adult	Primary schools for workers	1957/58	881	[8]3 611	...	45 530	12 620
	Lycées for workers	1957/58	195	[8]2 180	...	50 586	22 230
	Agricultural technical and vocational schools	1957/58	[7]1 005	...	...	113 262	30 016
	Total	**1957/58**	**[7]2 081**	**...**	**...**	**209 378**	**64 866**
	"	1956/57	...	...	...	206 996	63 561
	"	1955/56	[7]2 370	...	...	195 925	61 442
	"	1954/55	[7]2 296	...	...	176 663	64 501
	"	1953/54	[7]1 995	...	...	170 359	63 949

7. Not including vocational correspondence schools.

8. Including part-time teachers.

2. TRENDS IN SECONDARY EDUCATION, 1932–57[1]

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1932	186 805	40	...	...	...	...	[3]171	3 116	[3]5
1933	160 812	40	...	...	...	...			
1934	166 090	41	...	...	...	...			
1935	181 138	42	...	...	...	...	[3]209	3 319	[3]6
1936	200 601	43	...	...	...	...			
1937	221 417	43	97 413	...	...	...			
1938	234 200	43	...	...	...	...			
1945	224 027	50	[2]115 017	...	...	...	[4]463	2 429	[4]19
1946	229 446	48	[2]185 342	...	...	...			
1947	201 506	47	[2]260 486	...	...	...			
1948	219 205	...	[2]313 428	...	...	...			
1949	221 390	...	[1]343 720	...	...	...			
1950	194 431	...	[2]435 259	...	43 048	75	[5]674	2 498	[5]27
1951	185 531	...	504 370	...	49 701	78			
1952	186 857	56	420 901	...	55 874	78			
1953	188 261	57	408 128	35	58 281	81			
1954	195 113	58	380 658	36	63 341	82			
1955	201 421	59	364 659	37	64 918	83	[5]605	2 224	[5]27
1956	202 713	60	344 727	36	64 428	83			
1957	195 091	61	314 085	37	61 681	81			

1. No information is available for the period 1939–44 inclusive; since 1945, the frontiers of Poland have changed.
2. Including some adults attending vocational courses.
3. For general secondary education only.
4. For general and vocational secondary education only.
5. For all secondary education — general, vocational and teacher training.

3. EDUCATIONAL FINANCE, 1957 (in thousand złotys)[1]

A. EXPENDITURE BY PURPOSE

	Amount
Total expenditure[2]	**12 781 500**
Recurring expenditure	11 250 200
Capital expenditure	1 531 300

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure	**[3]11 250 200**	**100.0**
Pre-primary, primary, secondary, special and adult education[4]	[5]6 224 800	55.3
Vocational education	2 583 100	23.0
Higher education	2 442 300	21.7

1. Official exchange rate: 100 złotys = 4.17 U.S. dollars.
2. Closed account.
3. Includes expenditure for teacher training and 570.9 million złotys for repairs.
4. Includes cultural and instructional centres, etc.
5. Includes expenditure for school library books (28.0 million złotys).

4. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57[1]

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
General secondary certificate	28 248	14 550	29 777	16 145	29 856	16 688	29 679	16 709	28 010	15 989
Certificate of technical and scientific schools	35 543	16 738	26 718	10 456	35 011	17 475	33 931	17 589	26 616	13 902
Certificate of trade schools[2]	6 494	...	3 218	...	2 829	...	2 184	...	1 997	...
Certificate of agricultural schools[2]	—	—	—	—	—	—	—	—	125	51
Certificates of other vocational schools	60 348	12 366	55 316	11 736	39 037	7 500	36 448	5 801	15 913	4 556
Art school diploma	1 673	974	1 816	1 084	2 004	1 077	1 927	1 122	2 000	1 207
Certificates of all teacher training colleges	10 282	8 094	9 964	7 743	10 202	8 159	2 467	1 655	10 026	7 790

1. Excluding certificates awarded in workers' vocational schools.

2. State schools only.

PORTUGAL

THE EDUCATIONAL SYSTEM

The following articles of the Constitution of the Portuguese Republic (1933) relate to education.

'Education and instruction shall be obligatory, and are the concern of the family in co-operation with public or private institutions.' (Article 42.)

'The State shall officially maintain primary, complementary, secondary and higher schools, and institutions of advanced education.

'Elementary primary education is obligatory and may be given at home or in private or state schools.

'The development, teaching and propagation of the arts and sciences shall be fostered and protected, subject to respect for the Constitution, the authorities and the co-ordinating activity of the State.

'The aim of state education is not merely the development of physique and of the intellectual faculties, but the training of character, adequate preparation for a profession, and the inculcation of all moral and civic virtues, in accordance with Portugal's traditional principles of Christian doctrine and ethics.

'No authorization shall be required for the teaching of religion in private schools.' (Article 43.)

'Private schools corresponding to the state schools may be established freely. They shall however be subject to state inspection, and may be subsidized by the State or authorized to grant diplomas if their teaching staff and curricula are of a standard not lower than those of the corresponding public institutions.' (Article 44.)

The structure of the Portuguese school system is shown in the diagram on page 977.

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary education is governed by Decree-Law No. 36507 of 17 September 1947 and by Decree No. 36508 of the same date, which lay down the regulations for this type of education. Experience showed, however, that the curricula prescribed by this reform were somewhat too heavy, and could be abridged without detriment to the pupils' training or knowledge; another decree embodying this modification was therefore promulgated on 12 October 1948.

Administration

Within the Ministry of Education there is a technical and advisory body—the National Education Board (Junta Nacional de Educação)—which is divided into specialized sections, the third section dealing with pedagogical questions relating to secondary education. Headed by the General Director of Secondary Education, this section comprises several state teachers, a private school teacher, the

inspector-general of private schools and a representative of the education department of the Ministry for Overseas Provinces.

It deals with (a) evaluation and choice of school textbooks; (b) equivalence of certificates gained in schools other than the Portuguese *liceus* (in Portugal or in other countries) with the certificates awarded by the Portuguese *liceus;* rules for the conduct of *liceus;* and (c) selection of private school teachers.

The authority of the central directorate of education is exercised in each *liceu* through the school director. He is chosen by the Ministry of Education from regular teachers on the general list, and is appointed for an indefinite period. The administrative staff of a *liceu* also includes a deputy director and a secretary; they, too, are chosen by the Minister from regular teachers belonging to the establishment. The director—or, in his absence, the deputy director—is responsible for the execution of regulations and the decisions of the authorities. Secondary education is divided into three cycles, and the teaching staff for each of these cycles receives instructions from a 'cycle director'.

The director of a *liceu* is assisted by two boards: an educational board and a disciplinary board. The functions of the first of these are essentially pedagogical, and it consists of all the teachers on the school staff and the doctor or doctors attached to the school. It meets at the beginning of the school year and also whenever convened by the director. The disciplinary board holds an ordinary meeting once a month and extraordinary meetings when convened by the director. The members include the director, the deputy-director, the secretary, the 'cycle directors', the doctors attached to the school and the teachers responsible for religious instruction and moral education.

Inspection. Inspection of secondary schools is carried out by a special department—the Inspecção de Ensino Liceal—whose duties are to determine the educational value of teaching equipment and textbooks, to give advice on the arrangement of the courses and on school time-tables, to assess and mark the teachers' work, to set examinations and to prepare educational statistics.

Finance. All public educational expenditure is borne by the State. The public education budget is drawn up by the Minister of Education, sanctioned by the Finance Minister and approved by the Cabinet.

The State bears the cost of building and maintaining *liceus.* Until 1928, the *liceus* themselves had to make all the improvements and additions needed; in return, they received from the State half the total school fees and examination fees and the whole of the school attendance grants. Since 1928 (Decree No. 15942), all money received by the *liceus* is handed over to the State and administered by a commission called Junta de Construcçoes para o Ensino Técnico e Secundário, which comes under the Ministry of Public Works.

Liceus are autonomous and are controlled by an administrative board, the chairman of which is the deputy-director. The other members include a 'cycle director' and the head of the secretariat, who is also the treasurer.

In Portugal, primary education alone is free of charge. At the higher levels a fee is charged, but the cost of schooling is not high. The State provides assistance for secondary school pupils in the form of exemptions from fees and scholarships; 10 per cent of the boarders in each school may be granted exemptions.

Fifty scholarships, each worth 3,000 escudos, are awarded annually to deserving pupils in the second and third cycles who are in poor circumstances. To qualify for a scholarship, pupils must have received an average mark of at least 16 out of 20 either for their year's work or at the promotion examination. Pupils who gain scholarships are exempted from paying fees.

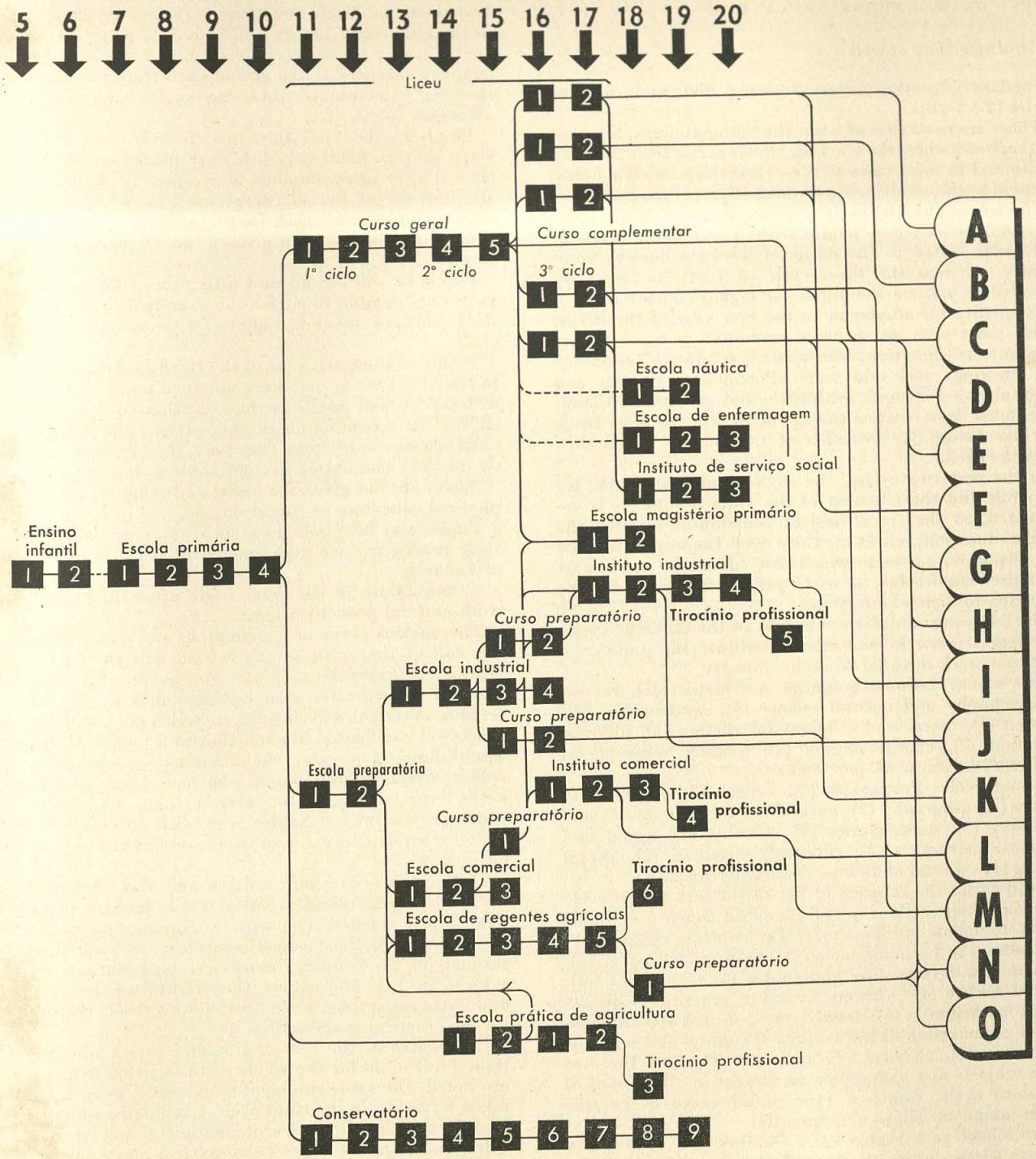
The Minister of Education may also award money prizes (*prémios nacionais*) to boarders in *liceus* who have obtained at least 18 marks out of 20 at the final examinations and whose behaviour has been exemplary throughout the year.

GLOSSARY

conservatório: vocational secondary school of fine arts or music.
ensino infantil: pre-primary education.
ensino técnico profissional: vocational education.
escola comercial: vocational secondary school of commerce with possibility of entry after second year into a preparatory class (*curso preparatorio*) leading to further specialized vocational training.
escola de enfermagem: vocational training school of nursing.
escolado magistério primário: teacher training school for primary school teachers.
escola industrial: vocational secondary school of technical studies.
escola náutica: vocational training school for careers at sea.
escola prática de agricultura: vocational training school of agriculture.
escola preparatória: lower vocational secondary school.
escola primária: primary school.
escola de regentes agrícolas: vocational training school for agricultural overseers.
instituto comercial: upper vocational secondary school of commerce.
instituto industrial: upper vocational secondary school of technical studies.
instituto de serviço social: vocational training school for social workers.
liceu: general secondary school with 7-year course in three cycles, the first two, of 2 and 3 years duration, providing a general course (*curso geral*), the last 2 years being specialized (*curso complementar*) and preparatory to university education.
tirocínio profissional: upper vocational course in agriculture.

UNIVERSITY FACULTIES OR COLLEGES

A. *Letras:* arts (five departments).
B. *Direito:* law.
C. *Medecina:* medicine.
D. *Farmácia:* pharmacy.
E. *Ciências:* science (four departments).
F. *Educação física:* college of physical education.
G. *Militar:* military college.
H. *Naval:* naval college.
I. *Arquitectura:* college of architecture.
J. *Instituto superior técnico:* college of technology.
K. *Belas-artes:* college of fine arts.
L. *Ciências económicas e finanças:* college of economics and finance.
M. *Ultramar:* college for overseas administration.
N. *Agronomia:* college of agriculture.
O. *Veterinária:* college of veterinary science.


5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Liceu
Curso geral
1 2 3 4 5
1º ciclo
2º ciclo
Curso complementar
3º ciclo
1 2
1 2
1 2
1 2
Escola náutica
1 2
Escola de enfermagem
1 2 3
Instituto de serviço social
1 2 3
Escola magistério primário
1 2
Ensino infantil
1 2
Escola primária
1 2 3 4
Instituto industrial
1 2 3 4
Tirocínio profissional
5
Curso preparatório
1 2
Escola industrial
1 2 3 4
Curso preparatório
1 2
Escola preparatória
1 2
Instituto comercial
1 2 3
Tirocínio profissional
4
Curso preparatório
1
Escola comercial
1 2 3
Tirocínio profissional
6
Escola de regentes agrícolas
1 2 3 4 5
Curso preparatório
1
Escola prática de agricultura
1 2 1 2
Tirocínio profissional
3
Conservatório
1 2 3 4 5 6 7 8 9
A
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TYPES OF SECONDARY EDUCATION

General secondary schools

Secondary education covers 7 years, divided into three cycles (2+3+2).

There are two types of *liceu:* the national *liceus*, financed by the State, where the teaching covers at least the first two cycles and in most cases all three; and the municipal *liceus*, financed by the municipalities, which offer only the first cycle.

The aim of the first cycle (2 years) and the second cycle (3 years) is to equip pupils with a minimum stock of knowledge suited to the needs of life in a modern community, whereas the third cycle (2 years) is especially intended to prepare the pupils for higher education.

To qualify for admission to the first year of the *liceus*, pupils must pass an entrance examination consisting of written tests (dictation, composition, arithmetic, geometry and drawing) and oral tests (Portuguese, history and geography of Portugal, arithmetic and geometry). Candidates must have reached the age of 10 years or must reach that age before 31 December of the year in which they enter the *liceu*.

In the first two cycles, the curriculum is the same for all pupils and the teaching of the various subjects is co-ordinated, so that each subject contributes towards the pupil's education; but in the third cycle the work is divided into separate sections which are designed to impart specialized knowledge, so as to prepare the pupil for the transition to higher education.

The following subjects are taught in the different cycles (the figures given in parentheses indicate the number of hours per week devoted to each subject):

First cycle: national language and history (5), French (5), geography and natural science (4), mathematics (3), drawing (3), moral and religious instruction (2), physical education (2), choral singing (2), manual work (1)—a total of 27 hours' work per week.

Second cycle: Portuguese (3), French (2), English (5), history (3), geography (2), natural science (2), physics and chemistry (3), mathematics (3), drawing (1), moral and religious instruction (1), physical education (2), choral singing (1)—a total of 28 hours' work per week.

Third cycle: the subjects in the curriculum of this cycle vary according to the type of advanced course the pupils intend to follow subsequently. The subjects taught are: Portuguese (4), Latin (5), Greek (3), French (3), English (3), German (5), history (4), philosophy (4), geography (4), natural science (4) (with one period of practical work per week), mathematics (4), drawing (4), political and administrative organization of the country (1), moral and religious instruction (1), physical education (2). The last three of these subjects and philosophy are taught in all sections of the third cycle, whatever type of advanced course the pupils intend to follow subsequently.

The school year begins on 1 October and ends on 10 August. Classes begin on 1 October and end on 30 June; there are three terms—1 October to 23 December; 3 January to the Friday before Palm Sunday; the Wednesday after Easter Sunday to 30 June.

Classes are of 50 minutes' duration, with a 10 minutes' interval.

Examinations. Marks are given in each subject according to the following scheme: 0–4, bad; 5–9, poor; 10–13, fair; 14–17, good; 18–20, very good. Marks are given by the board of teachers at the end of each term. At the end of the year, the pupils' three marks in each subject are averaged.

Pupils in the first, third and fourth years (the years when no examination is held) are promoted to the next class if they have obtained an average of at least 10 for all subjects (or for all except one). Any pupil who has been given a 'bad' mark for one subject must repeat the year, unless he has been given a 'good' mark for another subject.

Pupils in the second and fifth years (the examination years) are eligible to sit for the examination if they fulfil the conditions mentioned above for promotion to the next class.

Pupils in the sixth year of the third cycle are promoted to the next class if they have obtained an average mark of at least 10, and pupils in the seventh year are eligible to sit for the examination in subjects in which they have obtained the same mark. They may, therefore, be eligible to sit for the examination in some subjects but not in others.

Marks are not given for moral and religious instruction, physical education or choral singing.

Pupils may be required to repeat the year either because their marks are not high enough or because of irregular attendance.

Examinations in the *liceus* begin after the end of class work and finish on 10 August.

The various types of examination are: examinations at the end of the cycle, in the second and the fifth years, entitling successful candidates to the general secondary education certificate; examinations held in the various sections of the third cycle, in the seventh year, and entitling successful candidates to admission to a higher educational establishment; entrance examinations for secondary education, which qualify pupils who have been taking some other type of course to enter a *liceu;* and individual examinations for candidates who wish to obtain a certificate of equivalence for subjects which were not on their curriculum.

Examinations are both written and oral, and pupils in the seventh year take a practical test in physics, chemistry and natural science. The written examination papers are set by the secondary school inspectors, and are the same throughout the country; moreover, examinations in each subject are held throughout the country on the same day and at the same time. Each *liceu*, however, sets the subjects for the practical examinations.

Candidates in the first and second cycles who get less than 9 out of 20 for the whole of the written examination are failed; the same rule applies in regard to each subject taken by pupils in the third cycle. Candidates who pass are eligible to take the oral examination. Candidates in the third cycle who have not been given a mark below 16 in any subject and candidates in the first and second cycles whose average mark is not less than 14 are exempted from the oral examinations. Candidates who fail in the written examinations may appeal against the jury's decisions to the third section of the National Education Board, which may alter the mark given by the jury.

Teaching staff. Teachers in a *liceu* may be either permanent, engaged under contract, assistant teachers or temporary teachers. Teachers in the first three of these categories must hold the state teacher's certificate; it is optional for temporary teachers. Teachers who hold this certificate are known as *agregados*.

Teachers are required to work for 22, 20 or 18 hours per week, depending on whether they have been in the teaching service for less than 10 years, between 10 and 20 years or more than 20 years. This number of teaching hours may be reduced in the case of teachers who have special duties in the *liceu*.

Registered teachers must hold a university degree in the subjects they are to teach, and must have passed examinations in the following subjects: pedagogics and didactics, history of education, school organization and administration, general psychology, educational psychology, psychological testing and school hygiene. They then sit for an examination designed to ascertain whether they possess the knowledge necessary to carry out the duties they will be undertaking, after which they do a 2-year period of practical teaching under the direction of teachers who are specialists in teaching methods, in a teacher training *liceu* at Lisbon, Oporto or Coimbra.

After the 2-year practical teaching period, they sit for an examination, known as the State Examination, and if successful gain a certificate which is the equivalent of the *agrégation* certificate awarded by French universities.

Vocational and technical schools

Vocational and technical education is imparted in (a) training schools for farm managers, practical agricultural schools, agricultural apprenticeship schools and elementary agricultural schools; (b) industrial schools and institutes; and (c) commercial schools and institutes.

This type of education is intended both for young people who have never been engaged in industry or commerce and for those already in employment who have completed only their compulsory primary education.

Vocational education: preparatory cycle. Pupils may sit for the entrance examination for the preparatory cycle after they have taken the examination at the end of the fourth year of primary education, or during that year. It comprises 2 years' work, and is common to industrial, commercial and agricultural education. It is primarily a period for observation and direction finding, and is intended to give pupils a course of training which will enable them to proceed to one of the three types of education mentioned above, and which will also bring to light their special abilities and aptitudes.

At the conclusion of the preparatory cycle, pupils enter the vocational training courses, where they receive training in the work they have chosen.

Agricultural education

Farm management training schools. These schools are open to pupils who have completed the 2 years of the preparatory cycle of the vocational course or the 2 years of the first cycle of a *liceu*. The entrance examination is a test in French. The course is of 5 years' duration, and at its conclusion pupils do a period of at least 6 months' practical work, at the end of which the final examination is held. Successful candidates obtain the farm manager's certificate (*regente agrícola*).

Practical agricultural schools. These schools are open to pupils who have completed the course of study required for admission to the farm management training schools or the preparatory course at a practical agricultural school. The course is of 2 years' duration, and at its conclusion pupils undertake a period of at least 6 months' practical training, after which they take the final examination; successful candidates obtain the skilled farm worker's certificate (*agente rural*).

Industrial education

Industrial schools. Pupils enter these schools after completing the preparatory cycle of vocational education. The courses are usually of 3 years' duration (some are 4-year courses). Industrial schools are intended for pupils who wish to learn a trade.

Pupils may then take a specialized course lasting 1 or 2 years, according to the trade they have selected. The course is followed by at least 6 months' practical work in the trade concerned. Pupils who have completed this period of practical work and whose marks are satisfactory may take the trade proficiency examination, and, if successful, they are awarded the proficiency certificate.

In some schools there are 'preparatory sections', where pupils who intend to continue their studies in the industrial institutes receive the necessary training. These sections correspond to the second part of the last year at an industrial school, and applicants for admission must have obtained an average mark of at least 12 in the previous year in the subjects regarded as essential for the career they have chosen.

Industrial institutes. These institutes are open to candidates who have attained the age of 15 and have passed an entrance examination. The examination differs in type according to whether the candidates have completed the preparatory section of an industrial institute, the preparatory cycle for vocational education or a vocational course. At the conclusion of a 4 years' course, followed by a practical training period of at least 6 months, pupils may become assistant engineers (*auxiliares de engenharia*) or industrial specialists (*chefes de indústria*); after 2 years' studies, they may enter a higher engineering school.

Commercial education

Commercial schools. Pupils enter these schools after completing the preparatory cycle; the course is of 3 years' duration. After the last year of the course, pupils may carry out a period of practical work, which is optional in most cases, but sometimes compulsory. These schools provide training for commercial workers.

As in some industrial schools, there may be 'preparatory sections', which, in that case, replace the last year of the course and ensure the necessary training for

pupils who wish to continue their studies in commercial institutes.

Commercial institutes. The instruction provided in these institutes is of the same standard as that given in industrial institutes. The course is of 3 years' duration. These institutes train administration assistants, accountants, customs experts or foreign language correspondents. They also offer a 2-year course for candidates for admission to the Higher Institute of Economic and Financial Science or the Faculty of Economic Science.

Vocational education for persons already in employment

Complementary courses for apprentices. These courses (*cursos complementares de aprendizagem*) are open to candidates who have successfully completed the fourth year of the primary school course and who are at least 13 years of age on 1 October. In addition to attending classes, pupils receive practical training in their work in workshops, factories, offices, business houses, etc. These courses are of 3–5 years' duration, according to the subject studied. They are designed to give apprentices general and technical training which, together with the experience they have gained apart from the school, will enable them to acquire the desired proficiency in their trade.

Advanced training courses. These courses (*cursos de mestrança*) are open to candidates who have successfully completed the fourth year of the primary school course and who have reached the age of 14 on 1 October. Classes are usually held in the evening, and the curriculum is similar to that followed in the complementary courses for apprentices or in vocational training schools. In the latter case, the curriculum includes subjects taught in the preparatory cycle of industrial or commercial schools. According to the law, advanced training courses must be held to enable workers with sufficient ability to obtain the general and technical training necessary for them to become foremen or to be in charge of a workshop. The classes are held in the evening, and pupils remain in employment, except in the case of industries where the distance to be covered makes it impossible for pupils to combine attendance at the school with their work. In that case, full-time courses may be arranged. The courses are open to workers who have gained an industrial certificate in the trade concerned and who have had at least 3 years' practical experience in their trade as skilled workers or in a similar position; workers who have had at least 8 years' practical experience in the trade in which they wish to take a course and who have successfully completed the fourth year of the primary school course, may also enroll provided they pass an entrance examination.

Rural workers may also attend complementary courses for agricultural apprentices and elementary agricultural courses. The structure of these courses is different from that of the courses offered in farm management training schools or practical agricultural schools. The courses for agricultural apprentices are of a special type and are designed to give young people of both sexes who have successfully completed the fourth year of the primary school course, and who are already engaged in agricultural or similar work, general and technical training which will enable them to do their work more efficiently. Elementary agricultural courses are intended to increase the proficiency of adult agricultural workers who have attained a reasonable standard of general education, to encourage them to undertake specialized studies, and to stimulate activities which will contribute to the welfare of rural families by the intensive application of modern cultivation techniques or working methods and the dissemination of the scientific knowledge required for this type of work.

These courses do not lead to a certificate or a diploma.

Teacher training schools

Primary school teachers are trained at teacher training schools, which are all of the same type, and are called *escolas de magistério primario.*

Before being admitted to the entrance examination for a primary teacher training school, candidates must have completed at least the second cycle of the secondary school course or the equivalent.

The curriculum in primary teacher training schools includes the following subjects: general pedagogics and theory of education; educational psychology; methods of teaching the various subjects; school hygiene, physical education; drawing and educational handwork; education of girls; music and choral singing; school legislation and administration; moral and civic education; practical teaching.

At the end of the third half-year, pupils take a final examination on all the subjects studied. Successful candidates are eligible to undergo training for a 6-months period in a primary school. At the end of this training period, they take a state examination to test their teaching ability. They are required to prepare the plan for a lesson for one of the four primary classes and to give a lesson in accordance with this plan in a primary school; this is followed by discussion of their lesson-plan.

Staff for teacher training schools is recruited, according to subject, from qualified primary and secondary school teachers and school doctors. For physical education, music and choral singing, teachers are chosen who teach these subjects either in *liceus* in the district where the primary teacher training schools are situated or at the National Physical Education Institute. Instruction in school hygiene is given by a school doctor.

Art education (secondary level)

The National Conservatory is divided into two sections—music and theatre. The first of these covers vocal and instrumental music and composition. The theatre section includes courses in diction, dramatic art, choreography and stage-craft, which are intended to train actors, dancers, scene painters and stage designers. As well as these technical courses, pupils must also take courses in general subjects such as Portuguese language and literature, French, Italian, acoustics, the history of music and the history of the theatre. In the music section, both day-pupils and boarders are accepted; in the theatre section, free evening courses are arranged. Music is also taught in a number of private schools.

Out-of-class activities

There is a youth movement, the Mocidade Portuguesa, to which all young Portuguese between 7 and 18 may belong, whether they are still at school or not. It aims at all-round development of personality, in its physical, moral and civic aspects.

The movement arranges various activities for boys, according to age-group—educational games, choral singing and open-air activities for boys between 7 and 10, sports (sailing, riding, swimming, athletics, model aeroplane building, gliding, flying, etc.), and cultural activities (literary competitions, plays, journalism, music and singing, visits to museums and art galleries, etc.) for boys between 10 and 18. The movement also maintains canteens, youth hostels, students' hostels and holiday camps, and organizes work competitions, international work camps (archaeology, forestry, civic construction), etc.

The movement's principal object in its work with girls is to help to prepare them for family and social life. Activities arranged for girls include games and sports, camping, gymnastics, swimming, riding, nursing and child care, cooking, cutting and sewing, household crafts, music, the plastic arts, regional dances and other aspects of national folklore, literary discussion groups, educational excursions, cultural meetings, etc. In many cases regional conditions and the legitimate tastes and desires of the girls are taken into account in arranging these activities. There are other activities for girls; for example, a 'Mothers' week' is held annually, during which cradles and layettes are presented to poor families, Christmas and Easter campaigns are organized, when clothing and other commodities are distributed to the poor and the sick, and art education groups and holiday camps, etc., are organized. The movement also provides scholarships for girls in poor circumstances and maintains school canteens and students' hostels, etc.

In its work for both boys and girls, the movement collaborates closely with the schools and with the children's families.

[*Text prepared by the Ministry of Education, Lisbon, in January 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 8,981,000.
Area: 35,599 square miles; 92,200 square kilometres.
Population density: 252 per square mile; 97 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total pupil enrolment (not including some 100,000 in adult education courses) was over 1 million, being 12 per cent of the total population. Of this number, 83 per cent were enrolled in kindergartens and primary schools, 9 per cent in general secondary schools, 7 per cent in vocational schools, 0.3 per cent in teacher training schools and 2 per cent in institutions of higher education. The proportion of girls was 47 per cent in primary education, 45 per cent in general secondary education, 28 per cent in vocational education, 86 per cent in teacher training schools, and 27 per cent in higher education. Women teachers represented 90 per cent of the teaching staff in primary education, 46 per cent in general secondary education, and nearly one-third in vocational education.

Between 1953 and 1957, total enrolment increased by about 12 per cent, though the increase in primary education was only 7 per cent. Enrolment in general secondary education had grown by 38 per cent and in all the vocational schools together by about 50 per cent. The pupil-teacher ratio in public primary schools dropped from about 40 in 1953 to about 36 in 1957. (See Table 3.)

Enrolment trends in secondary education, 1930–57. Table 1 shows that enrolment in general secondary education, except for a setback in 1940 and 1941, had increased continuously since 1930. Taking into account minor differences in coverage, it may be said that there was a quadrupling of enrolment in these schools over a period of 28 years. Vocational school enrolment increased more than two and a half times between 1930 and 1946. Though there seems to have been some decrease after the high level reached in 1946, the trend has been definitely upward again since 1950. Enrolment in teacher training schools was irregular between 1930 and 1941, hence it has not been included in computing average total enrolment for that period. Nevertheless, the number of pupils preparing to become teachers had at least doubled between 1930 and 1957. For the period 1942–44, an average total enrolment

of 88,000 represented about 12 per cent of the estimated population 15–19 years old. By 1955–57, the average enrolment had increased much faster than the population, hence the enrolment ratio shows an increase of 50 per cent over that of 1942–44.

Examination results in secondary education, 1953–57. Between 1953 and 1957 the number of general secondary school certificates granted had increased by 42 per cent. The increase was more than twofold in the case of certificates for the completion of the third cycle. The number of girls receiving certificates of the first and second cycles remained at about 50 per cent, but the proportion of girls receiving the third cycle certificate dropped from 58 per cent in 1953 to only 34 per cent in 1957.

In vocational education, 85 per cent of the diplomas for medical and social services were received by girls, while in all the other branches of vocational education together, the proportion was only one-third. There were no girls among recipients of certificates from agricultural and nautical schools. In 1957, girls received 88 per cent of all teacher training school certificates. The total number of such certificates increased by 35 per cent between 1953 and 1957. (See Table 2.)

Educational finance, 1959. In the state budget for the fiscal year beginning in January 1959, a sum of 901,686,245 escudos was allocated to the Ministry of National Education, and in addition the Ministry of Public Works allocated a sum of 212,160,000 escudos for the construction of school buildings. Thus total expenditure for education, recurring and capital, may be estimated at 1,114 million escudos, or an average of 120 escudos per inhabitant. (Official exchange rate: 100 escudos = 3.46 U.S. dollars.) Detailed distribution of this expenditure is not available, but it is known that the state budget included the following provisions: for primary education, 419,495,360 escudos; secondary education, 94,017,604; vocational education, 142,745,628; higher education, 160,404,808.

Sources. Portugal: Instituto Nacional de Estatística, reply to Unesco questionnaire; Ministry of Education, 'Educational progress in 1958/59' (report submitted to the Twenty-second International Conference on Public Education).

1. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational[2]		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	22 830	34	18 375	18	1 243	66			
1931	23 709	32	18 485	19	1 086	63			
1932	28 286	35	20 339	20	525	54	[3]49	698	[3]7
1933	32 001	43	21 493	19	574	51			
1934	33 580	42	23 683	20	728	54			
1936	36 322	44	28 996	22	224	50			
1937	37 969	44	31 901	23	57	54			
1938	37 953	44	34 500	24	...	...	[3]71	724	[3]10
1939	37 602	44	36 795	24	...	...			
1940	33 871	44	41 919	25	...	...			
1941	34 676	44	39 560	27	...	...	[3]75	751	[3]10
1942	42 837	39	39 853	28	319	76			
1943	45 393	39	42 920	28	810	86	88	766	12
1944	47 077	40	44 661	27	1 044	91			
1945	48 460	42	47 109	27	1 240	85			
1946	51 552	43	47 337	27	1 302	83			
1947	50 243	43	46 885	29	1 155	83	98	786	12
1948	51 087	44	44 917	28	1 665	87			
1949	52 812	44	40 559	26	2 365	87			
1950	53 979	44	37 508	24	2 349	83			
1951	57 097	44	38 993	24	2 016	80			
1952	59 711	44	39 492	24	1 945	84	104	804	13
1953	64 055	43	42 216	23	2 337	88			
1954	69 033	44	45 946	24	2 727	88			
1955	74 364	...	53 492	26	2 751	88			
1956	81 971	45	59 733	26	2 673	88	145	778	19
1957	88 599	45	68 205	28	2 580	88			

1. From the school year 1942/43 including ecclesiastical preparatory schools. From 1955 to 1957, enrolment in schools of art, music, theatre, are included in vocational education.

2. From 1930 to 1954, not including enrolment in schools of art, music, theatre.

3. General and vocational education only.

2. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Certificate of general secondary school										
First cycle	9 615	4 592	10 070	4 757	...	...	12 486	6 201	13 647	6 639
Second cycle	5 413	2 659	5 844	2 828	6 669	...	6 764	3 362	6 695	3 288
Third cycle	1 433	829	2 643	880	3 040	...	3 004	1 016	3 110	1 065
Certificate of elementary technical and industrial schools	4 789	1 420	5 090	1 573	6 045	1 919	5 737	1 776	6 578	2 066
Certificate of upper industrial schools	119	12	80	5	120	13	85	4	149	13
Certificate of elementary commercial schools	1 356	503	1 243	465	1 175	456	1 124	394	1 064	384
Certificate of commercial schools	54	14	41	11	68	15	94	18	77	17
Certificate of elementary agricultural schools	64	—	72	—	51	—	71	—	58	—
Certificate of agricultural and nautical schools	234	—	224	—	211	—	219	—	230	—
Diploma of schools of medical and social services	274	240	231	222	342	316	757	632	1 026	889
Diploma of schools of arts and music	...	...	13	8	17	14	104	76	87	63
Teacher training school certificate (primary teachers)	915	787	1 283	1 152	1 242	1 090	1 388	1 229	1 221	1 072
Teacher training school certificate (special education)	—	—	4	3	12	12	8	7	15	12

3. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens and nursery classes, private						
	Total	**1957/58**	**172**	**153**	...	**4 978**	**2 457**
	,,	1956/57	163	156	149	4 820	2 459
	,,	1955/56	156	...	...	4 853	2 530
	,,	1954/55	125	...	...	5 258	2 656
	,,	1953/54	127	...	...	4 817	2 589
Primary	Primary schools and *postos escolares*, public	1957/58	16 095	22 583	19 672	810 394	376 304
	Primary schools, private	1957/58	885	1 800	...	41 281	21 073
	Total	**1957/58**	**16 980**	**24 383**	...	**851 645**	**397 377**
	,,	1956/57	16 678	23 383	20 239	841 937	397 092
	,,	1955/56	16 309	22 453	[1]18 070	829 469	...
	,,	1954/55	15 725	[1]20 001	[1]17 135	814 101	385 792
	,,	1953/54	14 943	[1]19 032	[1]16 170	796 467	377 133
Secondary *General*	*Liceus*, public	1957/58	43	1 620	861	34 812	16 708
	Liceus, private	1957/58	337	2 864	1 376	48 150	23 162
	Ecclesiastical preparatory schools, private	1957/58	51	346	—	5 637	—
	Total	**1957/58**	**431**	**4 830**	**2 237**	**88 599**	**39 870**
	,,	1956/57	428	[2]4 919	2 461	81 971	36 512
	,,	1955/56	[2]374	[2]3 951	...	74 364	...
	,,	1954/55	[2]365	[1]1 315	...	67 912	29 691
	,,	1953/54	[2]354	[1]1 293	[1]614	64 055	27 771

1. Public schools only.

2. Not including ecclesiastical preparatory schools.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Second. [cont.]							
Vocational	Commercial and industrial schools, public	1957/58	87	2 997	1 056	58 904	15 172
	Agricultural schools, public	1957/58	6	101	—	790	8
	School of nursing, midwifery and social service, public	1957/58	17	238	110	1 630	1 364
	Nautical school, public	1957/58	1	28	—	379	—
	Schools of fine arts, public	1957/58	2	[3] ...	[3] ...	391	207
	Commercial and industrial schools, private	1957/58	84	315	95	4 622	1 226
	Schools of nursing and social service, private	1957/58	10	149	48	777	725
	Schools of fine arts, private	1957/58	3	7	3	712	538
	Total	**1957/58**	**210**	**[4] 3 828**	**[4] 1 309**	**68 205**	**19 240**
	"	1956/57	203	[4] 3 241	...	59 733	15 813
	"	1955/56	192	[4] 2 970	...	53 492	13 927
	"	1954/55	198	[1] [4] 2 475	[1] [4] 732	47 073	11 869
	" [4]	1953/54	199	[1] 2 247	[1] 641	[5] 42 216	[5] 9 762
Teacher training	Teacher training schools for primary teachers, public and private	1957/58	18	292	158	2 561	2 264
	Teacher training school for teachers of the handicapped, public	1957/58	1	...	...	19	16
	Total	**1957/58**	**19**	**...**	**...**	**2 580**	**2 280**
	"	1956/57	19	...	...	2 673	2 344
	"	1955/56	...	...	...	2 751	2 414
	"	1954/55	...	...	...	2 727	2 398
	"	1953/54	15	143	48	2 337	2 054
Higher							
Teacher training	Teacher training colleges, public	1957/58	3	...	...	94	54
	National institute of physical culture, public	1957/58	1	17	2	77	19
	Total	**1957/58**	**4**	**...**	**...**	**171**	**73**
	"	1956/57	4	...	...	104	34
	"	1955/56	...	...	...	117	42
	"	1954/55	...	...	...	118	44
	"	1953/54	2	...	...	125	46
General and technical	Faculties, public	1957/58	17	672	49	15 403	4 581
	Colleges, public	1957/58	5	150	—	1 091	25
	Colleges of fine arts, public	1957/58	2	[3] 33	—	886	274
	Higher courses of fine arts, public	1957/58	2	66	25	142	102
	Pontifical faculty of philosophy, private	1957/58	1	12	—	35	—
	Theological courses, private	1957/58	32	400	—	1 753	—
	Courses of nursing and social services, private	1957/58	4	128	46	259	259
	Higher courses of fine arts, private	1957/58	2	17	10	11	8
	Total	**1957/58**	**65**	**1 478**	**130**	**19 580**	**5 249**
	"	1956/57	64	[1] 910	...	19 161	5 441
	"	1955/56	[5] 27	[1] 871	[1] 63	[6] 18 622	[6] 4 958
	"	1954/55	[5] 27	[1] 836	[1] 67	[6] 17 857	[6] 4 635
	"	1953/54	[5] 27	[1] 777	[1] 39	[7] 16 252	[7] 3 988
Special	Special primary classes and schools						
	Total	**1957/58**		**...**	**...**	**226**	**...**
	"	1956/57		...	...	204	...
	"	1955/56		...	...	...	...
	"	1954/55		...	...	412	...
	"	1953/54		...	...	419	121
Adult	Primary education						
	Total	**1957/58**	**...**	**3 748**	**2 036**	**93 703**	**20 445**
	"	1956/57	...	14 663	...	245 999	80 070
	"	1955/56	...	...	...	257 204	84 489
	"	1954/55	...	...	...	248 645	78 807
	"	1953/54	...	17 191	...	274 604	90 149

3. Teachers in secondary schools of fine arts are included with those of colleges of fine arts.
4. Not including schools of fine arts.
5. Not including theological courses, courses of nursing and social services, nor private courses of fine arts.
6. Not including students enrolled in courses of nursing and social services or private courses of fine arts.
7. Not including students enrolled in courses of nursing and social services, or in public and private courses and colleges of fine arts.

THE EDUCATIONAL SYSTEM

The main provisions concerning education, teaching, scientific research and culture in the Overseas Provinces are laid down in Section IV of Chapter VIII of Law No. 2066 of 27 June 1953 (*Lei orgânica do Ultramar Português*). This provides for the operation of schools by the State, and authorizes the establishment of private schools corresponding to the official schools. Private schools are subject to the control of the State, which may subsidize them and make them official.

The same law also stipulates that the budget of each Overseas Province must provide for the award of scholarships to enable pupils to attend teaching institutions in Portugal or in other provinces, if such institutions do not yet exist in its own territory. When an aptitude examination is required for admission to schools of a type not found in a particular province, the tests may be taken in that province.

The fundamental provisions governing educational and cultural activities overseas and the operation of organizations relating thereto are contained in Decree-Law No. 41472, of 23 December 1957.

The school system in the Portuguese Overseas Provinces forms part of the general pattern of Portuguese education. It is consequently the same as in metropolitan territory, but not all the levels and types of education provided in Portugal are to be found overseas.

General secondary and vocational secondary education are a continuation of the instruction given in primary schools, so that pupils attending schools at this level are generally within the 10–18 age group. In view of the special needs of the overseas population, older pupils are sometimes admitted, provided that school discipline is not impaired thereby.

The State grants wide facilities (study grants and scholarships, paid journeys, opportunities for taking entrance examinations in overseas territories) to students wishing to take post-secondary courses which are not available in the province where they have done their secondary studies.

DEVELOPMENT OF SECONDARY EDUCATION

General secondary and vocational education in Portuguese Overseas Provinces has developed along the same lines as in Portugal itself. Teaching has not been provided nor have courses been instituted simultaneously in the various provinces, but only as their usefulness became recognized, and depending on the interest shown in them by the inhabitants. However, as soon as secondary educational institutions were founded, they automatically came under the laws and statutes in force in Portugal; these laws and statutes were then adapted to the needs of the area.

Legal basis

The main laws now governing secondary education in Overseas Territories are the following:

Decree-Law No. 36507 of 17 September 1947 (*Reforma do Ensino Liceal*).

Decree No. 36508 of 17 September 1947 (*Estatuto do Ensino Liceal*).

Legislative Decree No. 12101 of 4 November 1947 (*Aplicada ao Ultramar o Decreto-Lei No. 36507*).

Legislative Decree No. 12238 of 9 January 1948 (*Adaptação do Decreto No. 36508 ao Ultramar*).

Law No. 2025 of 19 June 1947 (*Promulga a reforma do ensino técnico profissional*).

Legislative Decree No. 13883 of 15 March 1952 (*Aplica, com alterações, ao ultramar a Lei No. 2025*).

Decree-Law No. 37028 of 25 August 1948 (*Reforma do ensino técnico profissional*).

Decree No. 37029 of 25 August 1948 (*Estatuto do ensino técnico profissional*).

Legislative Decree No. 13884 of 15 March 1952 (*Adaptação do Decreto-Lei No. 37028 ao Ultramar*).

Legislative Decree No. 13885 of 15 March 1952 (*Adaptação do Decreto No. 37029 ao Ultramar*).

Decree-Law No. 40799 of 13 October 1956 (*Ensino agricola*).

Some of these laws were subsequently amended without, however, affecting their general structure. In each Overseas Province, in conformity with the above-mentioned laws, legislative decrees (*portarias*) concerning subjects of purely regional interest have been published by the local administration.

Secondary education is not compulsory.

Administration

The fundamental provisions relating to the organization of secondary education (reforms, regulations, statutes, etc.) are prepared at the Ministry of Education. They are applied to Overseas Provinces through ministerial decrees issued by the Ministry for Overseas Provinces. In this Ministry, educational affairs are the responsibility of the Directorate-General of Education. The Ministry also assists, when it deems necessary, the governors and the legislative councils of Overseas Provinces and other local bodies.

The curricula and school textbooks are generally the same as in Portugal; but in order to sanction their use overseas, a *portaria* or a decree from the Ministry for Overseas Provinces must be published. Provisions governing the administration and inspection of general education in Overseas Provinces are contained in Decree-Law No. 41472 of 23 December 1957.

Control. Each secondary institution is under a rector (in *liceus*) or director (in vocational schools) whose hierarchical and administrative superior is the director or head of

the provincial education services. These services submit all questions lying outside their competence to the office of the governor. Important problems to be considered or solved at the Ministry for Overseas Provinces are referred by the provincial governor to the Secretariat of State.

For the study and evaluation of the administrative problems of educational institutions, the directors of the provincial education services and the rectors and directors of general secondary and vocational schools are assisted by bodies whose purpose is to give advice and to collaborate in the management of these institutions (*Conselho Técnico Pedagogico, Comissão Central de Patronato do Ensino Técnico Profissional, Conselhos Escolares, Conselhos Disciplinares, Comissões de Patronato das Escolas Técnicas*, etc.).

Inspection. The inspectors of overseas education are directly subordinate to the Ministry for Overseas Provinces; their functions are essentially of a pedagogic and cultural nature and are not generally concerned with administrative matters. The main responsibilities of inspectors are: (a) to observe the operation of schools and verify the application of laws and regulations; (b) to report on the capacities of the teaching staff; (c) to take the initiative in arranging for the further training of teachers; (d) to collect data for an appraisal of the efficiency of each school; and (e) to ascertain whether or not private schools meet all the indispensable teaching requirements.

In agreement with the Minister of Education, the Ministry for Overseas Provinces sends inspectors of the Ministry of Education to the various territories to assess the work and advise teachers.

Finance. Official schools are financed by the State, which determines annually, for each Overseas Province, the budget to cover the costs of school staff, equipment and services. Each school has its own regulations, which are applied by its head and its administrative board.

Schools are built, and generally a part of the furniture and equipment supplied, at state expense through the directorate of public works of the province.

The State also supports many non-official schools, in particular those of the Portuguese Catholic missions. These grants, included in the general provincial budget, are, as a rule, in the form of a lump sum and are administered by the institutions which receive them. Other private schools have their own funds and handle them independently.

All official schools admit free of charge pupils whose study record is satisfactory, but whose parents do not have sufficient means.

Besides this privilege, parents residing far from the school attended by their children may receive a monthly educational allowance from the State if their income and financial resources do not exceed the limits stipulated by the law of their respective province.

Buildings and equipment. Geographical and local conditions vary greatly in the Overseas Provinces, and school building and equipment problems are therefore studied on the spot by specialists of the public works, education and school health services.

School welfare services. Secondary schools have medical services under the supervision of the Departments of School Health and Physical Education. The health services may also provide, when necessary, special staff and equipment (X-ray examinations, malaria tests, etc.). In the principal Overseas Provinces, there are vocational guidance offices which collaborate with the schools.

TYPES OF SECONDARY EDUCATION

On completion of primary school, pupils who wish to continue their studies may choose between general secondary and vocational education. The latter type is divided into three branches: industrial, commercial and agricultural.

There are no regular school guidance services, but rather vocational guidance offices; in provinces where they exist, they can give valuable help about the choice of courses. The law also provides that, at the end of the second year of secondary education, pupils may transfer directly, without losing a year, from general secondary to vocational schools or vice versa.

On completion of secondary education, pupils may take intermediate courses in industrial or commercial institutions, training courses for primary teachers or university courses, or else they may go to special schools (see the diagram of the Portuguese school system, page 977).

The school year comprises the same number of days as in Portugal, but is not distributed in the same way in all provinces owing to differences of climate. Christmas and Easter holidays are observed in every province and the school year is divided into three terms; the duration of each term, the schedule of class hours, the beginning and end of the school year, etc., are determined in each province by the local legislative body.

General secondary schools

The official general secondary schools are the *liceus*. Private institutions providing this form of education are required to observe all the rules of teaching laid down in the regulations governing official schools.

The curricula and internal organization are the same as in Portuguese schools and need not again be described here (see the corresponding section of the chapter on Portugal).

The syllabuses for the various subjects are provided in Decree No. 39807 of 7 September 1954 as applied in overseas territories by the Legislative Decree No. 15108 of 10 November 1954. In accordance with this decree, history courses must include special lessons on events which have occurred in the various Overseas Provinces, and other courses relate to elements and subjects of interest that can be provided by the local region.

Secondary school teachers are trained in the same way throughout Portuguese territory. In addition to a university diploma (*licenciatura*), a good background of general culture and teaching experience are required of candidates for teaching posts. Teaching experience is acquired in a teacher training school over a period of 2 years, after which there is a state examination. In place of a university degree,

teachers of physical education, choral singing and women's work are required to have taken special courses.

Teachers for established posts (*professores*) are normally recruited through a competitive written examination open to those who already hold a state diploma. The competitive examinations are held at the Ministry for Overseas Provinces, and successful candidates are placed on the official list of teachers for overseas secondary schools, and may be sent to any province.

In addition to holders of established posts, temporary teachers who have not taken the state examination may be engaged when the shortage of teachers in a school so requires. Temporary teachers are recruited for the school year in each Overseas Province.

Vocational and technical schools

The official vocational and technical secondary institutions are industrial and commercial schools. Private establishments which provide this training are required to observe all teaching rules contained in regulations governing the official schools.

The curricula and internal organization are essentially the same as for the corresponding types of school in Portugal. The curricula for vocational, industrial and commercial training are given in the Legislative Decree No. 13800 of 12 January 1952 and have been applied in Overseas Provinces by Legislative Decree No. 13887 of 15 March 1952. This decree stipulates that special courses must deal with historical events which have occurred in the various Overseas Provinces; other courses should relate to various elements and subjects of interest that can be provided by the local region; local conditions must be taken into consideration in the exercise of the profession.

Teachers for technical schools are trained in the same way throughout Portuguese territory. In addition to a university diploma, general culture and teaching experience are required. The latter can be acquired during a 2-year probationary period followed by a state examination. The recruitment of teachers (*professores*) is carried out by the same methods as those described above for teachers in *liceus*. Instructors (*mestres*), assistant instructors (*contramestres*) and other staff on the practical side are recruited by means of competitive examinations held in Overseas Provinces.

In addition to permanent teachers, temporary teachers who have not taken the state examination may be employed when there is a shortage of teaching staff. Temporary teachers are recruited for the school year in each province.

Agricultural education at secondary level is now provided in the Province of Angola. In order to adapt the courses to local circumstances and climate, it has been necessary to promulgate special legislation establishing certain standards and giving local legislative authorities broader powers in connexion with this type of education (Decree-Law No. 40799 of 13 October 1956).

The curricula for vocational secondary schools of agriculture has been approved by Legislative Decree No. 14524 and adapted to Overseas Provinces by Legislative Decree No. 16128 of 8 January 1957.

Teacher training schools

There is a teacher training school (*escola normal*) at Goa, which trains teachers for local primary schools; otherwise all teacher training takes place in Portugal.

Out-of-class activities

Most out-of-class activities are conducted by the national youth organization, Mocidade Portuguesa; it maintains a centre of activity in each school, with good-fellowship sections, cultural sections (theatre, films, concerts, libraries, radio, chess, philately, newspapers, etc.), sports sections and others.

TRENDS AND PROBLEMS

There has been a remarkable development of secondary education in Portuguese Overseas Provinces during the last few years; not only have school facilities expanded, but new courses have been provided in existing schools. Moreover, many private institutions have been granted official status.

Practically all large urban centres have either general secondary or industrial and commercial schools, or both.

Agricultural education is shortly to be provided in Mozambique.

[*Text prepared by the Ministry for Overseas Provinces, Lisbon, in July 1960.*]

STATISTICS: ANGOLA

Population (mid-year 1958 estimate): 4,508,000.
Area: 481,352 square miles; 1,246,700 square kilometres.
Population density: 9 per square mile; 4 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment was 91,000, or 2 per cent of the total population. Girls made up 29 per cent of the pupils in primary education, 49 per cent in the general secondary schools, and 28 per cent in the vocational schools. The average number of pupils per teacher was 40 in primary schools, and 26 in the secondary schools. Between 1953 and 1957 pupil enrolment increased by more than 60 per cent, but the number of teachers increased by only 39 per cent, from 1,924 in 1953 to 2,667 in 1957. It should be noted that there were 6 school years during this period, owing to a change which was made in order to bring the school year in Angola into conformity with metropolitan Portugal. (See Table 1.)

Enrolment trends in secondary education, 1930–57. From Table 2 it may be seen that general secondary education was relatively underdeveloped up to 1947; since then enrolment has increased at a rapid pace (between 5 and 10 per cent each year). Vocational education, after fluctuating in enrolment between 1932 and 1952, has been steadily growing since 1953. Average total enrolment and the enrolment ratio have shown rapid increase since the period 1945–49.

Examination results in secondary education, 1954–55. In 1954, 61 general secondary school certificates were awarded, of which 32 to girls. In 1955, the number of successful candidates increased to 151, and included 51 girls. Primary teacher training school certificates were granted to 43 boys in 1954 and 21 boys in 1955.

Educational finance, 1957. For the year 1957, recurring expenditure on education amounted to 43,959,000 escudos, an average of 10 escudos per inhabitant. Official exchange rate: 100 escudos = 3.46 U.S. dollars.

Sources. Portugal: Instituto Nacional de Estatística, *Anuario Estatístico do Ultramar, 1957;* replies to Unesco questionnaires.

1. ANGOLA: SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year [1]	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	175	360	277	14 466	6 683
	Primary schools, private	1957/58	83	490	213	[2] 5 319	[2] 2 697
	Primary mission schools	1957/58	162			5 847	1 312
	Rudimentary education, mission schools	1957/58	1 008	1 275	...	57 428	13 213
	Total	**1957/58**	**1 428**	**2 125**	**...**	**83 060**	**23 905**
	„	1956/57	1 460	2 152	...	69 214	20 927
	„	1955/56	1 371	3 250	...	68 758	23 485
	„	1955	1 283	3 111	...	66 944	22 913
	„	1954	1 190	1 714	435	58 298	16 593
	„	1953/54	1 030	1 598	446	51 407	15 066
Secondary							
General	*Liceus*, public	1957/58	5	108	60	2 457	1 054
	Liceus, private	1957/58	27	172	92	2 248	1 229
	Total	**1957/58**	**32**	**280**	**152**	**4 705**	**2 283**
	„	1956/57	31	268	143	4 043	1 964
	„	1955/56	24	212	121	3 629	1 782
	„	1955	20	192	105	3 120	1 577
	„	1954	22	215	113	2 830	1 372
	„	1953/54	21	189	102	2 582	1 246
Vocational	Industrial and commercial schools, public	1957/58	9	200	73	2 468	689
	Agricultural school, public	1957/58	1	8	—	60	—
	Technical schools, private	1957/58	4	28	6	211	65
	Vocational schools	1957/58	6	26	8	483	157
	Total	**1957/58**	**20**	**262**	**87**	**3 222**	**911**
	„	1956/57	24	250	78	2 840	880
	„	1955/56	25	[3] 180	[3] 53	2 814	768
	„	1955	17	139	35	2 298	602
	„	1954	18	136	40	1 977	508
	„	1953/54	18	137	41	1 651	413
Teacher training	Teacher training schools						
	Total	**1955**	**1**	.	.	**161**	—
	„	1954	2	.	.	120	12
	„	1953/54	1	.	.	121	—

1. The school years shown below refer to the following periods: (1953/54) June 1953–January 1954; (1954) April–November 1954; (1955) February–August 1955; (1955–56) October 1955–June 1956; (1956/57) September 1956–June 1957; (1957/58) September 1957–June 1958.
2. Including pupils of domestic science schools.
3. Not including teachers for five schools of nursing, with a total of 128 (F.45) pupils.

2. ANGOLA: TRENDS IN SECONDARY GENERAL AND VOCATIONAL EDUCATION, 1930–57

School year	Number of students enrolled by type of education				Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational				
	Total	Per cent female	Total	Per cent female			
1930	101	...	...	...			
1931	329	...	...	...			
1932	372	...	867	18	1.3	*200	*0.6*
1933	403	...	819	21			
1934	472	...	816	21			
1935	508	...	790	19			
1936	531	...	889	15	*1.2	250	*0.5*
1937	610	28	477	16			
1938	633	29	621	19			
1939	652	27	...	...			
1940	562	26	485	26			
1941	598	25	674	23	*1.1	300	*0.4*
1942	...	...	623	22			
1943	477	31	380	30			
1944	487	33	552	26			
1945	410	33	551	24			
1946	456	31	459	32	1.9	334	*0.6*
1947	1 959	...	533	30			
1948	2 165	...	531	32			
1949	2 166	...	514	34			
1950	2 195	...	567	31			
1951	2 257	48	1 076	21	3.5	351	*1.0*
1952	2 359	49	920	22			
1953	2 582	48	1 204	24			
1954	2 830	48	1 513	25			
1955	3 120	51	1 830	27	5 8	363	*1.6*
1956	3 629	49	2 335	28			
1957	4 043	49	2 339	33			

STATISTICS: CAPE VERDE ISLANDS

Population (mid-year 1958 estimate): 192,000.
Area: 1,557 square miles; 4,033 square kilometres.
Population density: 123 per square mile; 48 per square kilometre.

Summary of school statistics, 1953–57. In 1957, total enrolment was 11,550, representing 6 per cent of the total population. Nearly 90 per cent of all pupils were enrolled in primary schools. The average number of pupils per teacher was 46 in primary schools, 25 in general secondary schools and 34 in vocational schools. Between 1953 and 1957 there was an overall increase of 42 per cent in pupil enrolment. (See Table 1.)

Enrolment trends in secondary education, 1930–57. Between 1930 and 1947, enrolment fluctuated between 200 and 400 without any discernible trend. Steady increase is shown since 1949, the number of pupils having almost tripled between 1949 and 1957. Together with vocational schools, the average total enrolment for the period 1955–57 represented not quite 6 per cent of the estimated population 15–19 years old. (See Table 2.)

Educational finance, 1957. For the year 1957, recurring expenditure on education amounted to 4,547,000 escudos, an average of about 25 escudos per inhabitant. Official exchange rate: 100 escudos = 3.46 U.S. dollars.

Sources. Portugal: Instituto Nacional de Estatística, *Anuario Estatístico do Ultramar;* Agencia Geral do Ultramar, *Boletim Geral do Ultramar;* replies to Unesco questionnaires.

1. CAPE VERDE ISLANDS: SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	120	154	...	6 632	...
	Primary mission schools, aided private	1957	3	5	...	628	...
	Elementary mission schools, aided private	1957	56	56	...	2 775	...
	Primary schools, unaided private	1957	5	5	...	150	...
	Total	**1957**	**184**	**220**	**...**	**10 185**	**...**
	"	1956	182	216	...	11 290	...
	"	1955	171	205	...	8 359	...
	"	1954	157	...	...	7 535	...
	"	1953	146	...	...	7 032	...
Secondary *General*	*Liceus*, public						
	Total	**1957**	**2**	**36**	**...**	**888**	**...**
	"	1956	2	33	...	892	...
	"	1955	2	22	...	813	...
	"	1954	1	...	...	629	...
	"	1953	1	...	...	630	...
Vocational	Vocational schools, public	1957	3	9	...	233	...
	Agricultural school, aided private	1957	1	2	...	40	...
	Vocational mission school, aided private	1957	1	3	...	204	...
	Total	**1957**	**5**	**14**	**...**	**477**	**...**
	"	1956	5	9	...	470	...
	"	1955	4	7	...	255	...
	"	1954	7	...	...	493	...
	"	1953	5	...	...	481	...

2. CAPE VERDE ISLANDS: TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education				Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational				
	Total	Per cent female	Total	Per cent female			
1930	239	26	...	...	[1]0.27	11	[1]*2.3*
1931	252	29	...	...			
1932	292	...	...	...			
1933	264	28	...	...			
1934	278	28	...	...			
1935	302	26	...	...	[1]0.36	12	[1]*2.9*
1936	366	22	...	...			
1937	393	24	...	...			
1938	373	26	...	...			
1939	388	29	...	...			
1940	396	...	...	...	[1]0.29	14	[1]*2.1*
1941	205	...	...	...			
1942	329	...	...	...			
1943	274	...	...	...			
1944	268	...	...	...			
1945	249	...	...	...	[1]0.28	17	[1]*1.6*
1946	289	...	...	...			
1947	257	...	...	...			
1948	...	...	...	...			
1949	317	...	...	...			
1950	391	...	...	...	1.0	20	*5.1*
1951	484	...	384	...			
1952	591	...	416	...			
1953	630	...	481	...			
1954	629	...	493	...			
1955	813	...	255	...	1.3	23	*5.6*
1956	892	...	470	...			
1957	888	...	477	...			

1. General education only.

STATISTICS: MACAO

Population (mid-year 1958 estimate): 210,000.
Area: 6 square miles; 16 square kilometres.
Population density: 35,000 per square mile; 13,125 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment was 36,451, representing about 18 per cent of the total population; some 97 per cent of these pupils were in private schools. The percentage distribution of enrolment by level and type of education was as follows: pre-primary, 15; primary, 66; secondary general, 12; vocational, 7. The proportion of girls was 43 per cent in primary and general secondary schools, taken together, and 29 per cent in the vocational schools. Between 1953 and 1957 total enrolment increased by 67 per cent. (See Table 1.)

Enrolment trends in secondary education, 1930–57. Table 2 presents figures for 1930–32 and 1937–39 which exclude private secondary schools; these schools are included after 1940. Between 1941 and 1946, there was a serious decline in general secondary school enrolment, owing to circumstances unrelated to the school system. This trend was reversed after 1946, yet the number of pupils in 1957 was still only two-thirds as high as in 1941. In vocational education, the growth of enrolment has been rapid and continuous since 1930. For the latest period 1955–57, the average total in secondary and vocational schools was equal to about 30 per cent of the estimated population 15–19 years old.

Educational finance, 1957. For the year 1957, recurring expenditure for education amounted to 2,289,000 escudos, an average of 11 escudos per inhabitant. Official exchange rate: 100 escudos = 3.46 U.S. dollars.

Source. Portugal: Instituto Nacional de Estatística, *Anuario Estatístico do Ultramar*, 1957; replies to Unesco questionnaires.

1. MACAO: SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Infant school, public	1957	1	7	7	222	101
	Infant schools, private	1957	[1]2	...	...	5 355	2 298
	Total	**1957**	[1]**3**	[2]**7**	[2]**7**	**5 577**	**2 399**
	"	1956	[1]4	[2]6	[2]6	4 183	1 781
	"	1955	[1]4	[2]6	[2]6	3 789	1 593
	"	1954	[1]3	[2]6	[2]6	2 600	1 103
	"	1953	[1]4	[2]6	[2]6	2 115	980
Primary	Elementary primary schools, public	1957	4	38	*25	652	323
	Primary schools, private	1957	119	...	...	23 275	9 864
	Total	**1957**	**123**	[2]**38**	[2]***25**	**23 927**	**10 187**
	"	1956	129	[2]35	[2]25	22 020	8 922
	"	1955	120	[2]35	[2]24	18 950	7 841
	"	1954	106	[2]36	[2]24	15 739	6 556
	"	1953	103	[3]36	[2]24	14 737	5 807
Secondary *General*	*Liceu*, public	1957	1	17	5	153	69
	Secondary schools, private	1957	23	...	...	4 278	1 832
	Total	**1957**	**24**	[2]**17**	[2]**5**	**4 431**	**1 901**
	"	1956	24	[2]16	[2]6	4 612	1 824
	"	1955	21	[2]15	[2]4	3 558	1 380
	"	1954	21	[2]16	[2]5	3 603	1 369
	"	1953	20	[2]16	[2]5	3 408	1 398
Vocational	Commercial and industrial schools, private						
	Total	**1957**	**14**	...	...	**2 516**	**721**
	"	1956	17	...	...	2 136	546
	"	1955	16	...	...	2 253	735
	"	1954	18	...	...	1 771	542
	"	1953	17	...	...	1 600	415

1. Not including private Chinese infant classes attached to primary schools.

2. Public schools only.

2. MACAO: TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education				Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational				
	Total	Per cent female	Total	Per cent female			
1930	122	25	40	50			
1931	102	30	44	46	0.16	22	*0.7*
1932	123	28	43	35			
1937	206	28	82	55			
1938	171	29	106	59	0.28	35	*0.8*
1939	167	22	109	53			
1940	...	...	82	...			
1941	6 704	34	207	25			
1942	5 041	37	205	22	4.6	40	*11*
1943	2 992	36	235	21			
1944	2 725	37	146	29			
1945	3 540	38	677	32			
1946	1 716	38	525	16			
1947	2 077	37	642	25	3.1	*40	*7
1948	1 926	36	653	22			
1949	2 453	37	1 228	24			
1950	3 572	...	1 290	...			
1951	...	...	...	...			
1952	...	...	...	...	*5.1	20	*25
1953	3 408	41	1 600	26			
1954	3 603	38	1 771	31			
1955	3 558	39	2 253	33			
1956	4 612	40	2 136	26	6.5	22	*30*
1957	4 431	43	2 516	29			

1. From 1930 to 1939, not including private schools.

STATISTICS: MOZAMBIQUE

Population (mid-year 1958 estimate): 6,234,000.
Area: 302,329 square miles; 783,030 square kilometres.
Population density: 21 per square mile; 8 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment was 371,324, or 6 per cent of the total population. Of these pupils, 97 per cent were enrolled in primary schools. The proportion of girls, for 1956, was 36 per cent in primary schools, 43 per cent in public secondary schools, and 34 per cent in vocational schools. Apparently no girls were enrolled in teacher training schools, although about 15 per cent of the primary school teachers were women. The average number of pupils per teacher in primary schools has been around 100 or more but in 1957 was only 16 in secondary schools, and 25 in vocational and teacher training schools. Between 1953 and 1957, there was an increase of 82 per cent in primary school enrolment (mostly in the mission schools, which account for 94 per cent of all primary school pupils), an increase of 19 per cent in vocational schools, and of 62 per cent in the teacher training schools. (See Table 1.)

Enrolment trends in secondary education, 1930–57. In the public secondary schools, pupil enrolment increased nearly ninefold between 1930 and 1957, and the proportion of girls increased from 26 per cent in 1930 to 43 per cent in 1956. The development of vocational education has been somewhat uneven during this entire period, but shows an increasing trend on the whole. The average total enrolment in the three types of secondary education—general, vocational and teacher training—but not including the private secondary schools, was slightly over 2 per cent of the population 15–19 years old for the period since 1950. (See Table 2.)

Examination results in secondary education, 1953–57. In 1957, the number of certificates granted for completion of secondary school (*liceu*) was 998, of which 423 were received by girls. In 1953, the number of certificates granted was 415, of which 170 were received by girls. Thus the increase between 1953 and 1957 was about two and a half times, both in the total number of certificates and in the number received by girls. The annual numbers of teacher training certificates (all received by boys) were as follows: 1953, 36; 1954, 20; 1955, 66; 1956, 67; 1957, 75. Information concerning the completion of various vocational courses is incomplete, but for 1957, a total of 325 pupils (of whom 122 girls) passed their final examinations in five of the commercial, industrial and technical schools.

Educational finance, 1957. For the year 1957, recurring expenditure on education amounted to 54,080,000 escudos, an average of about 9 escudos per inhabitant. Official exchange rate: 100 escudos = 3.46 U.S. dollars.

Sources. Portugal: Instituto Nacional de Estatística, *Anuario Estatístico do Ultramar*; Agencia Geral do Ultramar, *Boletim Geral do Ultramar*; replies to Unesco questionnaires. Mozambique: Instruçâo Pública, *Anuario do Ensino.*

1. MOZAMBIQUE: SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	125	419	...	13 019	...
	Primary mission schools, aided private	1957/58	2 605	2 869	...	339 167	...
	Primary schools, unaided private	1957/58	54	118	...	8 445	...
	Total	**1957/58**	**2 784**	**3 406**	...	**360 631**	...
	„	1956/57	2 475	2 999	439	313 442	114 104
	„	1955/56	2 231	2 813	393	260 075	90 563
	„	1954/55	1 781	2 342	344	237 389	82 891
	„	1953/54	1 574	2 008	301	198 609	71 366
Secondary *General*	*Liceus*, public	1957/58	3	85	...	1 831	...
	Secondary mission schools, aided private	1957/58	10	97	...	1 040	...
	Liceus, unaided private	1957/58	3	14	...	248	...
	Total	**1957/58**	**16**	**196**	...	**3 119**	...
	„	1956/57	[1]6	[1]96	[1]49	[1]1 207	[1]523
	„	1955/56	[1]6	[1]126	[1]58	[1]1 082	[1]483
	„	1954/55	[1]6	[1]111	[1]49	[1]988	[1]428
	„	1953/54	[1]6	[1]100	[1]53	[1]956	[1]399

1. Public schools only.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Secondary [cont.]							
Vocational	Vocational schools, public	1957/58	9	171	...	3 206	...
	Vocational schools, aided private	1957/58	65	107	...	3 770	...
	Vocational schools, unaided private	1957/58	3	2	...	46	...
	Total	**1957/58**	**77**	**280**	**...**	**7 022**	**...**
	"	1956/57	69	301	90	7 496	2 549
	"	1955/56	67	282	77	6 747	2 544
	"	1954/55	71	279	83	6 353	2 147
	"	1953/54	67	244	75	5 925	1 901
Teacher training	Teacher training schools, aided private						
	Total	**1957/58**	**6**	**22**	**...**	**552**	**...**
	"	1956/57	5	21	2	360	—
	"	1955/56	4	19	—	341	—
	"	1954/55	4	22	—	352	—
	"	1953/54	4	18	—	341	—

2. MOZAMBIQUE: TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General [1]		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	208	26	1 283	...	...	...			
1931	283	28	2 613	51	...	...			
1932	408	27	2 338	50	...	...	[2]2.4	283	*0.8*
1933	422	25	2 232	39	...	...			
1934	479	26	1 676	29	...	...			
1935	507	26	1 676	26	...	...			
1936	428	29	1 874	25	...	...			
1937	505	31	1 943	24	...	...	[2]2.5	315	*0.8*
1938	557	31	2 174	35	61	—			
1939	471	29	2 343	36	24	—			
1940	545	29	2 722	33	...	...			
1941	528	29	4 074	31	...	...			
1942	614	31	3 173	37	...	...	[2]4.0	348	*1.2*
1943	637	32	3 253	40	17	—			
1944	675	33	3 971	40	28	—			
1945	721	31	5 351	31	32	—			
1946	744	31	4 768	41	83	—			
1947	793	34	4 566	36	174	—	6.0	369	*1.6*
1948	787	38	4 469	...	181	—			
1949	784	35	6 395	30	298	—			
1950	845	38	8 564	26	178	—			
1951	902	40	9 727	17	215	—			
1952	933	41	7 290	22	258	—	8.8	403	*2.2*
1953	956	42	5 925	32	341	—			
1954	988	43	6 353	34	352	—			
1955	1 082	45	6 747	38	441	—			
1956	1 207	43	7 496	34	360	—	8.9	421	*2.1*
1957	1 831	...	7 022	...	552	...			

1. Public schools only.

2. General and vocational only.

STATISTICS: PORTUGUESE GUINEA

Population (mid-year 1958 estimate): 559,000.
Area: 13,948 square miles; 36,125 square kilometres.
Population density: 40 per square mile; 15 per square kilometre.

Summary of school statistics, 1953–57. In 1957, total enrolment was 11,541, representing 2.1 per cent of the total population. Of these pupils, 97 per cent were enrolled in primary schools. The pupil-teacher ratio was 62 in primary schools and 17 in the secondary schools. Between 1954 and 1957 enrolment increased by 64 per cent in primary schools and by 50 per cent in general and vocational secondary schools. (See table.)

Enrolment trends in secondary education, 1950–57. From 1950 to 1957 the number of pupils in the one private general secondary school increased from 46 to 239, while enrolment in the vocational schools over the same period increased from 67 to 160. When related to the estimated population 15–19 years old, the average total secondary enrolment gives a ratio of less than 1 per cent.

Educational finance, 1957. For the year 1957, recurring expenditure on education amounted to 1,340,000 escudos, an average of 2.4 escudos per inhabitant. Official exchange rate: 100 escudos = 3.46 U.S. dollars.

Sources. Portugal: Instituto Nacional de Estatística, *Anuario Estatístico do Ultramar*, 1950 to 1957; *Anuario do Imperio Colonial*, 1947/48 and 1949; Agencia Geral do Ultramar, *Boletim Geral do Ultramar;* replies to Unesco questionnaires.

PORTUGUESE GUINEA: SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	11	31	...	741	...
	Primary and rural mission schools, aided private	1957	150	150	...	10 401	...
	Total	**1957**	**161**	**181**	**...**	**11 142**	**...**
	"	1956	136	169	...	10 178	...
	"	1955	145	305	...	9 573	...
	"	1954	122	...	...	6 811	...
	"	1953	[1]60	...	...	[1]3 150	...
Secondary							
General	*Liceu*, aided private						
	Total	**1957**	**1**	**14**	**...**	**239**	**...**
	"	1956	1	13	...	192	...
	"	1955	1	13	...	171	...
	"	1954	1	...	...	148	...
	"	1953	1	...	...	133	...
Vocational	Vocational mission schools, aided private						
	Total	**1957**	**6**	**10**	**...**	**160**	**...**
	"	1956	5	7	...	117	...
	"	1955	4	6	...	121	...
	"	1954	4	...	...	118	...
	"	1953	3	...	...	92	...

1. Not including rural mission schools.

STATISTICS: PORTUGUESE INDIA

Population (mid-year 1958 estimate): 649,000.
Area: 1,619 square miles; 4,194 square kilometres.
Population density: 401 per square mile; 155 per square kilometre.

Summary of school statistics, 1943–57. In 1957/58, enrolment in all schools except primary and secondary schools for the foreign population and private vocational schools was reported at 27,393 pupils. On the basis of figures for 1954/55 it may be assumed that the 1957/58 enrolment in the schools not accounted for was around 25,000. Total enrolment in 1957/58 may therefore be estimated at about 8 per cent of the total population. Of the reported enrolment 92 per cent was in primary education. The proportion of girls was 44 per cent in primary schools, 31 per cent in general secondary schools, 23 per cent in vocational schools and 33 per cent in higher education (including teacher training). Women teachers were 55 per cent of the teaching staff in primary schools and 17 per cent in secondary schools. Average number of pupils per teacher was 27 in the primary schools and 22 in the secondary schools.

Between 1953 and 1957, total enrolment increased by 38 per cent in primary schools and by 20 per cent in all types of secondary schools, general and vocational. (See Table 2.)

Enrolment trends in secondary education, 1948–57. In these 10 years, enrolment in general secondary schools more than doubled. There was a sudden drop in vocational school enrolment in 1951, which had not been recovered by 1957. Average total enrolment, and the enrolment ratio, showed an increase of over 60 per cent between the period 1948–49 and the period 1955–57. (See Table 1.)

Examination results in secondary education, 1953–57. In 1953, there were 51 certificates granted for the completion of secondary school, third cycle. Girls received only 5 of these certificates. The total number of such certificates awarded in 1957 rose to 110, of which 25 were received by girls. The number of certificates granted for the second cycle of secondary school increased from 121 (of which 25 to girls) in 1953 to 148 (of which 39 to girls) in 1955.

Educational finance, 1958. In the fiscal year beginning in January 1958, the state budget allocated 19.5 million escudos for education, averaging about 30 escudos per inhabitant. Recurring expenditure was 89 per cent of this total. It was distributed by level and type of education as shown in Table 3B.

Source. Portugal: Instituto Nacional de Estatística, reply to Unesco questionnaire.

1. PORTUGUESE INDIA: TRENDS IN SECONDARY EDUCATION, 1948–57

School year	Number of students enrolled by type of education				Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General [1]		Vocational [2]				
	Total	Per cent female	Total	Per cent female			
1948	762	17	419	8	1.2	59	*2.0*
1949	675	19	460	19			
1950	686	21	597	18	1.2	59	*2.1*
1951	895	23	30	—			
1952	934	26	—	—			
1953	1 477	25	144	20			
1954	1 295	26	173	27			
1955	1 531	23	218	19	1.9	59	*3.3*
1956	1 837	29	294	20			
1957	1 600	31	346	23			

1. Not including secondary schools for foreign population (12,010 pupils in 1954/55).

2. Not including private vocational schools (644 pupils in 1954/55).

2. PORTUGUESE INDIA: SUMMARY OF SCHOOL STATISTICS, 1953–57[1]

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	161	316	168	15 661	6 485
	Primary schools, private	1957/58	8	16	5	770	242
	Elementary schools, private	1957/58	157	603	337	8 820	4 405
	Total	**1957/58**	**326**	**935**	**510**	**25 251**	**11 132**
	,,	1956/57	317	572	239	22 676	9 022
	,,	1955/56	310	548	208	20 191	7 928
	,,	1954/55	358	473	138	19 639	8 629
	,,	1953/54	358	477	141	18 265	8 207
Secondary							
General	*Liceu*, public	1957/58	1	29	4	986	321
	Secondary schools, private	1957/58	3	13	—	614	170
	Total	**1957/58**	**4**	**42**	**4**	**1 600**	**491**
	,,	1956/57	4	49	6	1 837	523
	,,	1955/56	4	49	7	1 531	359
	,,	1954/55	3	40	6	1 295	334
	,,	1953/54	4	38	6	1 477	367
Vocational	Industrial and commercial school, public	1957/58	1	23	7	172	24
	Technical schools, public	1957/58	3	25	4	174	57
	Total	**1957/58**	**4**	**48**	**11**	**346**	**81**
	,,	1956/57	4	40	7	294	58
	,,	1955/56	4	38	7	218	42
	,,	1954/55	4	35	7	173	46
	,,	1953/54	4	37	7	144	29
Higher							
Teacher training	Teacher training school, public						
	Total	**1957/58**	**1**	**3**	**2**	**59**	**48**
	,,	1956/57	1	3	2	29	25
	,,	1955/56	1	4	2	34	32
	,,	1954/55	1	4	3	36	32
	,,	1953/54	1	4	3	21	17
Technical	School of medicine, public						
	Total	**1957/58**	**1**	**17**	**3**	**137**	**16**
	,,	1956/57	1	19	3	114	14
	,,	1955/56	1	19	3	126	15
	,,	1954/55	1	19	2	154	16
	,,	1953/54	1	20	4	178	9

1. Not including primary schools for foreign population (12,699 pupils in 1954/55), secondary schools for foreign population (12,010 pupils in 1954/55) and private vocational schools (644 pupils in 1954/55).

3. PORTUGUESE INDIA: EDUCATIONAL FINANCE, 1958
(in thousand escudos)[1]

A. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**19 546**
Recurring expenditure		17 375
For central administration	1 938	
For instruction		
Salaries to teachers, etc.	11 943	
Other instructional expenditure	1 568	
Other recurring expenditure	1 926	
Capital expenditure		2 171
Educational facilities	2 114	
Auxiliary facilities	57	

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**17 375**		**100.0**
Central administration		1 938		11.1
Instruction		13 511		77.8
Primary education	5 657		32.6	
Secondary education	5 044		29.0	
General	2 179		12.5	
Vocational	2 865		16.5	
Higher education	2 174		12.5	
Other education, not specified	636		3.7	
Other recurring expenditure		1 926		11.1
Hygiene, health, etc.	1 342		7.7	
Supplies	194		1.1	
Miscellaneous	390		2.3	

1. Official exchange rate: 100 escudos = 3.46 U.S. dollars.

2. State budget estimate for public and private education.

STATISTICS: SÃO TOMÉ AND PRINCIPE

Population (mid-year 1958 estimate): 62,000.
Area: 372 square miles; 964 square kilometres.
Population density: 167 per square mile; 64 per square kilometre.

Summary of school statistics, 1953–57. In 1957, pupil enrolment in 20 primary and 2 secondary schools reached a total of 4,000, representing about 6 per cent of the total population. The proportion of girls was 31 per cent in primary schools and 41 per cent in secondary schools. Of all pupils 94 per cent were in the primary schools, where the average pupil-teacher ratio was 74; in the secondary schools, there were only 11 pupils per teacher. Between 1953 and 1957, there was a 23 per cent increase in total enrolment, but the number of girls going to school increased by 44 per cent. (See Table 2.)

Educational finance, 1957. In the fiscal year beginning in January 1957, total expenditure for education amounted to 1,879,383 escudos, averaging 30 escudos per inhabitant. Of this amount, 93 per cent was recurring expenditure (including 87 per cent for salaries, and 1.4 per cent for central administration), and 7 per cent was capital expenditure. The amount spent for primary education was 1.3 million escudos, or 72 per cent of the total, while 28 per cent was spent for secondary education. (See Table 1.)

Source. Portugal: Instituto Nacional de Estatística, reply to Unesco questionnaire.

1. SÃO TOMÉ AND PRINCIPE: EDUCATIONAL FINANCE, 1957 (in escudos)[1]

Expenditure by purpose	Amount
Total expenditure	**[2]1 879 383**
Recurring expenditure	1 753 383
For central administration	24 000
For salaries to teachers, etc.	1 644 417
Other recurring expenditure	84 966
Capital expenditure	126 000

1. Official exchange rate: 100 escudos = 3.46 U.S. dollars.
2. Of this amount, the expenditure for primary education was 1,345,597 escudos and for secondary education 533,786 escudos.

2. SÃO TOMÉ AND PRINCIPE: SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	11	36	35	2 651	877
	Mission primary schools	1957	8	12	2	875	239
	Other primary schools, private	1957	1	3	2	246	69
	Total	**1957**	**20**	**51**	**39**	**3 772**	**1 185**
	„	1956	21	51	39	4 204	1 290
	„	1955	21	44	32	3 506	1 028
	„	1954	17	38	30	3 096	843
	„	1953	18	42	29	3 133	847
Secondary							
General	*Liceu*, private						
	Total	**1957**	**1**	**15**	**5**	**125**	**56**
	„	1956	1	9	3	84	29
	„	1955	1	9	3	92	33
	„	1954	1	6	2	35	9
	„	1953	1	8	2	44	16
Vocational	Arts and crafts school, private						
	Total	**1957**	**1**	**6**	—	**104**	—
	„	1956	1	6	—	63	—
	„	1955	1	5	—	63	—
	„	1954	1	5	—	69	—
	„	1953	1	6	—	75	—

STATISTICS: TIMOR

Population (mid-year 1958 estimate): 490,000.
Area: 5,763 square miles; 14,925 square kilometres.
Population density: 85 per square mile; 33 per square kilometre.

Summary of school statistics, 1953–57. In 1957, the total number of pupils enrolled in primary and secondary schools (not including private schools for the foreign population) was 5,572, which was slightly over 1 per cent of the total population; 27 per cent of these pupils were girls. The average number of pupils per teacher was 36 in primary schools and 13 in the secondary schools. Between 1953 and 1957 there was a decrease of 2 per cent in the total enrolment reported. (See Table 2.)

Educational finance, 1957. For the year 1957, total expenditure for public primary and secondary schools amounted to 1,151,000 escudos, averaging 2.3 escudos per inhabitant. This total amount was distributed as follows: recurring expenditure, 94 per cent (of which 66 per cent for salaries to teachers, and 7 per cent for central administration); capital expenditure (for equipment), 6 per cent. (See Table 1.)

Source. Portugal: Instituto Nacional de Estatística, reply to Unesco questionnaire.

1. TIMOR: EDUCATIONAL FINANCE, 1957
(in thousand escudos)[1]

Expenditure by purpose		Amount
Total expenditure[2]		**1 151**
Recurring expenditure		1 082
For central administration	85	
For salaries to teachers, etc.	761	
Other recurring expenditure	236	
Capital expenditure (equipment)	69	

1. Official exchange rate: 100 escudos = 3.46 U.S. dollars.
2. Expenditure for public primary and secondary schools.

2. TIMOR: SUMMARY OF SCHOOL STATISTICS, 1953–57[1]

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	2	5	5	154	63
	Primary schools, private	1957	15	30	5	789	330
	Mission primary schools	1957	71	115	38	4 391	1 046
	Total	**1957**	**88**	**150**	**48**	**5 334**	**1 439**
	,,	1956	87	204	69	5 803	1 587
	,,	1955	93	220	67	6 462	1 650
	,,	1954	90	230	74	5 438	1 275
	,,	1953	127	198	57	5 603	1 379
Secondary	*Liceu*, public	1957	1	8	3	110	25
	Liceu, private	1957	1	4	1	69	28
	Ecclesiastical school	1957	1	6	—	59	—
	Total	**1957**	**3**	**18**	**4**	**238**	**53**
	,,	1956	4	19	3	230	30
	,,	1955	4	20	2	207	27
	,,	1954	6	19	5	220	39
	,,	1953	3	10	3	107	14

1. Data for foreign schools have not been included in this table.

QATAR

THE EDUCATIONAL SYSTEM

There are three levels of education in Qatar: primary, for boys and girls, a 6-year course; preparatory (or intermediate), for boys, a 3-year course; secondary, for boys, a 3-year course.

The Government of Qatar is at present devoting considerable attention to the development of primary education, as a means of abolishing illiteracy and laying the educational foundations of a new society. It seeks to encourage this branch of education by: (a) opening a primary school in every village in which there is a sufficient number of boys and girls of school age to justify it; (b) supplying pupils with textbooks, stationery and all other requisites; (c) providing them with full lunches daily; (d) supplying them with winter and summer clothes; (e) offering them all kinds of medical care; (f) transporting pupils and teachers to and from school in government vehicles; (g) providing board and lodging for all expatriate pupils and pupils whose circumstances prevent their enjoying a stable home life.

All these services are provided free of charge. Moreover, from the fourth primary year upwards pupils receive government bursaries, with graded increments as they are transferred to higher classes.

The primary course lasts 6 school years. The age of admission is normally 6 years but pupils of either sex may be accepted after their fifth birthday if there are vacancies.

The curricula, syllabuses and examination system in primary education are those adopted in the Arab League States under the Cultural Agreement of the League, with such modifications as local circumstances in Qatar render necessary. A pupil is promoted to a higher grade if he passes his examinations in all but two subjects.

Attendance at primary schools is increasing rapidly from year to year. Increasing prosperity is enabling the people of Qatar to dispense with the financial aid that their children used to give them, and their cultural progress helps them to appreciate better the importance of the education of girls. This may help to explain the substantial increase in primary school enrolments in both sexes.

Administration

As the Department of Education cannot supervise the village schools directly because of their remoteness, government supervisors have been appointed in each area outside the capital, and some of the powers of the central administration in matters of administrative inspection and technical supervision of schools and teachers are delegated to these officials. The question is under study of giving such supervisors wider powers in order to derive the full benefit from decentralization.

Central supervision of all schools is in the hands of specialized technical and administrative inspectors, who are under the control of the Director of Education. Thus the schools are systematically inspected with reference to administration, financial affairs, methods of teaching, and school activities. There is also a woman inspector of girls' education, who is directly responsible for inspection and liaison between girls' schools and the Department.

TYPES OF SECONDARY EDUCATION

At the end of the primary course pupils sit a general examination held under the supervision of the Department of Education; the examination subjects are religious knowledge, Arabic, arithmetic, science, social studies, and handicrafts. Successful candidates receive an official diploma known as the Primary School Certificate, which is the basic qualification for continuing their studies.

Secondary education, defined for the purposes of this survey as education from the ages of 11 or 12 to 18 or 19 years, in fact corresponds to two distinct levels in the educational system of Qatar and other Arab countries: a lower secondary level known as preparatory or intermediate education and an upper secondary level or secondary education properly so called.

Preparatory education. Since in the early years of secondary schooling the pupils are not sufficiently mature either physically or mentally to make a satisfactory choice of career or future training, it was decided to create an intermediate level of education following on from the primary, in order to allow time for their personalities to develop. During this stage the pupil and those in charge of him have a better opportunity to discover the type of studies he should pursue at the next level.

In more detail, the objectives of preparatory education are: (a) to ensure that those who leave school at the end of this stage have a fund of knowledge and experience that will be of help to them in practical life; (b) to help discover the pupils' interests and aptitudes and properly develop and direct them; (c) to equip pupils with the knowledge and skills they will need as a basis for theoretical secondary studies.

The subjects taught include religious knowledge, Arabic, English, mathematics, social studies, science, art, physical exercises, and hobbies. Instruction is given by specialized subject teachers who, like the secondary school teachers, are graduates of universities or other institutions of higher education.

The same facilities as were mentioned earlier are provided free of charge to the pupils at this level. Their allowances are increased whenever they pass into a higher grade.

At the end of this stage the pupils take a general examination which is held under the supervision of the Department of Education. They are examined in the subjects listed above (with the exception of physical education

and hobbies). Those who pass receive an official diploma called the Preparatory School Certificate.

Secondary education. The subjects and syllabuses for the first year, like those of the preparatory level, are taken by all pupils and include religious knowledge, Arabic, English, various branches of social studies, science, and mathematics, art, physical training and hobbies. By the time they pass the examination for the second grade, they will have shown in what direction their tastes and abilities lie and will be ready to move on to the science or the arts side.

Not all the subjects on the science side are scientific, nor are all those on the arts side 'arts' subjects, although each stream is predominantly what its name indicates it to be, from the point of view of the type and number of subjects prescribed. Thus pupils on the science side devote comparatively little time to religious instruction, Arabic, and social studies, but have extensive courses in such subjects as chemistry, physics, biology, and the various branches of mathematics. Pupils of the arts side, on the other hand, take brief courses in science subjects and extensive ones in Arabic and English and social studies—geography, history, sociology, psychology, and logic.

This tendency towards specialization helps the pupil to choose the university course that best suits his abilities and gives him a sound preparation for higher study. Furthermore the fact that the syllabuses are framed on principles laid down by the competent committees of the League of Arab States ensures that pupils leaving secondary school will have no difficulty in enrolling in the universities of the Arab States.

At the end of this stage the pupils sit a general examination organized and supervised by the Department of Education which is, naturally, different for arts and science candidates. Successful candidates are awarded a diploma called the Secondary School Certificate.

The Trades and Vocational Training School. This is a technical school at present open to pupils who have passed the examination for entry to the fifth grade of primary school. It is planned to raise the standard of qualification for admission year by year, and in two years' time candidates will have to hold the Primary School Certificate.

The purpose of the school is to remedy the shortage of manpower in some occupations in the developing economy of Qatar by turning out a class of technicians with a reasonable education combined with sufficient manual skill and experience in such trades as motor-car mechanics, carpentry, blacksmithing, electricity, metal-working, lathework and welding, of which the oil company factories and public works are in urgent need.

The school and its curricula are organized with this aim directly in view. It has six main sections, in addition to some sub-sections. At the outset the pupils receive general vocational instruction and then begin to specialize in the fields they are interested in. They study the theoretical side of their trade in class and the practical side in the workshops. They also receive instruction in some general educational subjects which they require at this level, such as religious knowledge, Arabic, English, civics, arithmetic, technology, and technical drawing. Care has been taken to ensure that tuition in the four arts subjects provides exactly what the pupils need, from the standpoint of the type of course and the number of class-hours devoted to it; naturally fewer arts subjects are studied here than by pupils at the preparatory level.

At the end of the school year the pupils take a theoretical and a practical examination. At the end of the 3 years' course, the pupils sit a general examination organized and supervised by the Department of Education. Successful candidates are awarded a diploma called the Industrial Education Certificate.

TRENDS AND PROBLEMS

The main problem is the shortage of native teachers. A simple solution has been to employ nationals of other Arab countries and these teachers have proved a great success. The need for expatriate staff will gradually disappear with the spread of education in Qatar and the opening of teacher training schools for both sexes.

Another problem is the provision of education for the many adults who had no opportunity of attending school or were not educated beyond primary level; this is being tackled by opening primary and secondary evening schools.

[*Text prepared by Mustafa M. al-Dabbagh, Director of Education, Doha, in February 1960.*]

STATISTICS: QATAR

Population (mid-year 1958 estimate): 40,000.
Area: 8,500 square miles; 22,014 square kilometres.
Population density: 5 per square mile; 2 per square kilometre.

Summary of school statistics, 1957. Only very limited data are available. In 1957 there were 16 kindergartens, 3 primary schools and 1 secondary school enrolling approximately 1,550 pupils. A vocational education centre and a school for girls were also opened in 1957 but details are not available.

Source. *The Middle East 1959*, Europa Publications Limited, London.

RUMANIA

THE EDUCATIONAL SYSTEM

The educational policy of the Government is laid down in Article 80 of the Constitution of the Rumanian People's Republic:

'Every citizen has the right to education.

'This right is guaranteed through general, free and compulsory primary education; through the system of state scholarships for deserving students and pupils in higher, secondary and primary educational establishments; and through the organization, in industrial firms, state enterprises, machine and tractor stations and collective farms, of free vocational education for workers.'

Education at all levels is a responsibility of the State, as is also the development of science, literature and arts.

Previous Rumanian constitutions had also proclaimed the right to education, but only those children whose parents were able to pay school fees and to meet the costs of schooling actually enjoyed this right. Consequently, the educational level in Rumania was one of the lowest in Europe, and in 1948 there were more than 4 million illiterates or semi-literates in the country—almost a quarter of the population. The People's Democratic Government ensures that all the material conditions necessary for the enjoyment of the right to education exist.

Education in the People's Republic is governed at every stage by the Education Reform Act of 3 August 1948. Under this Act the State assumed complete charge of education and all private schools were abolished.

All Rumanian citizens, without distinction of nationality, sex, religion or class have the same right to education. The organization and the curricula of the schools are uniform; thus pupils are able to continue their studies in higher schools and pass from one category of school to another. Education is laic, realist and scientific. Instruction is given in the mother tongue of the children. Curricula and textbooks are standard and compulsory for schools of the same type. Free and compulsory education (7 years' schooling) is guaranteed through the existence of a widespread network of day and boarding schools and by the grant of scholarships to pupils.

The structure of Rumanian education is shown in the diagram on page 1005. The various types of school may be categorized as follows: crèches and day nurseries for children not over the age of 3 years; pre-primary establishments (kindergartens and nursery schools) for children between 3 and 6 years; primary schools (elementary)—schools giving a 4-year course (classes I to IV) for children between the ages of 7 and 11 years; schools giving a 7-year course the upper classes of which (V to VIII) form the first cycle of secondary education (children between 11 and 14 years); secondary schools (properly so called)—general secondary schools (classes VIII to XI) for adolescents between 15 and 18 years; vocational and technical schools (courses lasting from 2 to 4 years) for adolescents between 15 and 18 years; teacher training schools; higher educational establishments—universities and institutes.

Role of public authorities

The Ministry of Education and Culture is responsible for the general organization, control and orientation of education. The Department of Higher Education of this Ministry has direct control over all post-secondary institutions. Schools of general education (classes I to XI), teacher training schools, trade schools, agricultural schools and pre-primary schools are organized and administered by the People's Councils (local government authorities). When taking any measures in connexion with education these councils are directed, supervised and guided by the Schools Department of the Ministry of Education and Culture.

Vocational and technical schools are organized and supported by the competent ministries and central authorities. The Ministry of Education and Culture is in charge of the co-ordination of this category of schools and supervises the teaching.

Crèches and day nurseries are organized and administered by the Ministry of Health and Social Welfare.

THE DEVELOPMENT OF SECONDARY EDUCATION

The development of the general secondary school provides a good illustration of the changes that have taken place in the functions and status of the various kinds of secondary schools at different periods in Rumanian history.

This type of school first appeared in Rumania towards the middle of the nineteenth century in the form of the *gimnaziu*. The courses lasted 4 years and the school admitted pupils who had completed primary school. The number of schools of this type was greatly increased, and a higher cycle (the *liceu*) was added to the 4-year course (which thus became the lower cycle). The purpose of this secondary school was to form the elite of the ruling classes and it was the object of the great solicitude of the bourgeois society. The majority of the pupils belonged to the well-to-do classes.

General secondary schools were reorganized on several occasions, always with the purpose of adapting the youth of the country to the needs of the social life of the period. The practical effect of these reforms was to be found in the addition of literary and scientific sections to the classical *liceu*. But whatever its curriculum or title the secondary school of the past was accessible only to a restricted number of children and merely served as a preparation for higher education. The training of the higher ranks qualified to satisfy the demands of the economic, cultural and public life of the country was subject to obtaining the secondary

school leaving certificate. In view of its curriculum and conditions of work the general secondary school had only a limited influence on the cultural life of the country.

The educational reforms of 1948 remedied these faults and laid the foundations for a system of general secondary education in accordance with the cultural interests of the people and the needs of the new society in process of construction in the Rumanian People's Republic—the socialist society.

Technical and vocational education. Before the establishment of the People's Democracy in Rumania, the training of qualified workers was usually a haphazard affair. Most workers in industry, and in agriculture even more, were illiterate or had received only the most rudimentary education. The apprenticeship schools, the vocational schools, the elementary trades schools and commercial schools trained only a very limited number of workers, if the needs of the country's economic structure are considered. These schools were open to children who had completed 4 years of primary school. The courses were short, usually one or two years; they were mainly held in the evening and were of a very low standard. There were some advanced industrial, agricultural and commercial schools which had four lower and four upper classes, but they were very few in number and usually they were concerned only with training the teaching staff required for the various elementary vocational schools. After the 1936 reorganization, these advanced schools were given the name of industrial or commercial secondary schools, although the prospects they offered their pupils were no greater than in the past and successful pupils were given no opportunity to study at a higher establishment. Consequently, the vocational education given in trades schools—the only form of education open to working-class children—was in fact a dead end and blocked any opportunity of further study.

The present system of education for skilled workers and medium grade technicians was established by the Education Reform Act and improved later by decisions of the Council of Ministers in 1955 and 1957.

Administration

The main features of educational administration have been outlined in the section dealing with the educational system as a whole.

The Ministry of Education and Culture, acting through the inspectors-general, each with respect to his particular branch, is responsible for the general supervision and direction of general and technical secondary education. The inspectors-general are recruited from among the more competent teachers with a long period of practical experience. They may inspect the educational establishments of the regional and district People's Councils and the teaching authorities and staff of schools administered by the Ministry of Education and Culture as well as the vocational and technical secondary schools within the jurisdiction of other ministries.

The education departments of the regional and district People's Councils, acting through their own inspectors and specialists in teaching methodology, exercise complete supervision of the secondary schools under the Ministry of Education and Culture. They also supervise the teaching in the schools which come under the other ministries and central authorities, but the technical supervision in these schools is the responsibility of inspectors belonging to the respective ministries and authorities.

Finance. General and vocational secondary education is financed out of the central government, regional, district and local budgets. The sums necessary are assessed on the basis of government scales. The use to which the funds allocated are to be put is defined by legislation. The monies provided by the state budget are used for the payment of teachers' salaries, the construction of school buildings, the purchase of school furniture and equipment, teaching material, etc.

The State grants a large number of scholarships to pupils. Pupils of vocational schools receive free board and a sum equivalent to 50 per cent of the wage allocated for the work they do. At other types of secondary school, there is a high proportion of scholarship holders, viz. 31.4 per cent of the pupils in technical schools and 35.3 per cent of the students at teacher training schools. The number of scholarships granted to pupils in classes V to VII amounts to 19,108.

Education in the 7-year schools is entirely free and only a small number of pupils at other types of secondary school pay any fees, which are in any event very modest. The fees are assessed on the basis of the income of the parents and the pupils' reports.

When the schools are under construction the specifications laid down by the Ministry with respect to space, light, heating, sanitary installations and safety must be adhered to.

Medical treatment is free for pupils and teachers. It is provided by the Ministry of Health and the Ministry of Education and Culture, which supply the necessary funds and have established a network of health centres.

TYPES OF SECONDARY EDUCATION

To guide pupils at 7-year schools and their parents in the choice of a secondary school or occupation, various means are used: manual training classes in classes I to IV; employment in workshops (carpentry, metalwork) and instruction in the rudiments of industrial production in classes V to VII of urban schools; practical work on experimental farms and instruction in the rudiments of agricultural production in classes V to VII of rural schools; and organized visits to undertakings, factories, engineering works, machine and tractor stations, state farms, collective farms, building yards, etc. Six days are set aside annually for such visits.

On the basis of instructions issued by the Ministry of Education and Culture and the vocational and technical guidance office, teachers at the 7-year schools and general secondary schools organize pupils' discussions on the various sectors of the national economy and the characteristics of the different trades and occupations and arrange for conducted visits to factories and establishments of higher education. These visits take place on dates fixed by the factories and schools, usually in spring, and they

continue until the end of the school year. The aim is to give vocational guidance to the pupils. During these visits, the pupils are given a description of the type of activity carried on in the undertakings, their share in the national economy, the training required for the exercise of a particular trade or occupation and the satisfaction to be obtained from such employment; the names and achievements of outstanding workers are published. Parents may accompany their children on such visits. Other methods used are literary meetings, debates on current problems, seminars, meetings with workers and technicians, etc. Participation in productive work, in the two weeks before the end of the school year, also helps the children to decide on their vocational objectives.

The People's Democratic Government is paying special attention to improving the living and working conditions of pupils at general and vocational secondary schools. All vocational, technical and teachers' schools, all art schools and some of the general secondary schools are provided with boarding accommodation and canteens. The material means allocated for secondary education have been considerably increased since the establishment of the People's Democracy. New schools and boarding schools are constantly being constructed. From the date of the first five-year plan, large sums have been set aside for school buildings and equipment.

All pupils leaving school after the full 11-year course, whether at a technical or teachers' school or any other school of equivalent level, may enrol at any type of higher educational establishment provided that they pass the entrance examination.

At general secondary schools and teacher schools the year begins on 15 September and ends on 30 June. There are three terms of equal length. After the first and second terms pupils are given a fortnight's holiday and the principal holiday, lasting two and a half months, follows the end of the third term. There are six school days a week, and classes take up five or six hours daily.

At vocational and technical schools, the year begins on 1 September, ends on 30 June and is divided into two terms. There is a fortnight's holiday after the first term and a two-month summer holiday after the second.

General secondary schools

In the Rumanian People's Republic, the school providing a 7-year course of study (the incomplete secondary school) gradually developed after 1948; it became a general and compulsory type of school firstly in the cities and, after 1955, at workers' centres and in the chief towns of the districts. After the 1958/59 school year, under a decision of the Council of Ministers in August 1958, the 7-year cycle became general and compulsory for all children in the rural areas in which such schools were situated. Today, illiteracy among the masses in Rumania has been eliminated. All children of school age attend classes I to IV and 85 per cent of them then pass into class V. In conformity with the state plan, the 7-year school period will become the general rule throughout the country within the next few years. Thus, whereas in 1938 the *gimnaziu* classes were attended by only 119,110 pupils, today the first cycle of the general secondary school (classes V to VII) is open to the whole population. The number of pupils who have completed 4 years of elementary school and are attending the courses in classes V to VII is at present 501,260. Under the present system, the 7-year school is not subject to the limitations of the former *gimnaziu* which merely prepared pupils for the *liceu* or higher secondary school; it is now the principal institution for mass education giving every child and every citizen the opportunity to acquire a further general and technical education.

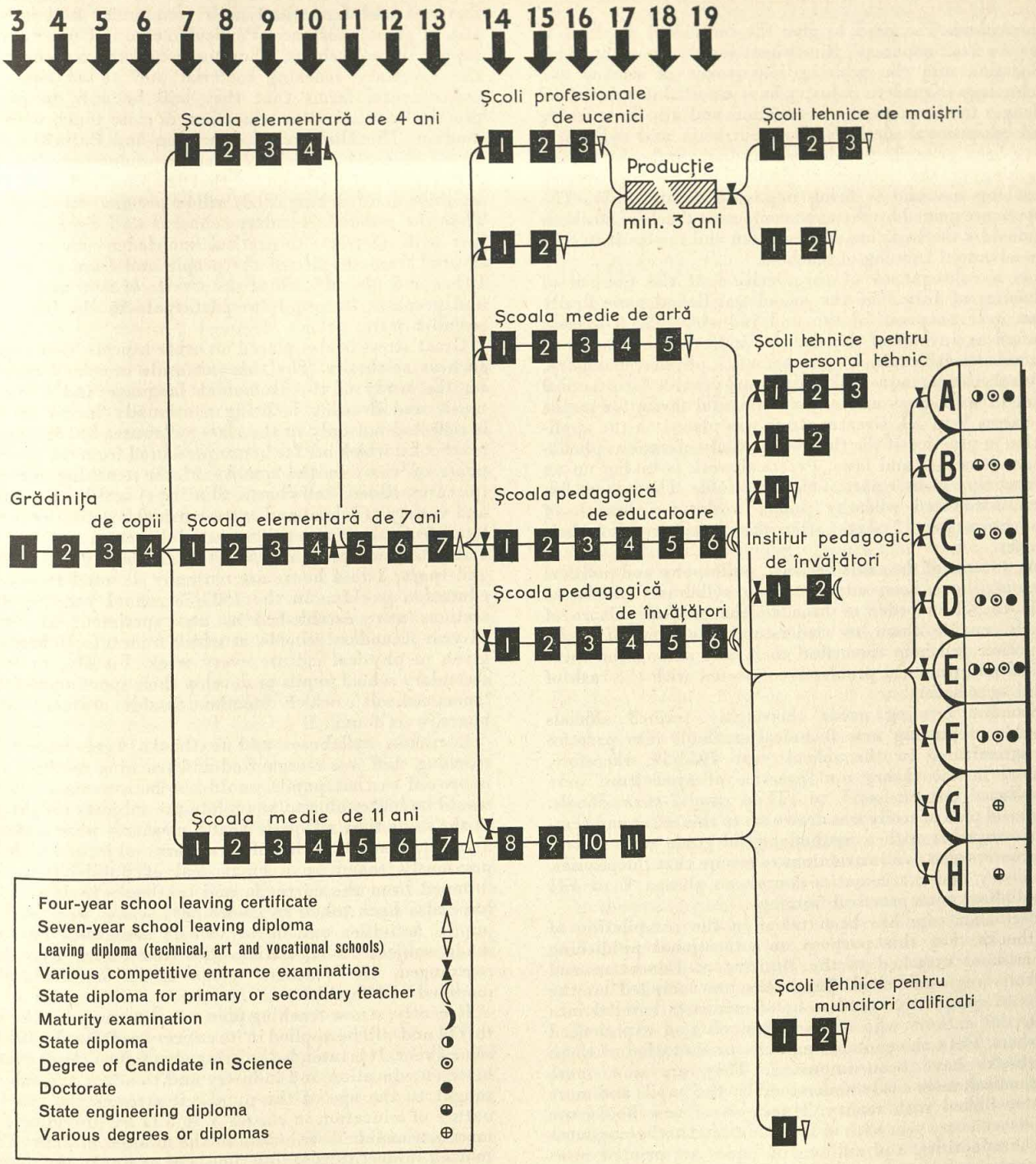
The second cycle of general secondary education (classes VIII to XI) also greatly expanded after the establishment of the People's Democracy. In 1938 Rumania possessed only 211 full secondary schools (*liceu*) attended by 29,004 pupils. Today there are 454 general secondary schools with an attendance of 181,069 pupils, i.e., six times as many as in 1938. The number of persons today who have completed their general secondary education is far in excess of the needs of higher education and of the country's needs in the higher ranks. Unlike the former *liceu*, the general secondary school is no longer exclusively a means of access to higher education; indeed, the majority of the students who terminate their general secondary studies and obtain a Maturity (secondary school leaving) certificate go on

GLOSSARY

grădiniţa de copii (kindergarten): pre-primary school.
institut pedagogic de învăţători: teacher training college.
producţie min. 3 ani: employment in industry for at least three years.
şcoala elementară de 4 ani: 4-year primary school.
şcoala elementară de 7 ani: 7-year school covering primary and lower secondary cycles.
şcoala medie de 11 ani (middle school): 11-year school covering complete primary and general secondary course.
şcoala medie de artă: vocational secondary school of art.
şcoala pedagogică de educatoare: teacher training school for women teachers in pre-primary schools.
şcoala pedagogică de învăţători: teacher training school for primary teachers.
şcoli profesionale de ucenici: vocational training schools for apprentices.
şcoli tehnice de maiştri: vocational training schools for foremen and master craftsmen.
şcoli tehnice pentru muncitori calificaţi: vocational training schools for skilled workers.
şcoli tehnice personal tehnic: vocational training schools for technicians.

HIGHER EDUCATION (universities and institutes)

A. Universities.
B. Polytechnics.
C. Industrial engineering.
D. Medicine and pharmacy.
E. Agronomy.
F. Economics.
G. Art, music and theatre.
H. Physical culture and sport.


3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Școala elementară de 4 ani
Școli profesionale de ucenici
Producție
min. 3 ani
Școli tehnice de maiștri
Școala medie de artă
Școli tehnice pentru personal tehnic
Grădinița de copii
Școala elementară de 7 ani
Școala pedagogică de educatoare
Institut pedagogic de învățători
Școala pedagogică de învățători
A
B
C
D
E
F
G
H
Școala medie de 11 ani
Școli tehnice pentru muncitori calificați
Four-year school leaving certificate
Seven-year school leaving diploma
Leaving diploma (technical, art and vocational schools)
Various competitive entrance examinations
State diploma for primary or secondary teacher
Maturity examination
State diploma
Degree of Candidate in Science
Doctorate
State engineering diploma
Various degrees or diplomas

to a vocational or technical or teacher training school or enter productive employment immediately.

Curriculum. The need to give the individual destined to live in contemporary Rumanian society a many-sided education and the growing importance of science and technology in modern industry have resulted in substantial changes in the content of education and also in teaching and educational methods. New curricula and syllabuses have been prescribed and new standard textbooks for the teaching of the various subjects have been produced. Teaching material is being improved continuously. The experience gained by the most competent teachers has been studied by the Institute of Education and the institutes for the advanced training of teachers.

As a consequence of the Decision of the Council of Ministers of July 1956 the school was linked more firmly than ever to practical life and industry. The curricula drafted as a result of this decision indicate a strong trend towards scientific subjects (mathematics, physics, chemistry, natural science, industrial design) and provide for practical work in workshops and on experimental farms for pupils in classes V to XI. Greater stress was placed on the application in practice of the theoretical study of various phenomena, processes and laws. Practical work is taking up an increasingly greater part of the time-table. The system has been introduced whereby pupils work in a branch of production for 12 days after the completion of their courses.

As a result of the same decision, philosophy and political economy have been added to the syllabuses of classes VIII to XI in order to broaden the general culture of pupils, enable them to understand the laws of social evolution and help them find their way among the theoretical and practical problems connected with the task of building socialism.

Socialist farming needs thoroughly trained officials capable of putting new technical methods into practice in agriculture. In the school year 1958/59, therefore, courses in the theory and practice of agriculture were introduced into classes V to VII in rural 7-year schools. A special plan of study was drawn up to this effect and textbooks together with a methodological guide were issued. There were also new instructions to ensure that the physics, chemistry and mathematics courses in classes V to VII should bear upon practical farming.

Particular care has been taken in the compilation of textbooks. For this purpose an educational publishing department attached to the Ministry of Education and Culture was established. Textbooks are compiled on the basis of competitive tenders or of contracts entered into with the authors who are well-trained and experienced teachers. Both the contents and the presentation of these textbooks have been improved. They are now more methodical, more easily understood by the pupils and more closely linked with reality. Hundreds of new books are published every year both in Rumanian and in the languages of the minorities, and millions of copies are printed so as to meet the ever-increasing needs of education.

Pupils increase their knowledge of the application of the various branches of science to production industries as a result of their practical training in the workshops and on experimental farms and through their participation in technical associations; their visits to industrial works, factories and farms and their community activities are also of great assistance. Particular care is being taken to supply the workshops, laboratories and the museums with the necessary teaching material and to so equip the experimental farms that they will be able to provide practical and scientific education, in close touch with production. The Ministry of Education and Culture has set up establishments specifically for the production of teaching material and equipment so that supplies sufficient to fill scientific and teaching needs will be permanently available. Thus the general secondary school is no longer concerned just with abstract, theoretical knowledge—an institution severed from the life of the people and from production. It has now placed itself at the service of man and society, and prepares its pupils to participate in the life of the socialist State.

Great stress is also placed on other aspects of education, such as aesthetics. The time set aside in school curricula for the study of the Rumanian language and literature, music and drawing is being continually increased. This is reflected not only in the class syllabuses but in the new textbooks, which are far better presented from the aesthetic point of view, in the quality of the teaching materials (pictures, slides, wall charts, filmstrips) and in the number and variety of school and extra-curricular activities (school fêtes, festivals, competitions, art clubs, etc.).

A prominent place is also set aside for physical training and sport; 3 to 4 hours are normally devoted to physical education weekly. In the 1957/58 school year six sport sections were established as an experiment at certain 11-year secondary schools, at which from 6 to 10 hours are given to physical culture every week. Finally, to enable secondary school pupils to develop their sporting aptitudes 'sport schools', which function outside ordinary school hours, were founded.

Curricula, syllabuses and textbooks were revised, the teaching staff was reorganized and teaching methods were improved so that pupils would not be overburdened and would be better able to assimilate the subjects taught, and at the same time adequate health measures were taken. As a result, a whole series of secondary subjects which had previously taken up a great deal of pupils' time were dropped from the curricula and textbooks in 1958. Steps have also been taken to co-ordinate school work and the pupils' activities outside of school; homework has been made subject to regulation, the time-tables have been rearranged, the teachers' plans of lessons have been modified and the like.

Recently, a new teaching plan was drawn up for classes I to VII and will be applied in its entirety as from the 1959/60 school year. It is intended to bring about even closer contact between education and industry and to adapt the subjects taught to the age of the pupils; it stresses the practical nature of education in classes V to VII by providing for a more reasonable distribution of the number of hours given to each subject thus saving time. For example, the number of hours set aside for classes V to VII—in which until now the pupils have been heavily burdened—has been drastically cut. The number of hours per week in class V has been cut from 37 hours in rural and 36 in urban schools

to 28 hours, and in classes VI and VII it has been reduced from 35 to 30.

In line with this plan, new programmes of work and new and improved textbooks have been compiled more closely in touch with practical life.

Vocational and technical schools

In the Rumanian People's Republic, the training of the skilled workers and medium-grade technicians needed for industry, for the health services and for promoting the cultural level of the population, is provided in different types of school: skilled workers are trained at the vocational apprenticeship schools which provide 2-, 3- or 4-year courses, at trades schools (4 years), agricultural schools (3 years) or technical schools (1 or 2 years). Courses for more highly qualified technicians are given at the foremen's schools (3-year courses), technical schools (3 or 4 years) or art schools (4 years).

Pupils who have completed the 7-year compulsory period may enrol at apprenticeship schools, trade schools, agricultural schools and art schools. The foremen's schools are reserved for the most competent workers who have passed through the ordinary vocational schools, and who have at least 3 years of practical industrial experience. Pupils who have completed the full 11-year general secondary course are admitted to the technical schools. Vocational and technical education is directly linked with production so that full advantage can be taken of practical instruction in the work places. Vocational and technical schools are now attached to large industrial undertakings, factories and works, machine and tractor stations, state farms, experimental farms, constructional works, health centres, etc.

The schools at which medium-grade skilled workers and technicians are trained are subordinate to the competent ministries, institutions and central bodies. The Ministry of Education and Culture co-ordinates, directs and controls the educational process in all vocational and technical schools so as to ensure uniform instruction and the application of appropriate teaching methods. The Ministry must also approve the special teaching plans and curricula drawn up by the ministries and central bodies responsible for such schools. The general cultural and general technical curricula are the responsibility of the Ministry of Education and Culture. The textbooks required for vocational and technical education are in every case compiled by the relevant ministry in co-operation with the Ministry of Education and Culture.

The trades and agricultural schools established for the purpose of training the skilled workers needed in the various branches of the nation's economy are subordinate to the People's Councils and are supervised and directed by the Ministry of Education and Culture in the same way as the general secondary schools and teacher training schools.

The Ministry of Health and Social Welfare has organized special vocational schools to train infirm and disabled children for an occupation.

During the first period following the educational reform (August 1948–55), two types of schools were established for the training of medium-grade skilled workers and technicians: (a) vocational schools with 2- or 3-year courses (according to the occupation) for persons who had completed at least 4 years of primary school; and (b) intermediate technical schools with a 4-year course open to persons who had completed the 7-year cycle. Their purpose was to train medium-grade technicians by providing them with the scientific knowledge required for the occupation they intended to enter.

The growing need, however, for a thorough theoretical and technical education owing to the expansion of socialist industry and agriculture added to the increase in the number of pupils completing the 7-year cycle and general secondary education, made the reorganization of vocational and technical education both essential and possible. Since 1955, only applicants who have completed the 7-year course have been admitted to vocational schools and only those who have completed secondary school have been admitted to technical schools. These new provisions make it possible to ensure that holders of diplomas from vocational and technical schools have received a thorough theoretical and practical training adequate for the requirements of the country's socialist structure.

Teacher training schools

In the cultural revolution now taking place in Rumania, the instruction of the requisite teaching staff is an urgent matter. The number of teacher training colleges had to be increased and the training of men and women primary teachers and pre-primary teachers (women) had to be much improved. For this reason two systems of teacher training were introduced as an experiment in 1956. Under one system some students are trained at male or female teachers' schools (or the pre-primary women teachers' institutions) where the course lasts 6 years (instead of 4 as formerly); for these teacher training schools candidates must have completed the 7-year cycle. Under the other system the students enter pedagogical institutes where the course is 2 years and in this case candidates must have completed the 11-year course at a secondary school and have obtained the Maturity (upper secondary school leaving) certificate.

The curriculum at the 6-year teacher training schools ensures that the students shall receive a general secondary education and at the same time the theoretical and practical training they require.

In the pedagogical institutes the curriculum provides the pupil-teachers principally with a psychological, pedagogical and methodological training. Stress is placed on the methods used in teaching the various subjects and on the acquisition of some teaching experience through prolonged contact with the school and constant teaching practice.

From the experience gathered so far through the application of the two above-mentioned systems of training it has not been possible to draw any definite conclusion as to which is the better. Nevertheless, the statistics and the results obtained show that this experiment has been both interesting and valuable. It will certainly contribute to an improvement in the system of teacher training and help to establish scientifically a suitable method of teaching and teacher instruction in the secondary teacher training schools.

The teacher training schools and pedagogical institutes form part of the network for which the Ministry of

Education and Culture is responsible. They are supervised and administered by the People's Councils in the same way as general secondary schools.

Art schools

The 1948 educational reform also provided for the establishment of a new type of secondary school, i.e., art schools (music, ballet, plastic arts). Structurally, these schools are very similar to the 11-year general secondary schools. The course, however, lasts 12 years and there is a special curriculum designed to give pupils the opportunity of developing their aptitudes in a particular branch of art. The number of these schools is expanding and they exist in many urban centres. There are now 28 art schools with a 7-year course and 12 schools which give the complete 12-year course.

In the larger towns there are certain art schools with a special syllabus to provide their pupils with the opportunity of cultivating their artistic aptitudes. The lessons take up three hours daily on three days a week, outside school hours. Students attend the usual general secondary schools simultaneously.

The art schools are organized and administered directly by the Ministry of Education and Culture (Cultural Department, Art Education Section). They provide boarding accommodation and canteens. Most pupils not resident in the area of the schools they attend receive government scholarships.

Other specialized schools

In the Rumanian People's Republic, in addition to day schools, there are also evening classes and voluntary courses. In accordance with the laws and decisions in force, these courses correspond to the general secondary schools (classes V to VII and VIII to XI) or the technical schools for foremen. Workers are thus enabled to continue their studies without interrupting their employment. The curricula at evening secondary schools are based on those of the day schools, subject to a maximum of 20 hours a week.

Out-of-class activities

Out-of-class activities have an important place in the training of the pupils in secondary schools, both general and technical.

Such activities help pupils use their leisure in a pleasant and rational way by enabling them to cultivate their own interests and talents, and to broaden their outlook by stressing the practical side of their training and preparing them to live in a manner useful to the community. These activities are most varied, i.e., private reading, sports, engineering groups, literary and art groups, groups of young naturalists, groups for handicrafts, outings for the purpose of showing pupils the beauty and wealth of their country, factory and farm work, visits to monuments, art treasures, historic places, etc.

Youth movements such as the Union of Young Workers and the Pioneers play a considerable part in organizing such activities. They organize various literary, art or sport competitions, more particularly the '*Spartakiades* for mathematicians and physicists', which attract large numbers. Pupils can also take part in school championships, athletics, gymnastics, volley-ball, basket-ball, hand-ball, swimming, skiing. The youth organizations also arrange for the participation of pupils in various civic activities such as decorating their schools or towns, gardening, harvesting, etc. In addition, pupils are encouraged to take part in the social life and internal organization of the school, to arrange various cultural and civic functions at cultural centres, trade union clubs, industrial works and factories, collective farms, holiday camps and colonies, etc. The educational effect of such activities is both considerable and durable. They supplement teaching activities and develop the love of study and practical action among the pupils. Special emphasis is placed on individual enterprise, on independent work and on the creative talent of pupils.

The activities of the schools and youth movements in this regard are assisted by various non-educational institutions such as theatres, cinemas, trade union clubs, groups of young naturalists, etc.

The Pioneer's Palace at Bucarest and the Pioneer Club premises in the large towns and district centres also make an important contribution to the organization of out-of-school activities and the education of the young. Special attention is paid to organizing the use of pupils' leisure time during their holidays. Every year, tens of thousands of schoolchildren spend part of their holidays at youth camps in the loveliest parts of the country, in the mountains or by the sea. At these camps various educational and recreational activities are organized such as walks, social evenings, camp fires, sports, etc. The number of pupils spending their holidays at youth camps increases annually.

Teaching staff

A great deal of care is given to the preparation and in-service training of secondary school teachers.

Teachers of all subjects and at all types of secondary schools receive their training at institutions of higher education, where the courses last from 5 to 6 years. Teachers appointed to classes V to VII specialize in two subjects, and this qualifies them to take complete charge of a class.

To enable teachers to attend advanced and refresher courses, the Decision of the Council of Ministers of 16 August 1951 provided for the establishment of four inter-regional institutes for in-service teacher training. Under the Decision of the Council of Ministers of 12 August 1954, all secondary school teachers must attend refresher courses at these institutes, where they must take up some individual studies; furthermore, every 5 years they must take the competitive examinations and attend the refresher courses held in summer. Great importance is attached to the instruction of specialists in pedagogics and methodology and to comparing experiences. At these refresher courses, the experiences of the better schools and most competent teachers are studied. The institutes for in-service training are staffed by highly qualified teachers who must have had the same training as university teaching staff and are paid on the same salary scale.

TRENDS AND PROBLEMS

The very rapid rate of expansion of the country's economy, of the sciences, of technology and of culture accompanying the building up of the socialist society offers new prospects of development to all the types of secondary schools existing in the Rumanian People's Republic.

The wide range of technical and vocational schools now existing, for example the metallurgy schools, electricity schools, chemistry schools, textile schools, schools serving the oil industry, agricultural and forestry schools, commercial schools, art schools, sport schools, etc., guarantees an adequate vocational training to specialists in a large number of fields. The curricula at the vocational and technical schools and schools for foremen provide pupils with a general education, training in the trade selected and practical instruction acquired in the workshops and in production.

The present trend of education in the general secondary schools is to accentuate and intensify the scientific education at the 7-year schools by providing more and more practical classes for the various subjects. In classes VIII to XI emphasis is laid also on general and polytechnical education, pupils thus obtaining a scientific view of the universe. There is an ever-growing conviction that a general secondary education should include a large measure of practical activity so that pupils while receiving a thorough general and polytechnical education should be enabled to learn a trade or craft. This factor has become increasingly urgent in the last few years, since owing to the expansion of secondary education most of the pupils on completion of the 11 years at a general secondary school must start directly in a productive branch.

Moreover, both pupils and parents are openly expressing their wish for the schools to provide a vocational education. The experience obtained until now proves that this is not only necessary but possible. Thus the pupils in classes VIII to XI at the experimental secondary school No. 4 ('Aurel Vlaicou', Bucarest) have spent five days weekly in class and one day doing practical work in the workshops of the Rumanian Railways and thus obtained their certificates as skilled workers (turners, milling machine workers, etc.) as well as the Maturity certificate. Secondary school pupils may also obtain a similar training in agriculture.

Taking into account the current evolution affecting the courses at secondary vocational and technical schools, characterized by a broader general education and technical training it can justifiably be claimed that general and technical secondary education are continually being brought closer together. In this manner the age-old gap separating intellectual and physical labour is being bridged and the positive needs of a society which in this age of automation and mechanization requires workers with a broad outlook, a solid general education and a thorough technical knowledge are being filled.

At present the chief aims of the authorities of the Rumanian People's Republic with respect to secondary education are as follows: to make a 7-year study system general without further delay; to expand general secondary education and to reorganize it by bringing it into an increasingly closer relationship with productive activity; to train pupils with a view to a practical occupation; to promote vocational and technical education in the light of the economic needs and the scientific and technological requirements of the country; to allow a greater share to be given to theoretical knowledge and general culture in the vocational and technical schools; gradually to improve methods of education by work in the productive sectors.

[*Text prepared by the Rumanian National Commission for Unesco in July 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 18,059,000.
Area: 91,700 square miles: 237,500 square kilometres.
Population density: 197 per square mile; 76 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, the total enrolment of 2.5 million pupils (not including special and post-primary education) was about 14 per cent of the total population. (In the last edition of *World Survey of Education*[1] it was shown that about 2,000 pupils were enrolled in special schools for handicapped children and about 427,000 in various types of evening and correspondence courses, including courses for illiterates.) Of the reported school enrolment, 11 per cent were pupils in nursery schools, 56 per cent in classes I to IV, 18 per cent in classes V to VII, and 6 per cent in classes VIII to XI. Vocational schools accounted for another 5 per cent, teacher training schools 0.1 per cent, and higher education 3 per cent. The proportion of girls was 48 per cent in the general primary and secondary schools. The average number of pupils per teacher in the 4-, 7- and 11-year schools altogether was 22. Between 1953 and 1957, primary education enrolment increased by 9 per cent, but total secondary enrolment decreased by 11 per cent. (See table.)

Enrolment trends in secondary education. Comparable data are not available to show the trends in secondary enrolment before 1953. However, it may be seen from the table that

1. *World Survey of Education*: II—*Primary Education.* Paris, Unesco, 1958, 1380 pp.

there has been, at least in the most recent years, a substantial decline in the enrolment figures for vocational and teacher training schools, which is not quite offset by the increase in the enrolment of general secondary schools (classes VIII to XI). The average total enrolment in all types of secondary education for the period 1955–57 was 271,000, or 19 per cent of the estimated population 15–19 years old.

Educational finance, 1959. In the state budget for 1959, an amount of 3,043 million lei was allocated for education. This represented an average of about 165 lei per inhabitant. Official exchange rate: 1 leu = 0.17 U.S. dollar approx.).

Sources. Rumania: Ministry of Education and Culture, reply to Unesco questionnaire; *Report on educational progress in 1958–1959.*

SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools[1]						
	Total	**1957/58**	**6 641**	**10 467**	**10 467**	**281 141**	...
	„	1956/57	6 527	10 201	10 201	276 673	...
	„	1955/56	6 422	9 623	9 623	275 433	...
	„	1954/55	6 406	9 324	9 324	274 953	...
	„	1953/54	6 360	9 026	9 026	278 282	...
Primary	Classes I to IV	1957/58	[3]11 399	50 145	...	1 375 012	668 930
	Classes V to VII[2]	1957/58	[4]4 284	[5]40 769	...	443 967	198 904
	Total	**1957/58**	**15 683**	**[6]90 914**	**...**	**1 818 979**	**867 834**
	„	1956/57	15 558	[6]88 208	...	1 714 323	816 673
	„	1955/56	15 523	[6]84 112	...	1 603 025	767 698
	„	1954/55	15 408	[6]85 092	...	1 614 038	778 489
	„	1953/54	15 344	[6]82 098	...	1 664 274	807 562
Secondary							
General	Classes VIII to XI						
	Total[7]	**1957/58**	**448**	[8]...	...	**156 290**	**74 986**
	„ [7]	1956/57	405	[8]...	...	144 947	72 147
	„ [7]	1955/56	375	[8]...	...	129 135	69 083
	„ [7]	1954/55	343	[8]...	...	103 756	55 267
	„ [7]	1953/54	301	[8]...	...	88 764	44 435
Vocational	Technical schools	1957/58	220	2 720	...	31 220	...
	Vocational schools	1957/58	408	5 303	...	92 734	...
	Total	**1957/58**	**628**	**8 023**	**...**	**123 954**	**...**
	„	1956/57	616	8 389	...	127 880	...
	„	1955/56	593	6 916	...	117 569	...
	„	1954/55	623	[9]11 476	...	151 004	...
	„	1953/54	716	[9]13 232	...	202 193	...
Teacher training	Teacher training schools						
	Total	**1957/58**	**13**	[7]...	...	**2 683**	...
	„	1956/57	14	[7]...	...	3 460	...
	„	1955/56	38	[7]...	...	6 955	...
	„	1954/55	57	[7]...	...	13 079	9 188
	„	1953/54	113	[7]...	...	27 826	21 119
Higher	Faculties (all branches of study)						
	Total	**1957/58**	**98**	**8 982**	**...**	**80 919**	**26 498**
	„	1956/57	112	8 154	...	81 206	28 452
	„	1955/56	127	8 369	...	77 633	27 517
	„	1954/55	144	8 278	...	78 860	28 375
	„	1953/54	155	7 866	...	80 593	26 880

Note. Data on special education and post-school and adult education are not available.

1. Including special nursery schools for deficient children.
2. These grades, for children 12–14 years of age, which are described in the text as constituting an incomplete secondary school, are included here with primary education in order to maintain continuity of statistics reported for previous years in *World Survey of Education — II.*
3. Number of 4-year schools.
4. Number of 7-year schools.
5. Including teachers of teacher training schools and of general education classes VIII to XI.
6. Teaching staff of classes I to XI.
7. Number of 11-year schools. Enrolment in day and evening classes.
8. Included in primary education.
9. Including teachers of evening schools and correspondence courses.

SAN MARINO

THE EDUCATIONAL SYSTEM

An Educational Statute, having the force of law, was approved by the Government (the *Consiglio Grande e Generale*) on 12 August 1946.

School administration is headed by a Director of Education (*Deputato agli Studi*), whose functions are equivalent to those of a Minister of Education; his is, in fact, one of the most important of the 10 government departments. He is assisted by a technical advisory body. This branch of the government service consists of a Directorate of Primary Schools and a Directorate of Secondary Schools.

All schools are maintained entirely by the State except the nursery schools, and even these receive considerable government subsidies.

Primary education is free and compulsory for all children between the age of 6 and 12.

TYPES OF SECONDARY EDUCATION

The organization and content of education are practically the same as in Italy. After completing the 5-year primary school and passing the primary school certificate examination or *licenza elementare* the pupil sits for a separate entrance examination to the intermediate school (*scuola media*). Pupils from the fourth class of the primary school can also sit for this entrance examination, without holding the primary school certificate, provided they have reached the age of 10.

At the end of their third year in the *scuola media*, pupils sit for the intermediate school certificate or *licenza media*, which entitles them to enter the upper secondary school. There is only one school at this level, a classical secondary school comprising a 2-year *ginnasio* followed by a 3-year *liceo classico*. Pupils who have gained their *licenza media* and want to pursue other secondary studies, enter the appropriate type of school in Italy. Similarly, students who graduate from the San Marino *liceo* with the secondary leaving examination (*maturità*) may apply for admission to an Italian university or other institution of higher education.

[*Text prepared by the Unesco Secretariat in June 1960.*]

STATISTICS

Population (mid-year 1958 estimate): 15,000.
Area: 24 square miles; 61 square kilometres.
Population density: 625 per square mile; 246 per square kilometre.

In the school year 1957/58 there were in San Marino 35 primary schools, 1 secondary and 1 vocational school. Enrolment figures are not available.

Some data relating to 1950–54 were presented in the previous edition of the *World Survey of Education:* II—*Primary Education.*

Source. *The Statesman's Year Book 1959.*

SAUDI ARABIA

EDUCATIONAL SYSTEM

Religious schools are the oldest educational institutions in Saudi Arabia, and they still continue at primary, secondary and higher levels. Alongside them a system of secular schools has developed, providing primary, secondary and technical education. Education at all levels is free.

The Government first assumed responsibility for education in 1926 when a Directorate of Education was established. In 1953 this was raised to the status of a Ministry. Within the framework of the Ministry, planning, guidance, and technical supervision are assigned to a General Directorate of Education, and the recent establishment of a Directorate of Technical Supervision has made

possible the separation of responsibility for technical matters and administration. The latter is entrusted to a Directorate of General Administration, and there is also a Directorate of Financial Administration. Recently there has been established a Directorate of Primary Education and a Directorate of Secondary Education. A Division of Cultural Relations prepares reports for international conferences on education and studies their recommendations, and a Division of Educational Statistics collects and makes available data needed for the establishment of educational policy. In 1954 medical services for schools were set up in four principal towns and the other local education administrations were later provided with similar services.

The Minister of Education is assisted by a Higher Council for Education and a Bureau of Advisers. The Ministry is responsible for laying down policy, for the development and revision of curricula and for the selection of textbooks. There are educational district administrations which are responsible for the implementation of the Ministry's policy and programmes in their respective districts (17 in all) and for the supervision and control of the schools under their jurisdiction.

SECONDARY EDUCATION

The general requirement for entry to all types of secondary school is completion of the 6-year primary course and a pass in the Primary School Certificate examination. The general secondary school provides a 6-year course divided into two cycles each of which leads to a certificate examination. The curriculum includes religion, Arabic language and literature, mathematics (arithmetic, geometry, algebra and mechanics), science (physics, chemistry, botany and zoology), social studies (history, geography, civics, education and psychology), foreign languages (English and French), art education and physical education.

During the first 4 years all pupils take the same subjects, but from the beginning of the fifth year and for the last 2 years they have the opportunity of choosing between a literary course and a scientific course. Both courses lead to the Secondary School Certificate examination (second cycle), and students who pass this examination are entitled to grants for higher study abroad and to admission to the Teachers' College. A project for the establishment of a Saudi Arabian university is under way.

In addition to the general secondary school, other types of secondary level education are provided in such establishments as Dar at-Tawhīd, which offers a 5-year religious course leading to higher studies in Islamic law; al-Ma'had al-'ilmi, which offers a 5-year teacher training course qualifying students either for teaching in the upper grades of the primary school or for admission to the Teachers' College, which trains teachers for secondary schools; primary teacher training institutes, which offer a 3-year course intended for prospective teachers in the lower grades of the primary school; the intermediate commercial school, which provides a 3-year terminal course; and the industrial schools, which provide a 5-year course.

Teachers of Arabic in secondary schools are often trained locally; teachers of other subjects are either Saudi Arabians trained abroad or expatriate staff recruited in other Arab countries.

Great importance is attached in Saudi Arabian schools to out-of-class activities. Physical training and sports have been strongly encouraged by the authorities, and schools have been fully provided with staff and equipment for the promotion of games and of the team and sporting spirit. A number of training centres have been opened for the benefit of students at schools without adequate playgrounds. Scouting camps, trips and inter-school contests have been organized. School societies attract a large number of pupils and provide them with useful leisure-time activities ranging from the artistic and social to the cultural and intellectual.

TRENDS AND PROBLEMS

The current five-year plan for education includes a defined enrolment policy which aims at keeping a balance between general secondary education on the one hand and technical and teacher training institutions on the other. This will help meet the country's needs for technicians and skilled workers and for trained teachers to staff the rapidly-expanding primary school system.

The plan therefore involves the diversification of education after the primary stage. The Ministry had already begun six years ago to establish industrial schools with this end in view and there are now seven such schools in operation. In 1959 four intermediate commercial schools were opened, and the Ministry is considering the establishment of an intermediate agricultural school in 1960. This trend has created the need for an educational guidance service to select the students for vocational education.

Although curricula and methods at all levels are at present felt to be reasonably well adapted to the conditions and needs of the country, they will be subject to revision by the Ministry after the diversification policy has been developed.

The chief difficulties the Ministry is facing in implementing its programme arise from the fact that much of the country consists of sparsely inhabited areas where nomadic tribes form a substantial proportion of the population. Another major problem is the shortage of Saudi Arabian teachers. Primary teacher training facilities are being expanded and it is hoped that when the Saudi university is in full operation in the near future the shortage of locally-trained teachers for secondary schools will gradually become less acute.

[*Text prepared by the Unesco Secretariat in December 1959 from official sources.*]

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STATISTICS

Population (mid-year 1958 estimate): 6,036,000.
Area: 617,762 square miles; 1,600,000 square kilometres.
Population density: 10 per square mile; 4 per square kilometre.

Summary of school statistics, 1953–58. In 1958/59, there were 100,000 pupils enrolled in all types of schools, not including higher education and adult education. This represented less than 2 per cent of the total population. About 94 per cent of these pupils were enrolled in primary schools, where there were on the average 27 pupils per teacher. The pupil-teacher ratio was 11 in the secondary schools and only 7 in the technical schools. Between 1953 and 1958 primary school enrolment more than doubled, while secondary and technical school enrolment more than quadrupled. (See Table 1.)

Enrolment trends in secondary education, 1949–58. The number of pupils in all types of secondary schools increased nearly six times between 1949 and 1958. Nevertheless, the average total enrolment for the period 1955–58 was still less than 1 per cent of the estimated population 15–19 years old. (See Table 2.)

Educational finance, 1958/59. The budget for education in 1958/59 amounted to 108,686,893 riyals. This represented an average expenditure of less than 20 riyals per inhabitant. Official exchange rate: 1 riyal = 0.27 U.S. dollar (approx.).

Source. Saudi Arabia: Ministry of Education, reports.

1. SUMMARY OF SCHOOL STATISTICS, 1953–58

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools						
	Total	**1958/59**	**582**	**3 478**	...	**93 720**	...
	„	1957/58	...	...	...	...	...
	„	1956/57	518	3 085	...	79 274	...
	„	1955/56	505	2 236	...	57 841	...
	„	1954/55	446	1 998	...	49 740	...
	„	1953/54	326	1 652	...	43 734	...
Secondary							
General and Teacher training	Secondary schools						
	Total	**1958/59**	**41**	**499**	...	**5 689**	...
	„	1957/58	38	477	...	5 760	...
	„	1956/57	32	357	...	4 811	...
	„	1955/56	23	226	...	2 394	...
	„	1954/55	13	150	...	1 405	...
	„	1953/54	12	176	...	1 397	...
Vocational	Technical schools						
	Total	**1958/59**	**5**	**97**	...	**641**	...
	„	1957/58	4	92	...	455	...
	„	1956/57	4	70	...	452	...
	„	1955/56	3	43	...	305	...
	„	1954/55	2	28	...	174	...
	„	1953/54	...	...	...	...	...
Higher	University[1]						
	Total	**1958/59**	**1**	...	...	...	...
	„	1957/58	1	...	...	...	...
Adult	Evening schools for illiterates	1956/57	14	92	...	1 821	...
	English language evening schools	1956/57	9	52	...	1 230	...
	Total	**1956/57**	**23**	**144**	...	**3 051**	...

1. The academic year 1957/58 marked the inauguration of the first university in the Kingdom, when the Faculty of Arts of King Saud University in Riyad received the first group of students. The Faculty of Science will start in 1958/59.

2. TRENDS IN SECONDARY EDUCATION, 1949–58

School year	Number of students enrolled by type of education				Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational				
	Total	Per cent female	Total	Per cent female			
1949	1 116	...	21	...	1.1	...	...
1952	1 315	...	60	...	1.5	*600	*0.25*
1953	1 397	...	...	...			
1954	1 405	...	174	...			
1955	2 394	...	305	...	5.1	*600	*0.85*
1956	4 811	...	452	...			
1957	5 760	...	455	...			
1958	5 689	...	641	...			

1. Including teacher training.

SIKKIM

The Government of Sikkim runs three secondary institutions and aids two others; three institutions are co-educational, one is for boys and one for girls. A Basic Training Institute trains teachers for the primary schools. For post-secondary study, the Sikkimese students in mining, civil engineering, mechanical engineering, law, medicine, arts, advanced forestry, agriculture, education, social science, etc., are admitted to institutions in India on stipends provided by India and the Government of Sikkim.

The Government of Sikkim runs one institution for vocational study where selected stipendiaries receive training for 1- and 3-year courses in carpet-making, weaving, carpentry, hand-made paper manufacturing, handicrafts, including doll-making, and painting. An adult training centre attached to the institute gives primary education to the trainees. On completion of their course the trainees receive initial financial assistance from the Government of Sikkim.

The local hospital provides training in midwifery.

After completion of the School Leaving Examination, selected Sikkimese students are sent to India for various forms of vocational training in the National Extension service for the undergraduate course in veterinary science and for training as overseers, draughtsmen, etc.

[*Information provided by the Ministry of Education, Government of India, December 1959.*]

STATISTICS

Population (mid-year 1958 estimate): 150,000.
Area: 2,744 square miles; 7,107 square kilometres.
Population density: 55 per square mile; 21 per square kilometre.

SPAIN

THE EDUCATIONAL SYSTEM

The Spanish Constitution, which is uncodified, is defined by Article 10 of the Law of Succession as being comprehended in five basic laws: the Spanish Citizenship Statute of 17 July 1945; the Statute of Labour of 9 March 1938; the Parliament Bill of 17 July 1942; the Law of Succession of 26 July 1947 and the National Referendum Act of October 1945. Education is referred to in the first two of these enactments.

Article 5 of the Spanish Citizenship Statute reads: 'All Spaniards shall be entitled to receive education and instruction and shall be under a duty to acquire them, whether in their family or in private or public institutions as they may freely elect. The State shall ensure that no talent is frustrated for lack of financial means.'

The Statute of Labour of 9 March 1938—coupled with more extended declarations about the programmes—represents the social and economic policy of the present Government. There are 16 of these declarations; the following are the passages relating to education and instruction:

'Steps shall be taken to establish the institutions necessary to enable the workers, in their free time and holiday periods, to enjoy the treasures of culture' (point two of the second declaration).

'The State shall devote special attention to the technical training of farm workers, enabling them to execute all the tasks required for agricultural production' (point two of the fifth declaration).

'The Sindicato Vertical may initiate, maintain or supervise research organizations, associations for moral, physical and vocational education, provident and welfare societies and social organizations concerned with the elements of production' (point six of the thirteenth declaration).

Everything concerning education in general comes under the Ministry of Education, though other ministries and public and private bodies have educational institutions under their direction which are governed by the general regulations.

The Ministry of Education is in charge of the organization of education and is responsible for regulating and maintaining all the activities of state educational institutions and for approving and regulating the activities of private schools.

The provincial authorities (*diputaciones*) give support to philanthropic educational institutions, while the municipalities contribute to the maintenance of local educational institutions, especially primary schools.

The Government's work in education is supported and supplemented by the activities of private bodies which found and run many large institutions at all levels of education; quite a high percentage of the total school population attends such institutions.

The structure of the school system is shown in the diagram on page 1017.

THE DEVELOPMENT OF SECONDARY EDUCATION

At the beginning of the twentieth century secondary education was not regarded as a system of education in its own right but rather as an essential preliminary to higher education, preparing pupils for the *bachillerato* certificate, the basic qualification for university entrance. In the last 20 years this concept has undergone substantial revision, so that secondary education now has a character of its own, its purpose being to further the all-round education of the individual and to equip him for the most effective pursuit of his vocation, not just for university.

The Act of 20 September 1938 made sweeping reforms in the policy and organization of secondary education, affirming the principles of freedom of teaching and humanistic training, and establishing the system of cycles. The Primary Education Act of 17 July 1945 established for the first time in the primary school system a fourth stage, known as the pre-vocational stage, leading on to vocational training proper, which is regarded as a prolongation of this period of initiation. This fourth stage is for children from 12 to 15 years of age. The same Act establishes, as a special kind of fourth stage, adult classes in public or private schools for persons over 15 years of age. These serve the twofold purpose of rounding off the primary education of those who have had some schooling, however rudimentary, and of giving them basic or more advanced vocational training. Attendance at these classes is compulsory for all who did not qualify for a primary school certificate because they had not passed through the requisite number of grades.

The Act of 16 July 1949 established vocational secondary education, creating a second type of baccalaureate course (*bachillerato laboral*) with initial specialization in the techniques of agriculture, industry or other activities as well as the basic disciplines of a liberal education.

The Secondary Education (Organization) Act of 26 February 1953 defined the legal status of secondary education, explicitly enunciating and safeguarding the rights of the State, the Church and the family in secondary education, providing for state inspection of all schools, enunciating or reaffirming the principles of teaching and the technical provisions for the substantive reform of this level of education in Spain, laying down standards of social justice designed to foster fuller participation of, and greater solidarity between, all sectors of youth in secondary education, and establishing the guiding principles for the economic assistance of all teaching institutions, whether state or not, that require it. The Act also sought to lighten the overloaded curricula to enable pupils to work better on essential subjects and to reduce the number of hours of study so that they might have more time for sport and family life. It established an intermediate examination at the end of the fourth year, introduced practical improvements in the actual holding of examinations and offered a

choice between the arts and the science sides in the last two years at school.

The Commercial Education (Organization) Act of 17 July 1953 co-ordinated instruction in commercial subjects, while the Decree of 23 July 1953 laid down the curricula for the various levels of commercial education and fixed the examinations, levels of instruction, diplomas awarded and their equivalent value.

The Technical Education Act of 20 July 1957 established the various forms of technical training to be offered, making the system sufficiently flexible for it to keep pace with the rapid development of technology. The technical schools at the secondary level provide specialized training of a pre-eminently practical kind, an outstanding feature of this Act being the way in which the various specialities and levels are co-ordinated between themselves and with other related dispositions.

Legal basis

The principal laws and regulations governing secondary education (general and vocational) may be summarized as follows:

General secondary studies. Secondary Education (Organization) Act of 26 February 1953. Decree of 31 May 1957 promulgating the new curriculum for the baccalaureate, now in force. Decree of 13 September 1957 prescribing the tests to be taken in the pre-university year, which follows the completion of the 6-year general baccalaureate course. Ministerial Order of 11 November 1958 introducing a scheme for adapting the lower general baccalaureate course (4 years) to the corresponding stage of the vocational baccalaureate course, and enabling pupils to transfer from one to the other.

Commercial studies. Decree of 16 March 1956 amending the curriculum and conditions for admission. Ministerial Order of 13 March 1957 on syllabus adjustment. Ministerial Order of 28 May 1957 on transfer requirements for students. Commercial Education (Organization) Act of 17 July 1957. Decree of 23 July 1957 promulgating the syllabus, later amended. Ministerial Order of 25 March 1958 authorizing transfers from the baccalaureate course to commercial studies and vice versa.

Primary teacher training schools (escuelas del magisterio). Decree of 7 July 1950 approving the regulations for primary teacher training schools.

Vocational secondary baccalaureate (bachillerato laboral). Act of 16 July 1949. Decree of 21 December 1956 promulgating curricula for arable and livestock farming, industrial and mining and maritime and fishing courses. Decree of 5 September 1958 establishing a course of management studies.

Technical studies. Act of 20 July 1957.

Vocational training for industry. Act of 16 July 1949.

Central School of Languages (Escuela Central de Idiomas). Regulations for the Central School of Languages approved by Royal Decree dated 14 October 1930.

GLOSSARY

aprendizaje: see *formación profesional industrial.*

escuela de comercio: vocational secondary school of commerce.

escuela de magisterio: teacher training school.

escuela de párvulos (infant school): see *escuela maternal.*

escuela maternal y escuela de párvulos (nursery school and infant school): types of pre-primary school, providing the initiatory stage (*período de iniciación*) of primary education.

escuela primaria: primary school. The complete range of schooling covered by the term 'primary education' (*enseñanza primaria*) covers four stages: an initiatory or pre-primary stage (*período de iniciación*); an elementary primary stage (*período de enseñanza elemental*); an advanced or complementary stage (*período de perfeccionamiento*); and a pre-vocational stage (*iniciación profesional*).

escuela técnica media: secondary level technical school; all pupils must take a preliminary or selective course (S) before beginning specialized technical studies (industrial, agricultural, etc.).

formación profesional industrial: industrial vocational training covering three stages: pre-apprenticeship (*preaprendizaje*), apprenticeship (*aprendizaje*) leading to certification as an entered apprentice, and the course leading to qualification as skilled worker (*maestría*)

iniciación profesional: pre-vocational training (see *escuela primaria*).

instituto o colegio (institute or college): state or private general secondary school; the secondary course proper leading to the upper *bachillerato* (see under examinations) lasts 6 years, but pupils wishing to continue at university are required to take an additional one-year pre-university course (P).

instituto laboral: vocational secondary school; the complete 7-year course qualifies for admission to higher technical schools and pupils taking an appropriate bridge course (*curso de transformación*, shown as T) may go on to certain faculties of the university.

maestría: see *formación profesional industrial.*

período de . . .: see *escuela primaria.*

preaprendizaje: see *formación profesional industrial.*

HIGHER EDUCATION

A. Faculties of Law, and Philosophy and Letters.
B. Faculty of Medicine.
C. Faculties of Political Science, Economics, Pharmacy, Veterinary Science.
D. Faculty of Science.
E. Higher technical schools.

EXAMINATIONS

bachillerato laboral elemental: lower vocational secondary certificate.

bachillerato laboral superior: upper vocational secondary certificate.

bachillerato preuniversitario elemental: lower general secondary certificate.

bachillerato preuniversitario superior: upper general secondary certificate, the basic qualification for university entrance.

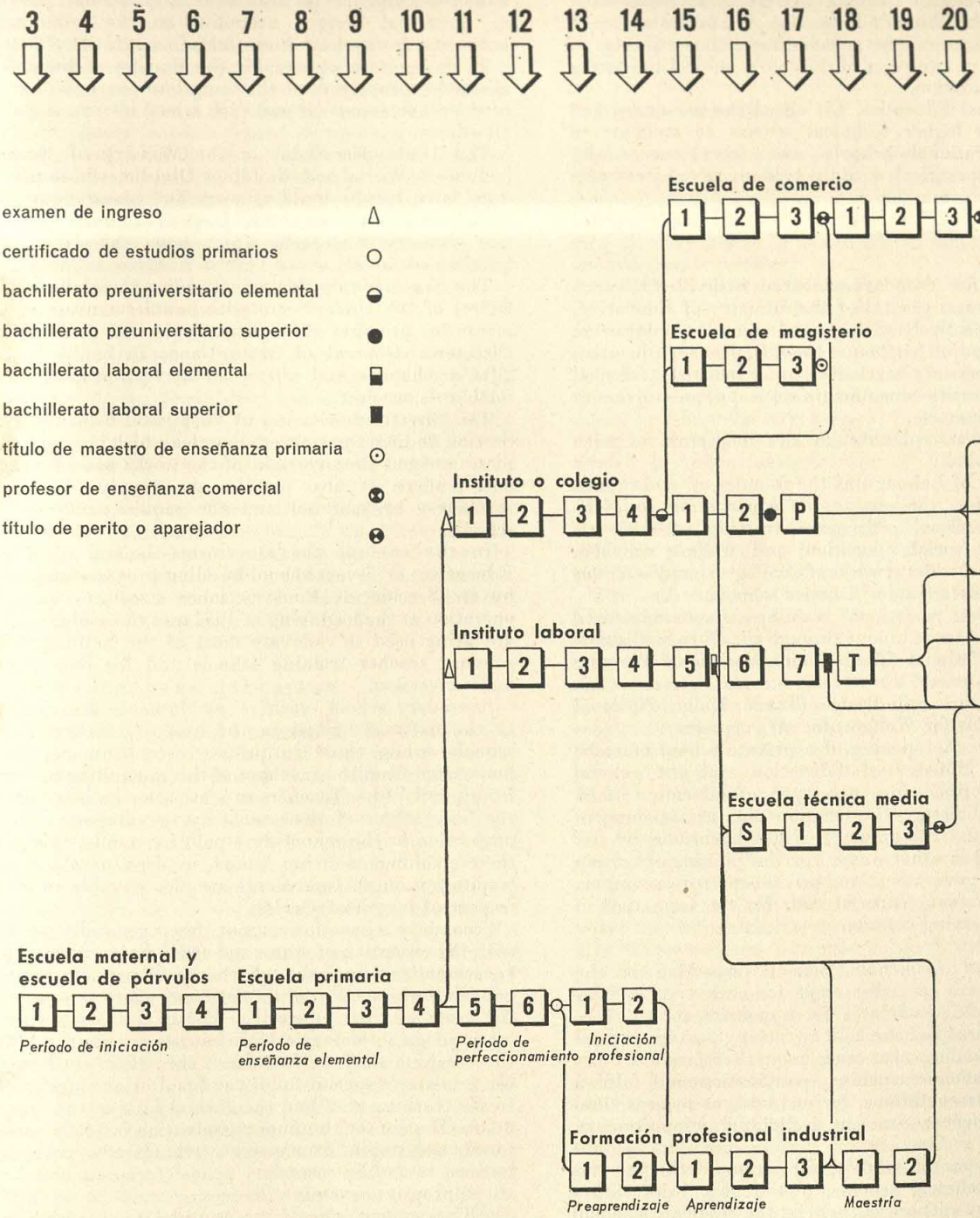
certificado de estudios primarios: primary school certificate.

examen de ingreso: entrance examination.

título de maestro de enseñanza primaria: qualification as primary teacher.

título de perito o aparejador: qualification as technician or technical overseer.

título de profesor de enseñanza comercial: qualification as commercial teachers.


3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
examen de ingreso
certificado de estudios primarios
bachillerato preuniversitario elemental
bachillerato preuniversitario superior
bachillerato laboral elemental
bachillerato laboral superior
título de maestro de enseñanza primaria
profesor de enseñanza comercial
título de perito o aparejador
Escuela de comercio
1 2 3 1 2 3
Escuela de magisterio
1 2 3
Instituto o colegio
1 2 3 4 1 2 P
Instituto laboral
1 2 3 4 5 6 7 T
A
B
C
D
E
Escuela técnica media
S 1 2 3
Escuela maternal y escuela de párvulos
1 2 3 4
Período de iniciación
Escuela primaria
1 2 3 4 5 6
Período de enseñanza elemental
Período de perfeccionamiento
1 2
Iniciación profesional
Formación profesional industrial
1 2 1 2 3 1 2
Preaprendizaje
Aprendizaje
Maestría

The Primary School Leaving Certificate introduced by Article 42 of the Primary Education Act makes access to secondary education easy, including the possibility of 'jumping' one or two years of the course subject to passing a simple examination.

The Technical Education Act opens the secondary and ultimately the higher technical schools to students in industrial vocational schools who have successfully followed the apprentice's with the tradesman's or foreman's course as the case may be.

Administration

Responsibility for secondary education is divided between several directorates-general of the Ministry of Education, which deal respectively with general secondary education, vocational education (*enseñanza laboral*), primary education (in respect of primary teacher training schools), technical education, university education (in respect of pre-university courses), and fine arts.

Control is exercised through the inspectors of each directorate-general.

The Ministry of Labour was the founder of, and retains responsibility for, the *escuelas de capacitación social de trabajadores* (workers' citizenship training schools), *escuelas sociales* (social education and welfare schools), *universidades laborales* (workers' colleges) and *escuelas elementales de pesca* (junior fisheries schools).

There are some vocational training schools subsidized by the combined trade unions through the Obra Sindical de Formación Profesional (Trade Union Vocational Training Service); they come directly under the Vicesecretaría Nacional de Obras Sindicales (Trade Union National Under-Secretariat for Welfare) for all purposes.

Authority for the opening of a private school must be given by the Ministry of Education and the general standards prescribed for each type of education must be met. The Ministry of Education aids the opening of private schools by the grant of cash subventions, by tax exemptions and in other ways. For the running of certain types of school, government and private enterprise combine forces for a common cultural end, by the formation of *patronatos* (governing boards).

Supervision and inspection. School inspection is the responsibility of a specialist corps for each type of education. As a rule, candidates for appointments to these bodies are required to have held a teaching post in a school of the corresponding type and must therefore hold the appropriate academic teaching qualification and fulfil a number of other conditions, for instance, as regards total teaching experience, time in individual appointments, etc.

For some types of schools, for example the *escuelas sociales* and technical schools, a watching brief rather than supervisory authority is held by the Sindicato Español Universitario, in pursuance of which it appoints a student representative on the Staff Council who has a right of audience but no vote.

In some secondary schools parents' assocations have been formed which co-operate effectively with the school administrations.

Finance. Funds are derived from the national, provincial or municipal budget, according to the administering authority, from school dues, and from educational charities.

Each directorate-general in the Ministry of Education is allotted a proportion of the budget to cover the expenses of the schools under it and each school in turn is given an allocation.

The Under-Secretariat of the Ministry of Education includes a Works and Buildings Division whose principal duty is to handle building work and plant requirements for all directorates-general except Vocational Education and Primary Education which have their own school building sections.

The Negociado de Régimen Jurídico Inmobiliario (Land Office) of the Under-Secretariat handles renting arrangements for premises throughout Spain and deals with the Directorate-General of State Lands in connexion with gifts, exchanges and alienation of real property on its ministry's account.

The Directorate-General of Vocational Education has a Sección de Construcciones Laborales which checks building plans and has the oversight of the works and of contracts and tenders. It also handles the supply of furniture, machinery or material and the requirements for farm schools.

In the case of the Directorate-General of Primary Education, a 15-year school building programme prepared by its Sección de Construcciones Escolares came into operation at the beginning of 1957 and the ordinary credits are being used to renovate most of the buildings of the primary teacher training schools and for improvements and conversion.

Secondary school teachers' emoluments are chargeable to the national budget in the case of teachers in state schools, while those in private establishments are remunerated from the revenues of the controlling bodies and from pupils' fees. Teachers in state schools, in addition to the base salary of their seniority or category, receive a proportion of the school dues paid by pupils, this part of their emoluments being known as *derechos obvencionales* (capitation dues). Increments are also payable to them in respect of length of service.

Secondary education is not free, generally speaking, with the exception of state- and trade union-run industrial vocational training, though the sums payable by pupils are relatively small and do not cover more than a part of the costs of their education. The examination fees paid by pupils in secondary establishments are divided between the teaching staff welfare fund, the school welfare fund, the ministry's special fund, the 'capitation dues' payable to the teaching staff and the general fund of the establishment. The fee for the final examination is 160 pesetas per pupil, and pupils from private schools who take examinations in public secondary schools are required to pay the appropriate examination fees.

All secondary schools are required to set aside a proportion of free places equivalent to between 5 and 12 per cent of the numbers in the school. Boarding establishments are required to grant prescribed numbers of free places with full and half board.

The most important form of student aid is bursaries, which may be either at full or half rate, while another is

the grant of annual subventions for group educational travel.

The Trade Union Organization likewise grants over 15,000 annual studentships, mostly for secondary education of all types, for which further large sums in grants are provided by the youth organization Frente de Juventudes. The students in the workers' colleges are mostly in receipt of grants from the *mutualidades laborales* (workers' friendly societies). And all students in the establishments of the Obra Sindical de Formación Profesional (Trade Union Vocational Training) receive instruction free of all charges, free board or half board in boarding establishments and coverage under specified welfare heads. In some instances grants are made by individual corporations, societies or firms for their own nominees.

Buildings and equipment. The buildings used for secondary education are to a great extent new and provided with all the requisites for maximum effectiveness and serviceability. Old buildings not capable of conversion in conformity with modern educational needs are being replaced by new ones which meet the most exacting requirements.

School welfare services. The school medical service is responsible for watching over pupils' health and some schools have a clinic. In the general secondary sector, the adjustment and mental health problems of baccalaureate candidates are dealt with by the Psychotechnical Guidance Service (Servicio de Orientación Psicotécnica).

TYPES OF SECONDARY EDUCATION

Pupils completing primary education have the following choices open to them: (a) immediate entry into the labour market (they must have passed their 14th birthday and hold the primary school leaving certificate); (b) study at secondary level in industrial vocational training centres, where they can secure the ratings of craftsman and foreman and go on into employment or to technical schools at secondary level; (c) take the pre-university baccalaureate (lower and upper) or the vocational baccalaureate (lower and upper), which qualifies them for admission to the higher technical schools; (d) take commercial education leading to the qualification of commercial technician; (e) take teacher training for appointments in primary schools; (f) study fine arts—music, painting sculpture, etc.; (g) enter upon other forms of specialized training such as courses for public health technicians, linguists, etc.

The Educational Guidance Department of the Instituto Nacional de Psicología Aplicada y Psicotecnía (National Institute of Applied Psychology and Psychotechnology) and the branch offices of the institute to be found in almost all provincial capitals advise students and their parents on the type of secondary studies most suitable for each individual. In addition to its psychiatric functions already mentioned, the Psychotechnical Guidance Service helps baccalaureate students in the selection of courses and jobs.

The secondary school year runs from 1 October to 15 June and is usually divided into three terms. Vacations are taken at Christmas (20 December to 7 January), Easter (7 days) and in summer (16 June to 30 September). Schools are usually open 6 days a week, the hours of class varying according to the type of school. Instruction may be full-time, half-time (morning or afternoon) or on a night school basis.

General secondary schools

These schools (*centros de enseñanza media, institutos, colegios*) prepare pupils for the baccalaureate. The course does not qualify them for a specific vocation but gives a thorough general education which will improve the student's chances of success when he embarks on university education or professional training.

Candidates must have reached their tenth birthday in the year of entry and must pass an entrance examination on subjects taught at the primary level. Exemption from this examination is granted to those in possession of the primary school leaving certificate, those who received their primary education in the preparatory school of a secondary school or those who have passed the entrance examination to an *instituto de enseñanza laboral* (vocational secondary school) or other establishment of the same or higher level.

Curriculum. The governing considerations are the inculcation of spiritual values, the training of character and the development of mind and body.

The total number of yearly subject courses under the new baccalaureate curriculum is 35, against 48 under the 1953 curriculum.

In the lower baccalaureate course, which lasts 4 years, the following subjects are taken. *First year:* Spanish, 6 periods per week; Spanish geography, 6; mathematics, 6; religious instruction, 2; drawing, 3. *Second year:* Spanish, 6 periods a week; world geography, 4; mathematics, 3; a modern language, 6; religious instruction, 2; drawing, 2. *Third year:* Latin, 6 periods a week; mathematics, 3; natural science, 6; a modern language, 4; religious instruction, 2; drawing, 2. *Fourth year:* Latin, 3 periods a week; Spanish, 3; history, 6; mathematics, 3; physics and chemistry, 6; religious instruction, 2.

The upper or university baccalaureate course lasts 2 years, and is organized in two parallel sections, science and arts. These sections comprise subjects common to both, which are taken by all pupils, and special subjects for each. *Fifth year:* common subjects—natural science, a modern language (the same as in the lower baccalaureate), religious instruction and drawing. Special subjects—mathematics and chemistry for the science section and Greek and Latin for the literature section. *Sixth year:* Common subjects—philosophy, Spanish language and literature, history of art and culture and religious instruction. Special subjects—mathematics and physics for the science section; Greek and Latin for the literature section. Common to all annual courses are the development of patriotic feeling and physical training, plus domestic economy for girls.

Achievement testing. Baccalaureate students are marked separately in each subject. The annual examinations take place at the end of the academic year out of term time in September. Markings are from 1 to 10, 5 marks being necessary for a pass. The gradings are 'held back' (1 to

4 marks), pass (5 to 6 marks), distinguished (7 to 8 marks) and outstanding (9 to 10 marks).

Pre-university course. Holders of the upper baccalaureate wishing to go on to a university are required to pass the pre-university course as a preliminary. It is 9 months in length, and consists of specific subjects notified yearly by the Ministry of Education. Attendance at a recognized establishment is compulsory, and on completion the centre where the course has been taken issues a proficiency or attendance certificate to enable the candidate to sit the qualifying examinations in June and September.

Teaching staff. Teachers in academic secondary education may be state employed or free (private). State employed teachers are those who have passed the prescribed academic eliminatory and professional tests and are employed in state or municipal secondary schools, with the rights, restrictions and responsibilities of civil servants. They consist of: (a) staff teachers (*catedráticos numerarios*), who must hold the licentiate of a university faculty of arts or science, except for drawing masters who must be graduates of the Escuela Superior de Bellas Artes; (b) special subject teachers, appointed to take modern language classes, art classes, handicrafts and all subjects for which a university degree is not necessary; (c) associate teachers (*profesores adjuntos*), licentiates in science or arts who assist the staff teachers, act for them in split classes, during their absence or during the vacancy of a post, and co-operate in teaching and educational duties; they are remunerated from state funds; (d) assistant teachers (*profesores ayudantes*), university, etc. graduates who assist with classroom exercises and are remunerated from the revenues of the school where they are employed.

To improve the standards of scholarship and training in the profession, an Escuela de Formación del Profesorado de Enseñanza Media (Secondary Teachers' Training School) was established by an Order of 19 July 1955 under the Centro de Orientación Didáctica (Didactical Guidance Centre). The latter was instituted by Ministerial Order of 27 December 1954 and its responsibilities include the purchase and keeping of publications.

Staff and associate teachers are recruited by competitive examination. Special subject teachers may be appointed by competitive examination or at the discretion of the appropriate authority. Assistant teachers are selected on qualifications and at the discretion of the authorities.

Types of secondary schools. Secondary schools may be classified according to the way in which they are financed or administered, and their manner of operation, as follows:

State institutes (*institutos nacionales*). Since the academic year 1957–58 state institutes have had branch schools located in suburban areas. There is also provision for night courses in the institutes.

Unofficial schools. Unofficial secondary schools may be licensed (*autorizados*) or recognized (*reconocidos*) according to their academic standing. The standards prescribed as conditions for the recognition of unofficial schools are in no case higher than those applicable to state schools of the same level. Teachers must hold the academic qualifications required by law.

Church secondary schools. As well as being subject to the supervision and jurisdiction of the church hierarchy, these schools are organized, maintained and controlled by it or by canonically approved teaching institutions.

Foundation schools (*centros de patronato*). These are, firstly, schools in whose operation and management the State co-operates with other public corporations, with ecclesiastical bodies, with Falangist bodies or with private corporations under legally established statutes and agreements, and secondly, schools conceded the status in virtue of the charitable service they perform in providing education for necessitous pupils, on condition that they maintain a satisfactory standard of teaching.

Private secondary schools. This term covers schools founded by private enterprise which are neither church nor *patronato* schools but conform to the education laws in respect of curricula, teaching standards, tests and inspection and offer junior or senior secondary education on a private basis.

There are also the 'independent' schools whose students must requalify in the subject examinations and finals before the Examining Boards of the State Institutes of Secondary Education, when permission may be given, in specified circumstances, to count time spent in an independent school.

Correspondence schools. Private correspondence schools are governed by the Decree of 17 June 1955 supplemented by the Ministry of Education Order of 11 July of the same year.

Vocational secondary schools

Vocational secondary education (*enseñanza laboral*), which contains general education and vocational training features, is a new pattern of education given in *institutos laborales.* The lower stage (*bachillerato laboral elemental*) is comparable to the first part of the general baccalaureate as regards the basic formative disciplines, supplemented by initial 'trade' instruction in the practical aspects of agriculture, industry, office work and similar activities for those students unable to secure such training by other means.

These centres are used by three classes of student: those who only want practical training in modern trade subjects with a lower baccalaureate foundation of general education; those aiming at going on to other specialist and technical studies for which the lower baccalaureate is a sufficient qualification; and finally the more gifted, intellectually, living at a distance from large urban centres who can thus take the lower baccalaureate near their homes with the intention of pursuing their studies later and passing the university baccalaureate by a system of equivalences and additional subjects.

Vocational secondary schools are opened as national technological needs dictate; the branches of specialization they cover include arable farming, animal husbandry, industry, mining, seafaring, administration and women's employments, the nature of the courses offered in a particular school being influenced by the economic pattern of the region in which it is situated.

These schools may be opened by the State or privately.

The state schools are established by the Ministry of Education in association with *municipios* (local councils), *diputaciones provinciales* (provincial councils) or other public entities, Falange services and any other individual or corporation desirous of contributing to their foundation. Non-governmental vocational secondary schools may be given state subventions in proportion to the number of free places they offer and will be gazetted as establishments of public service. They are subject to state inspection.

To take overall responsibility for the organization and functioning of this branch of education, a *Patronato Nacional* was established, with the Under-Secretary of the Ministry of Education as chairman, and representatives of all the interests playing a part in the schools' activities.

There is an entrance examination from which are exempted those candidates who hold a primary school leaving certificate or who have passed the entrance examination to another secondary school. Other examinations are annual tests for each subject and a final examination consisting of a theoretical and a practical part.

A specimen time-table for the lower (5-year) stage of a vocational secondary school of agriculture (arable and livestock farming) is given in the table opposite.

The upper vocational baccalaureate stage (*bachillerato laboral superior*) is a 2-year course of study which similarly comprises some subjects common to all specialist courses and others exclusive to each. By way of example the time-table for the farm pests specialist course is given below.

TIME-TABLE FOR VOCATIONAL SECONDARY SCHOOL OF AGRICULTURE (UPPER STAGE)

(in hours per week)

Subject	Year	
	1	2
Languages		
Spanish	1	1
French	1	1
Geography and history		
Economic geography	1	–
History of agriculture and animal husbandry	1	–
Applied economic geography	–	1
Mathematics	1	1
Physics and chemistry		
General and applied physics (theory and practice)	3	3
General and applied chemistry (theory and practice)	3	4
Technical farming studies (special cycle)		
Technology	6	6
Practical farm and workshop training		
Field and workshop	24	24
Drawing	3	3
Business accountancy and organization		
Accounting and elements of business organization	1	1
Social law	1	1
Religious instruction	1	1
Development of patriotism	1	1
Total	48	48

Note. This particular time-table is given as an example; it can be adapted to the special circumstances of each school and, as regards practical farm training, to local climatic conditions.

TIME-TABLE FOR VOCATIONAL SECONDARY SCHOOL OF AGRICULTURE (LOWER STAGE)

(in hours per week)

Subject	Year				
	1	2	3	4	5
Mathematics	6	4	4	4	4
Languages					
Spanish	6	6	2	2	2
French	–	–	3	3	2
Geography and history					
Elements of geography and history	3	–	–	–	–
General and descriptive geography of the world	–	3	–	–	–
Ancient and mediaeval history of Spain and the world	–	–	2	–	–
Modern and contemporary history of Spain and the world	–	–	–	2	–
Economic geography of Spain and the world	–	–	–	–	2
Discussion groups, essays, surveys	–	–	–	–	1
Natural sciences					
Elements of natural science	3	–	–	–	–
Physics and chemistry	–	3	$4\frac{1}{2}$ $(3 \times 1\frac{1}{2})$	–	–
Applied physics and chemistry	–	–	–	$4\frac{1}{2}$ $(3 \times 1\frac{1}{2})$	–
Mass production farming procedures and experiments	–	–	–	–	$4\frac{1}{2}$ $(3 \times 1\frac{1}{2})$
Specialization cycle					
Plant and animal physiology	–	3	–	–	–
Agronomy:					
Theory	–	–	3	–	–
Practice	–	–	6	–	–
Crops and plant pathology, processing industries:					
Theory	–	–	–	3	–
Practice	–	–	–	6	–
Animal husbandry and pathology, processing industries; elements of economics and accounting	–	–	–	–	9
Manual training					
Handicrafts	3	–	–	–	–
Drawing	3	3 $(2 \times 1\frac{1}{2})$	3	3 $(2 \times 1\frac{1}{2})$	3 $(2 \times 1\frac{1}{2})$
Technology	–	1	1	1	1
Workshops	–	$4\frac{1}{2}$ $(3 \times 1\frac{1}{2})$	6 (3×2)	6 (3×2)	6 (3×2)
Religious instruction	3	3	2	2	2
Physical training	3	3	3	3	3
Development of patriotism	1	1	1	1	1
Total	31	$34\frac{1}{2}$	$40\frac{1}{2}$	$40\frac{1}{2}$	$40\frac{1}{2}$

Women take the vocational secondary baccalaureate course in centres of vocational secondary education where girls' classes have been started, and will be able to do so in such all-female schools, public and private, as may be established in future years at the instance of the Ministry of Education.

Teaching staff. Teachers in vocational secondary schools must be licentiates of the appropriate faculty, as in the case of science and arts subjects, and, for the technical subjects, either hold a corresponding degree of another university

faculty or be graduates of a senior or professional technical school or similar institution. They are appointed on the results of a competitive examination or on the reasoned recommendation of the *patronato* concerned. In the former case, successful candidates obtain the status of civil servants, with permanence of tenure and other rights attaching thereto; appointment by recommendation is for a period of five years, and renewable.

Teachers in private schools are appointed at the discretion of the school itself subject to their holding qualifications equal to those laid down for teaching staff in state establishments.

The Institución de Formación del Profesorado de Enseñanza Laboral (Teacher Training Institute for Vocational Secondary Education) was formed under the Ministry of Education by a Decree of 14 March 1952. Its commitments include the further training of temporary teachers in vocational secondary schools, the training of candidates for teaching posts (for the easier selection of appointees); and, outside the teaching sphere, giving opinions on pedagogical and technical questions put by the Patronato Nacional and the centres of vocational secondary education. The staff of the institute comprises two classes of instructor: teachers of general subjects whose duty it is, with the help of their assistants, to take the basic subjects and direct students' training in their particular fields; and specialist associates whose duty it is to run the laboratories and workshops in their branches, carry on regular research and give practical instruction in their special subject in such teaching periods as may be set aside for it by agreement with the instructor in charge. All teachers must be graduates of a university or of a special school at university level.

Industrial vocational training schools

Industrial vocational training is governed by the Law of 20 July 1955 whose immediate predecessors were the Vocational Training Statute of 21 December 1928 and the Industrial Education Statute of 31 October 1924. Its essential aim is to provide a satisfactory qualifying training for operatives in the various types of industrial work. The main responsibilities of the Ministry of Education in this matter are approving schemes of instruction, prescribing the conditions and requirements for the establishment, licensing and official recognition of such training courses and carrying out the official inspectoral functions prescribed by law in centres in this category.

Industrial vocational training comprises apprenticeship from 14 to 17 and tradesman and foreman training from 17 to 21.

Apprenticeship studies are taken in the *escuelas oficiales de orientación profesional y aprendizaje* (aptitude testing and apprentice training schools) and equivalent private schools, while the foreman courses (*maestría*), where tradesmen and foremen are trained for industry, are given in the *escuelas oficiales de trabajo* or the *escuelas de maestría industrial* or in non-government centres; the latter may be recognized or licensed church centres, trade union schools, or recognized or licensed schools started by private interests, notably those which major industrial undertakings are required by law to establish.

Studies may be on a full-time, part-time or extension basis.

When attendance is full-time, the apprentice or tradesman takes the whole syllabus exclusively in the school and its attached workshops and laboratories; as far as possible instruction takes place in normal working hours and is planned intensively to give operatives a technical training in the shortest possible time. In part-time training, the arrangement is for the employee to do a maximum of 34 hours per week in his place of employment and have the remainder of the working week for attendance at the instructional centre or the course where he has enrolled. Under 'extension' arrangements, the tradesman or foreman is employed by his firm on normal terms, can do a full day's work and still attend the appropriate school or free course for the required instruction to bring his knowledge up to the standard for the professional certificate he seeks.

Escuelas de aprendizaje industrial (industrial apprentice schools). The minimum age for entry is 14 and candidates must hold the primary school leaving certificate, undergo a psychotechnical examination and take qualifying tests, holders of the lower baccalaureate being exempt. Instruction is free in state centres.

Apprentice training consists of three consecutive courses of theoretical and practical instruction in fundamental scientific and technological knowledge and in the graphic and manual skills essential to apprentices in the basic groups of industrial employments and for the range of specialist trades in each.

Apprentice training is full-time in the first academic year and may be full-time or part-time in the other two. On completion of the first year's studies, students take a number of tests for the award of the certificate qualifying them as *aprendiz en prácticas* (entered apprentice) which, other things being equal, gives holders preference for employment by industrial undertakings.

Escuelas de maestría industrial (industrial foreman schools). The minimum age for entry is 17 and candidates must be in possession of one of the following qualifications or certificates: entered apprentice, vocational baccalaureate, certificated apprentice, or class 3 or equivalent craftsman.

All candidates undergo psychological testing, and some categories are required to take an entrance examination in addition. The full course lasts 4 years, of which the first 2 turn out skilled operatives for the basic employments and specialized trades covered by the particular centre, while the last 2 produce foremen.

On completion of the first 2 years, students receive the certificate of *oficial industrial en prácticas* (qualified tradesman). On completing the final course they receive the certificate of *maestro industrial en prácticas* (qualified foreman). This gives them priority for employment in industrial undertakings. On completion of 2 years' experience in their industry, they can sit an examination for the diploma of *maestro industrial titulado* (certificated foreman).

Instructional staff in industrial vocational training centres consist of staff teachers and workshop supervisors, associate teachers, special subject teachers and workshop and practical training instructors.

Trade union industrial training activities. The essential object of trade union industrial training centres is to turn out operatives or tradesmen of equivalent status mainly in the metal, electrical, wood working, printing and building trades. Entry is at 12, 13 or 14 according as pupils want or do not want to take first-year apprentice training. Candidates have to pass a number of practical tests and undergo a complete psychotechnical examination.

Vocational courses coming under the Ministry of Labour

Workers' colleges (*universidades laborales*). The dispositions governing the functioning and direction of workers' colleges are the following: (a) on their teaching status, Cabinet Order of 16 August 1958; (b) on their civil status, Ministry of Labour Order of 8 December 1958; (c) on the organization of the Sección Central de Universidades Laborales (Workers' Colleges Division of the Ministry), Ministry of Labour Order of 2 January 1959.

Although workers' colleges come under the Ministry of Labour, the Ministry of Education is responsible for their educational and pedagogical guidance. For the purposes of co-ordination between the two ministries there is a Technical Council, the Consejo Técnico de Universidades Laborales, which acts as an advisory body on the instructional side.

The administration of workers' colleges is in the hands of the rector. Rectors are appointed by the Minister of Labour in consultation with the Minister of Education from distinguished personalities in the field of vocational and technical education.

Finance for the workers' colleges is a commitment of the Mutualismo Laboral (Industrial Friendly Society Movement). For this purpose 3 per cent of members' dues for the preceding year is set aside and posted to a training fund (Prestación de Acción Formativa), out of which the *mutualidades* pay all expenses including bursaries for students. In addition to those provided by the *mutualidades*, bursaries are also financed by the *diputaciones provinciales* (provincial councils) and *municipios* (local authorities).

Workers' colleges are regular student cities, with separate blocks and buildings surrounded by gardens. For the use of the student body and all attached staff, each college has a medical service fully equipped for all forms of treatment. There is also a staff store for the teachers.

The courses available in workers' colleges include those for the industrial foreman's qualification, the vocational baccalaureate, and for the qualifications of skilled farm worker and farm steward; in the near future the full range of technical secondary school courses will be available.

The subjects taught are as follows:

First year. Apprentice training (age of entry 14). Mathematics, 6 hours a week; science, 6; technology, 3; drawing, 6; workshops, 15; Spanish, 2; religious instruction, 2; physical training, 3; personality training, 4; total, 47 hours per week.

Second and third years. Industrial tradesman qualification. Mathematics, 4 hours a week; science, 4; technology (second year), 6; technology (third year), 4; Spanish (second year), 1; Spanish (third year), 2; factory safety and health precautions and industrial organization, 1; religious instruction (second year), 2; religious instruction (third year), 1; civic training and social law, 1; personality training (second year), 2; personality training (third year), 4; drawing, 6; workshop (second year), 18; workshop (third year), 20.

Fourth and fifth years. Foreman qualification. Mathematics, 3 hours a week; science, 3; technology, 3; drawing, 6; workshop, 20; Spanish, 3; religious instruction, 1; civic training and social law, 2; physical training, 1 hour; factory safety and health precautions, and industrial organization, 2 hours; personality training, 2 hours; total, 46 hours per week.

The object of the 'personality training' assignment is to achieve the full development of the student as a person and it covers every aspect of student life in the college. The methods of teaching it are by practice and by student participation in group activities which are designed to cultivate the student's powers of self-mastery and the spirit of fellowship and mutual help. Students are organized in independent self-governing associations sharing the same line of study and interests—sport, art, music, photography, choral singing, rhetoric, etc.

As regards the vocational secondary baccalaureate all the subjects for the lower and upper certificates are available.

Training for the skilled farm worker's qualification consists of a selection of courses spread over the period between the ages of 14 and 18. Students showing sufficient aptitude can take the farm manager's course under the Ministry of Agriculture standards and secure an officially recognized qualification (Decree of 7 September 1951 and Ministry of Agriculture Orders of 31 October 1953 and 12 July 1956). The minimum age for this course is 16.

Appointments to the teaching staff are by nation-wide selection made by the Consejo Técnico from graduate or certificated applicants. Workshop supervisors, drawing and language teachers are required to take a test of competence in addition.

Junior fisheries schools (*escuelas elementales de pesca*). Pupils are recruited very largely from youths on the rolls of the merchant marine and employed in fishing; the minimum age is 14. These schools serve three basic ends: training and passing fisher lads for qualification as skippers of coastal and deep water fishing craft and as motormen; providing an opportunity for general education for boys over primary school age; and, by continuance of studies, providing a connecting link between primary schooling and the senior level studies of the *escuelas medias de pesca* (fisheries middle schools) where the skipper's certificates for medium and long-range fishing craft are obtained. These are special purpose schools maintained entirely by the Instituto Social de la Marina, a dependency of the Ministry of Labour. The schools are financed from the budget of the institute.

Escuelas sociales. There are eight such schools in operation, located in Madrid, Barcelona, Granada, Oviedo, Salamanca, Valencia, Saragossa and Santiago de Compostela. To be eligible for admission applicants must have reached their 16th birthday and pass an examination, from which, however, those who can show possession of a secondary education diploma or ex-students of the Escuela de Capacitación Social de Trabajadores are exempt.

Studies are divided into three courses. *Course one:* organization of the Spanish State; Falange doctrine and political law; labour law (1); economic geography; economics and statistics. *Course two:* social history, labour law (2); social policy; welfare and social assurance; scientific organization and safety at work. *Course three:* trade union and corporation law; theory of labour law; labour disputes law; industrial hygiene and medicine; agrarian social policy.

To make attendance at these courses easier for apprentices, workers and office personnel, the classes take place from 7 to 9 p.m.

Escuela de Capacitación Social de Trabajadores. Established in Madrid by a Ministerial Order of 7 February 1942, the school has as its main object to provide workers with a training in citizenship through intensive 45-day residential courses. It has a budget from the Ministry of Labour from which students, during their courses, are paid their full daily wage rates and all other types of remuneration to which their employment entitles them, plus travel expenses.

Although the school is intended primarily for adult workers, a certain number of courses per year are set aside for giving citizenship training to apprentices. The latter's ages vary between 16 and 18 and they come from all parts of Spain, the only restriction being that all members of any one course must be of the same trade.

Technical subjects are taught by senior officials of the Ministry of Labour and general educational subjects by university faculty members and specialist instructors. All are appointed direct by the Ministry of Labour.

Schools of commerce

There are two levels of commercial studies, secondary and higher. At present there are 42 schools of commerce in operation under the Ministry of Education in which the following training courses, approved by a Decree of 16 March 1956, are given at secondary level.

Office assistant. The conditions for admission are attainment of 14th birthday and possession of the primary school leaving certificate or completion of a course of study in the preparatory school of a school of commerce. Those without these academic qualifications are required to take an entrance examination covering arithmetic, geometry and dictation. The course last 3 years.

Bank assistant. The same conditions for entry as for office assistants. Length of studies 3 years.

Merchant office assistant-interpreter. Same conditions for entry as above. Length of studies 3 years.

Commercial technician (*perito mercantil*). For acceptance applicants must hold the lower baccalaureate and pass certain additional qualifying tests; exemption from these is granted to holders of the upper baccalaureate and those who have passed the entrance examination for a centre of higher education. The course lasts 3 years.

Technical schools

The Law of 20 July 1957 on the organization of technical education arose from the growing need for technicians created by Spain's programme of industrialization. By this law all technical education is fitted into a co-ordinated and progressive system which allocates subjects appropriately between two successive stages: (a) *escuelas técnicas de grado medio* (secondary level technical schools), providing the essentially practical specialist training required for the holding of a technician's post, and conferring the rating of 'charge hand' or technician with mention of the particular trade; and (b) *escuelas técnicas superiores* (higher technical schools) providing an extensive and substantial background of science teaching followed by the specialist technological training required for professional practice as a fully fledged architect or engineer; students may get as far as the doctorate.

Admission to these schools is via selective courses which may be taken by all those with the requisite bent and an adequate level of education received alike in a general or vocational secondary school or their equivalents.

There is a joint preparatory course for admission to all secondary level technical schools which is compulsory for all holders of the lower baccalaureate and for operatives graded as class I or equivalent tradesmen with a minimum seniority as such of two years. The subjects in this course are mathematics, physics and chemistry, and candidates must pass in them within two years.

Industrial technical schools (*escuelas técnicas de peritos industriales*). Candidates for all branches of training—mechanical engineering, electrical engineering, chemical engineering and textiles—take the mathematics, physics and chemistry, natural history and drawing of the selective course in common and also the first common course, comprising elements of infinitesimal calculus and analytical geometry, general physics, general chemistry, free-hand drawing, French or English and carpentry, metal fitting and finishing, forging, casting and electrical shop training.

This curriculum will come into operation by degrees and has not yet been drafted in its entirety as the pre-1957 curriculum, which provides for two years of common studies for all branches, still applies for the classes now going through training.

First year: additional mathematics, descriptive geometry and system of projection, physics, chemistry, French or English, free-hand drawing and shop work.

Second year: additional mathematics, physics, chemistry, French or English, drawing and shop work.

On successful completion of these two courses the student can enrol in the specialist branch of his choice. By way of illustration, the curriculum for mechanical engineering technicians is given below:

First year: additional pure and applied mathematics, topography, technology, mechanical drawing, general mechanics, characteristics of industrial materials, mechanical engineering workshops.

Second year: machine assembling, industrial and labour law, elements of hydraulics and hydraulic machines, mechanical drawing, applied mechanics, mechanical workshops.

Third year: industrial health and accident prevention, works accounting and organization, political economy, elements of thermodynamics and heat engines, works and drawing office practice; mechanisms, machine tools and machine tool practice, mechanical workshops.

Agricultural technical schools (escuelas técnicas de peritos agrícolas). Conditions of entry: preparatory and selective courses as for the industrial technical schools. The curriculum under the 1957 law lays down two years of study.

Other vocational and technical schools. These include the schools for public works technicians, surveyors, telecommunications and aero-engineering technicians, schools for builders' foremen, mine deputies and ore dressing and smelting works foremen, the State Nautical School, schools of ceramics, schools for public health technicians, etc.

The educational and vocational training commitments of the *centros de enseñanza media y profesional* (vocational secondary schools) were extended by Ministerial Order of 15 June 1954 to include the provision of domestic economy courses for girls. These courses give training in homecraft, rural home industries, and elements of health knowledge and citizenship.

Arts and music schools

These include conservatories of music, schools of dramatic art (including folk dancing), and colleges of fine arts, all coming under the Ministry of Education. The two first-named provide courses at elementary, professional and advanced levels.

Teacher training schools

Teachers for primary education are trained in the official primary teacher training schools under the Ministry of Education and in non-governmental schools run by the church or such bodies as the women's section of the Falange (FET) and the trade union youth movement (JONS) and the Frente de Juventudes.

All schools have suitable premises, suitably equipped, for their teaching commitments. There are schools for men and women.

For admission to the beginners' course, candidates must be 14 years of age, hold the lower baccalaureate, be of Spanish nationality and free from any contagious disease or physical defect likely to incapacitate them for teaching (this last condition may be waived). There are entrance examinations and the full training lasts 3 years.

Staff teachers' appointments in primary teacher training schools are filled by competitive examination of holders of a science or arts degree. Candidates must produce proof of two years' teaching practice in a training school and be qualified primary school teachers or have a pass in general pedagogy and teaching methods from a university department of education.

Special subject teachers must hold a satisfactory qualification in their subject and take any tests prescribed. Graduates in philosophy and arts from the education section who desire appointment as teachers of pedagogic disciplines will be required to do one year of practical teaching in a primary school.

Out-of-class activities

Special attention is given to sports and games in secondary education and the Ministry of Education runs annual inter-school championships with eliminating rounds in each province and finals in Madrid. State, church and private schools participate and the standard of the performances is clear proof of the keenness and the sound training of the pupils.

Sports activities are mainly run by the *Frente de Juventudes* and the women's section of FET and JONS, which arrange matches, etc., both in term time and more particularly in youth hostels and summer camps.

In the hostels and camps, the schoolchildren have the benefits of healthy conditions and good companionship, do their own organizing and live their own lives. The camps are situated in the most picturesque parts of Spain.

TRENDS AND PROBLEMS

The intention is that general secondary education at the lower level shall become compulsory, though this will not be achieved overnight. A most successful step already taken in this direction has been the introduction, in the institutes, of classes for young office and factory workers to assist them in improving their education after their day's work.

By a far-reaching system of study equivalences, any student who has gone through any kind of secondary school and meets the conditions of eligibility can follow the career of his choice with no road barred to him.

It is also the intention to make secondary studies more uniform by the promulgation of a law to co-ordinate and consolidate the vast variety of categories within the same secondary grade.

[*Text prepared by Dr. María Josefa Alcaraz Lledó and transmitted by the Spanish National Commission for Unesco in September 1959.*]

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STATISTICS

Population: (mid-year 1958 estimate): 29,662,000.
Area: 194,396 square miles; 503,486 square kilometres.
Population density: 153 per square mile; 59 per square kilometre.

Summary of school statistics 1953–57. Total enrolment in educational institutions at all levels from kindergartens to university was about 4,208,000 pupils in 1957/58, representing 14 per cent of the population. There were, in addition, some 365,000 people, mostly men, attending adult education courses. Of the school-going population, 9 per cent were pupils in nursery schools, 74 per cent in primary schools, nearly 10 per cent in general secondary schools, over 4 per cent in vocational schools, about 1 per cent in teacher training courses at secondary level and the remainder, less than 2 per cent, at university and higher educational colleges. Girls made up over half the enrolment at primary schools, 39 per cent in general secondary, 27 per cent at vocational schools, 56 per cent at teacher training courses and 16 per cent at universities and higher educational institutions. The teaching staff at all levels of education, excluding special schools and adult education, was over 127,000 in 1957/58, an increase of 10 per cent compared with 1953/54. Women teachers were 60 per cent of the total in public primary schools, 36 per cent in all general secondary schools, nearly half the staff at teacher training courses, and 8 per cent at university level institutions. These percentages show little change compared with 1953/54. The pupil-teacher ratio in primary schools in 1957/58 was 38 compared with over 40 in 1953/54 but in general secondary schools 21 against 15 at the beginning of the period under review. Compared with 1953/54, however, enrolment increased by nearly 60 per cent in general secondary education. At other levels of education enrolment rose more moderately between 1953/54 and 1957/58: by 3 per cent in primary schools, by 16 per cent at secondary vocational schools, by 52 per cent at teacher training colleges and by 9 per cent at universities and higher educational institutions. (See Table 1.)

Enrolment trends in secondary education, 1930–57. Enrolment in general secondary education increased more than five-fold between 1930 and 1957 and over the same period the proportion of girls to total enrolment rose from 15 to 39 per cent. Expansion of vocational education was less striking but enrolment in 1957 was three times as high as in 1930. The trend in public teacher training schools has fluctuated over the period under review but enrolment appears to have been increasing more rapidly in recent years; women now represent well over half the enrolment in these schools. The ratio of enrolment in all sectors of secondary education to the estimated age group 15–19 years has steadily risen from 7 in 1935 to 21 for the 3-year period 1955–57. (See Table 2.)

Examination results in secondary education, 1953–57. The number of students awarded the elementary *bachillerato* or lower secondary school certificate increased by 145 per cent over the 5 years under review and the proportion of girl candidates rose from one-third to 42 per cent of the total. Candidates awarded the upper *bachillerato* or higher secondary school certificate increased by 46 per cent between 1953/54 and 1957/58 but on the other hand the proportion of girls declined slightly. Certificates granted by technical, industrial and commercial schools numbered 8,811 in 1957/58 against 9,142 in 1953/54—the fall in the number of students taking the upper commercial certificate (*profesor mercantil*) was largely responsible for this decline. Teaching certificates steadily increased from 5,266 to 6,577 over the period, representing a rise of 24 per cent; three-quarters of the teaching certificates were awarded to women students. (See Table 3.)

Educational finance, 1957. Total expenditure by the Ministry of Education amounted to 3,156 million pesetas in 1957 (fiscal year beginning January), averaging 107 pesetas per inhabitant. Of this sum, about one-third was for capital expenditure and debt repayments. (See Table 4.)

Sources. Spain: Ministerio de Educación Nacional, Sección de Estadística de la Secretaría General Técnica, reply to Unesco questionnaire; other official sources.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools, public	1957/58	312	331	331	*12 158	...
	Infant schools, public	1957/58	4 327	4 427	4 427	*168 753	...
	Nursery schools, private	1957/58	951	961	961	*38 040	*21 303
	Infant schools, private	1957/58	3 765	3 799	3 799	*173 080	*105 194
	Total	**1957/58**	**9 355**	**9 518**	**9 518**	***392 031**	...
	„	1956/57	9 210	9 360	9 360	*363 070	...
	„	1955/56	9 022	9 140	9 140	*337 455	...
	„	1954/55	8 798	8 378	8 378	*327 804	...
	„	1953/54	9 445	9 524	9 524	*356 864	...

Note. Including data on Ceuta and Melilla.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	[1]62 698	62 795	36 147	2 461 542	1 296 885
	Primary schools, private	1957/58	[1]16 165	18 203	...	646 600	370 758
	Total	**1957/58**	**[1]78 863**	**80 998**	**...**	**3 108 142**	**1 667 643**
	"	1956/57	[1]77 101	80 450	...	3 089 350	1 656 536
	"	1955/56	[1]75 878	79 431	...	3 117 168	1 569 526
	"	1954/55	[1]74 132	77 977	...	3 019 082	1 502 896
	"	1953/54	[1]74 132	77 977	...	3 019 082	1 502 896
Secondary							
General	Secondary schools, public	1957/58	119	4 159	1 621	61 963	26 762
	Secondary schools, private	1957/58	1 048	15 313	5 706	355 919	137 302
	Total	**1957/58**	**1 167**	**19 472**	**7 327**	**417 882**	**164 064**
	"	1956/57	1 157	19 175	7 231	371 010	142 917
	"	1955/56	1 137	18 837	7 133	327 725	123 612
	"	1954/55	1 130	18 726	6 971	292 493	108 699
	"	1953/54	1 122	17 938	6 431	261 724	96 170
Vocational	Technical schools, public	1957/58	42	1 450	...	17 626	90
	Industrial schools, public	1957/58	99	1 873	...	25 756	2 069
	Schools of agriculture, mining, engineering, etc., public	1957/58	91	1 586	277	12 426	—
	Arts and crafts schools, public	1957/58	45	1 059	130	22 920	13 214
	Commercial schools, public	1957/58	39	1 382	267	42 833	9 706
	Schools of fine arts and music, public	1957/58	40	652	234	30 195	23 315
	Other schools, public	1957/58	59	1 603	...	26 669	...
	Total	**1957/58**	**415**	**9 605**	**...**	**178 425**	**[2]48 394**
	"	1956/57	435	9 002	...	166 160	[2]40 036
	"	1955/56	429	8 825	...	167 457	[2]40 918
	"	1954/55	411	8 110	...	160 486	[2]40 835
	"	1953/54	395	7 047	...	153 649	[2]39 507
Teacher training	Teacher training schools, public	1957/58	106	1 948	1 079	37 950	22 110
	Church teacher training schools	1957/58	49	264	...	1 230	...
	Teacher training schools, private	1957/58	2	19	...	147	20
	Total	**1957/58**	**157**	**2 231**	**[3]1 079**	**39 327**	**[4]22 130**
	"	1956/57	157	1 990	[3]915	36 773	[4]20 146
	"	1955/56	157	1 811	[3]860	29 531	[3]18 104
	"	1954/55	157	1 608	[3]788	25 999	[3]17 114
	"	1953/54	157	1 583	[3]776	25 896	[3]18 181
Higher							
General and technical	Universities, public	1957/58	12	4 600	370	63 983	10 750
	Engineering colleges, public	1957/58	13	591	—	4 488	4
	Engineering and chemistry schools, private	1957/58	2	62	—	309	—
	Total	**1957/58**	**27**	**5 253**	**370**	**68 780**	**10 754**
	"	1956/57	27	5 190	362	66 959	10 286
	"	1955/56	27	4 711	349	61 359	10 056
	"	1954/55	27	4 901	364	62 542	9 534
	"	1953/54	27	4 602	369	63 223	9 612
Special	Schools for mentally defective children	1957/58	[5]70	75	...	1 270	...
	Schools for the blind	1957/58	[5]69	69	...	696	...
	Schools for deaf-mutes	1957/58	[5]143	143	...	1 421	...
	Total	**1957/58**	**[5]282**	**287**	**...**	**3 387**	**...**
	"	1956/57	...	...	...	...	...
	"	1955/56	...	...	...	...	...
	"	1954/55	...	...	...	...	...
	"	1953/54	...	...	...	...	...
Adult	Adult primary courses, public						
	Total	**1957/58**	**[1]44 690**	**[6]44 740**	**...**	**364 902**	**28 825**
	"	1956/57	[1]43 519	[6]43 519	...	360 146	26 825
	"	1955/56	[1]45 409	[6]45 430	...	367 919	27 191
	"	1954/55	[1]34 089	[6]34 099	...	386 107	25 063
	"	1953/54	[1]48 261	[6]48 270	...	410 395	31 821

1. Number of classes.
2. Not including 'other schools'.
3. Public schools only.
4. Not including Church teacher training schools.
5. Schools or classes.
6. Teachers are those of the public primary schools.

2. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational[1]		Teacher training[2]				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	76 074	15	62 466	24	41 617	50			
1931	105 649	23	73 467	30	39 852	49			
1932	114 645	27	...	...	30 124	50	[3]140	2 222	*6*
1933	130 752	29	...	...	21 323	50			
1934	124 775	32	...	...	15 517	47			
1935	124 900	32	15 571	29	10 704	46	151	2 286	*7*
1940	157 707	36	70 552	25	11 877	44			
1941	170 782	37	90 643	25	3 143	47			
1942	180 194	35	108 317	24	15 526	70	288	2 568	*11*
1943	178 770	34	115 962	24	19 439	75			
1944	175 644	35	125 917	24	18 064	71			
1945	194 741	34	136 893	24	24 041	72			
1946	203 136	34	144 931	26	25 928	71			
1947	212 248	35	146 232	27	24 171	73	375	2 668	*14*
1948	213 818	35	149 352	28	18 440	69			
1949	214 847	35	146 767	28	19 942	72			
1950	221 809	35	154 149	31	21 086	73			
1951	234 627	36	160 441	34	24 384	73			
1952	249 605	36	163 612	35	25 421	73	435	2 720	*16*
1953	261 744	37	153 649	[4]26	25 336	72			
1954	292 493	37	160 486	[4]25	25 213	68			
1955	327 725	38	167 457	[4]24	28 551	63			
1956	371 010	39	166 160	[4]24	34 931	58	577	2 803	*21*
1957	417 882	39	178 425	[4]27	37 950	58			

1. From 1930–49 vocational education at university level is included but this represents only a small proportion of total enrolment.
2. Public schools only.
3. General secondary and teacher training enrolment only.
4. Percentage calculated for part of total enrolment only.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Lower *bachillerato* . . .	23 699	7 865	33 485	12 320	40 546	15 563	48 839	19 609	58 025	24 119
Upper *bachillerato* . . .	15 834	4 250	17 642	4 599	19 381	4 879	21 268	5 171	23 135	5 429
Certificate of technical and industrial schools . . .	1 467	34	1 594	25	1 711	22	1 831	24	1 942	27
Certificate of commercial schools										
Perito mercantil . . .	4 813	1 379	5 469	1 332	4 821	1 089	4 879	1 125	4 929	1 159
Profesor mercantil . . .	2 862	298	2 894	416	1 818	202	1 884	209	1 940	215
Teacher training certificate	5 266	4 017	4 860	3 556	5 414	3 969	5 994	4 405	6 577	4 845

4. EDUCATIONAL FINANCE, 1957 (in thousand pesetas)[1]

A. EXPENDITURE BY PURPOSE

	Amount
Total expenditure[2] [3]	**3 156 164**
Recurring expenditure	2 079 972
For central administration	78 130
For instruction	
Salaries to teachers, etc.	1 467 050
Other instructional expenditure	489 794
Other recurring expenditures	44 998
Capital expenditure	776 192
Educational facilities	751 280
Auxiliary facilities	24 912
Debt service	300 000

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure[2]		**2 079 972**		**100.0**
Central administration		78 130		3.8
Instruction		1 956 844		94.1
Pre-primary and primary education	1 268 940		61.0	
Secondary education	144 068		6.9	
General	75 425		3.6	
Vocational	47 189		2.3	
Teacher training	21 454		1.0	
Higher education	250 581		12.1	
Special education	1 523		0.1	
Adult education	36 102		1.7	
Other education, not specified	255 630		12.3	
Other recurring expenditures, not specified		44 998		2.1

1. Official exchange rate: 100 pesetas = 2.38 U.S. dollars.
2. Budget estimate of the Ministry of Education only.
3. In addition, other Ministries allocated 168,250,207 pesetas and local authorities allocated 415,442,000 pesetas (of which 243,619,003 pesetas were for construction of primary schools).

SPANISH TERRITORIES IN AFRICA

The territories under Spanish jurisdiction may be classed as follows:

Spanish Guinea, comprising continental Guinea and a group of islands—Fernando Po, Elobey, Annobon, Corisco and some smaller ones. It is administered by a Governor-General. The Treaty of Paris of 1900 fixed the limits of the territory.

Spanish West Africa, comprising Sidi Ifni and the two adjacent regions of Saguia Hamra and Rio de Oro (forming Spanish Sahara). Administration is in the hands of two sub-governors who come under the Governor-General.

The legal basis of education in the Spanish territories embodies the following principles: (a) a juridical status broadly similar to that of provinces on the Spanish mainland; (b) special assistance to these underdeveloped regions to enable them to play a larger part in civilization; (c) respect for races and religions; (d) respect for customs.

[*Text prepared by the Unesco Secretariat in June 1960.*]

STATISTICS: SPANISH GUINEA

Population (mid-year 1958 estimate): 214,000.
Area: 10,831 square miles; 28,051 square kilometres.
Population density: 20 per square mile; 8 per square kilometre.

Summary of school statistics, 1953–57. In 1957, enrolment in primary and secondary schools numbered 21,867 pupils, representing about 10 per cent of the estimated population. The number of girls attending schools is unknown. Of total enrolment, 98 per cent were pupils in primary schools, 1 per cent in middle schools and the remainder were either in the higher school for natives which prepares assistant teachers and government employees and/or in two other vocational schools. No information on adult edcuation is available for recent years. In 1953, it was reported that 378 people, of whom 91 women, were attending adult

education courses. Compared with 1953, enrolment in primary and secondary education increased by 19 per cent. (See table.)

Educational finance, 1958. The budget estimate for educational expenditure for the year 1958 (fiscal year beginning January) amounted to 6,464,000 pesetas, averaging about 30 pesetas per inhabitant. Official exchange rate: 100 pesetas = 2.38 U.S. dollars.

Sources. Spain: Ministerio de Educación Nacional, Sección de Estadística de la Secretaría General Técnica, reply to Unesco questionnaire; Instituto Nacional de Estadística, *Anuario Estadístico de España.*

SPANISH GUINEA: SUMMARY OF SCHOOL STATISTICS, 1953-57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary[1]	Elementary schools for natives, public. . .	1957	114	189	—	17 551	6 257
	Primary schools, public	1957				785	...
	Primary schools, private	1957	19	47	...	3 103	...
	Total	**1957**	**133**	**236**	**...**	**21 439**	**...**
	„	1956	128	221	...	20 085	...
	„	1955	124	221	...	19 848	...
	„	1954	121	208	...	18 977	...
	„	1953	119	199	...	18 161	...
Secondary							
General	Middle school, public[2]						
	Total	**1957**	**1**	**11**	**...**	**211**	**...**
	„	1956	1	11	...	192	...
	„	1955	1	11	...	152	...
	„	1954	1	15	...	118	...
	„	1953	1	12	...	118	...
Vocational	Arts and crafts school, public	1957	1	...	...	75	...
	Commercial school, public	1957	1	...	...	28	...
	Higher school for natives, public[3]	1957	1	...	...	114	...
	Total	**1957**	**3**	**...**	**...**	**217**	**...**
	„	1956	3	...	...	282	...
	„	1955	3	...	...	256	...
	„	1954	3	...	...	214	...
	„	1953	3	...	...	165	...

1. Including pre-primary education separate data of which are not available.
2. Patronato Colonial de Enseñanza Media.
3. The school trains the students to be assistant teachers or to hold positions in the administration.

STATISTICS: SPANISH WEST AFRICA (IFNI)

Population (mid-year 1958 estimate): 52,000.
Area: 579 square miles; 1,500 square kilometres.
Population density: 90 per square mile; 35 per square kilometre.

Summary of school statistics, 1953–57. Total enrolment in 27 primary schools in 1957 was 1,072 pupils, representing about 2 per cent of the estimated population. The number of girls enrolled is unknown. Compared with 1953, enrolment had increased by about 40 per cent. There were in addition some 120 people enrolled in adult education courses in 1957. (See table.)

Source. Spain: Ministerio de Educación Nacional, Sección de Estadística de la Secretaría General Técnica, reply to Unesco questionnaire.

SPANISH WEST AFRICA (IFNI): SUMMARY OF SCHOOL STATISTICS, 1953–57[1]

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	15	15	...	592	...
	Primary schools, private	1957	12	12	...	480	...
	Total	**1957**	**27**	**27**	**...**	**1 072**	**...**
	,,	1956	27	27	...	966	...
	,,	1955	27	27	...	1 090	...
	,,	1954	25	25	...	891	...
	,,	1953	25	25	...	754	...
Adult	Adult education						
	Total	**1957**	**...**	**...**	**...**	**121**	**...**
	,,	1956	...	...	...	95	...
	,,	1955	...	...	...	172	...
	,,	1954	...	...	...	172	...
	,,	1953	...	...	...	120	...

1. Native and Spanish pupils.

STATISTICS: SPANISH WEST AFRICA (SAHARA)

Population (mid-year 1958 estimate): 19,000.
Area: 102,700 square miles; 266,000 square kilometres.
Population density: 0.2 per square mile; 0.1 per square kilometre.

Summary of school statistics, 1953–57. Enrolment in eight primary schools for native and Spanish children was only 179 pupils in 1957 compared with 438 pupils in 10 schools in the preceding year. The number of native children attending school fell from 206 to 23 between 1956 and 1957. The number attending adult education classes also fell from 250 in 1956 to 62 in 1957. (See table.)

Source. Spain: Ministerio de Educación Nacional, Sección de Estadística de la Secretaria General Técnica, reply to Unesco questionnaire.

SPANISH WEST AFRICA (SAHARA): SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, Spanish, public	1957	...	...	...	156	...
	Primary schools, native, public	1957	...	...	...	23	...
	Total	**1957**	**8**	**8**	**—**	**179**	**...**
	,,	1956	10	10	—	438	...
	,,	1955	8	8	—	411	...
	,,	1954	11	11	—	259	...
	,,	1953	11	11	—	243	...
Adult	Schools for adults, public						
	Total	**1957**	**3**	**3**	**...**	**62**	**...**
	,,	1956	3	3	...	250	...
	,,	1955	3	3	...	136	...
	,,	1954	3	3	...	116	...
	,,	1953	3	3	...	108	...

SUDAN

THE EDUCATIONAL SYSTEM

Prior to the Anglo-Egyptian Condominium (1899–1956) education was mainly religious. The Khalwa (Koranic School) and the Masjid (Mosque) were the seats of traditional learning, and were at the same time the centres of village life; the Feki (teacher of the Koran) and the 'Alim (teacher of Islamic law) were held in great respect.

This religious education continues to thrive side by side with the public educational system, but has undergone considerable change. It has thrown open its doors to current educational thought and practice, and now includes in its curriculum many modern subjects such as mathematics, science, history and geography. Further, plans are under way for orienting the whole field of religious education towards the university. The elementary school of the (secular) educational ladder leads to both the secular intermediate and secondary schools and the religious intermediate and secondary schools.

The public educational ladder. The public educational ladder, comprising the three stages of elementary, intermediate and secondary schooling (4+4+4), and leading to the university, is a creation of the Condominium era. Early attempts at secular schools were made during the Turko-Egyptian period (1821–85), but these were short-lived, and only religious education was provided during the Mahdiyya (1885–99). By about 1924 the present educational organization had more or less taken shape. Expansion, however, was comparatively slow; by 1936 the educational system had 1 secondary school, 11 intermediate schools and some 87 elementary schools, with a total attendance of only 9,000 pupils. The inauguration of the Graduates' General Congress (a private body) marked a step forward. Voluntary contributions helped in increasing the number of schools and, before the close of the Condominium rule in 1956, private enterprise had established 3 secondary schools and about 40 intermediate schools. The corresponding figures for government institutions were 9 secondary and about 50 intermediate. In girls' education progress has been slower; private enterprise did not interest itself equally in this field.

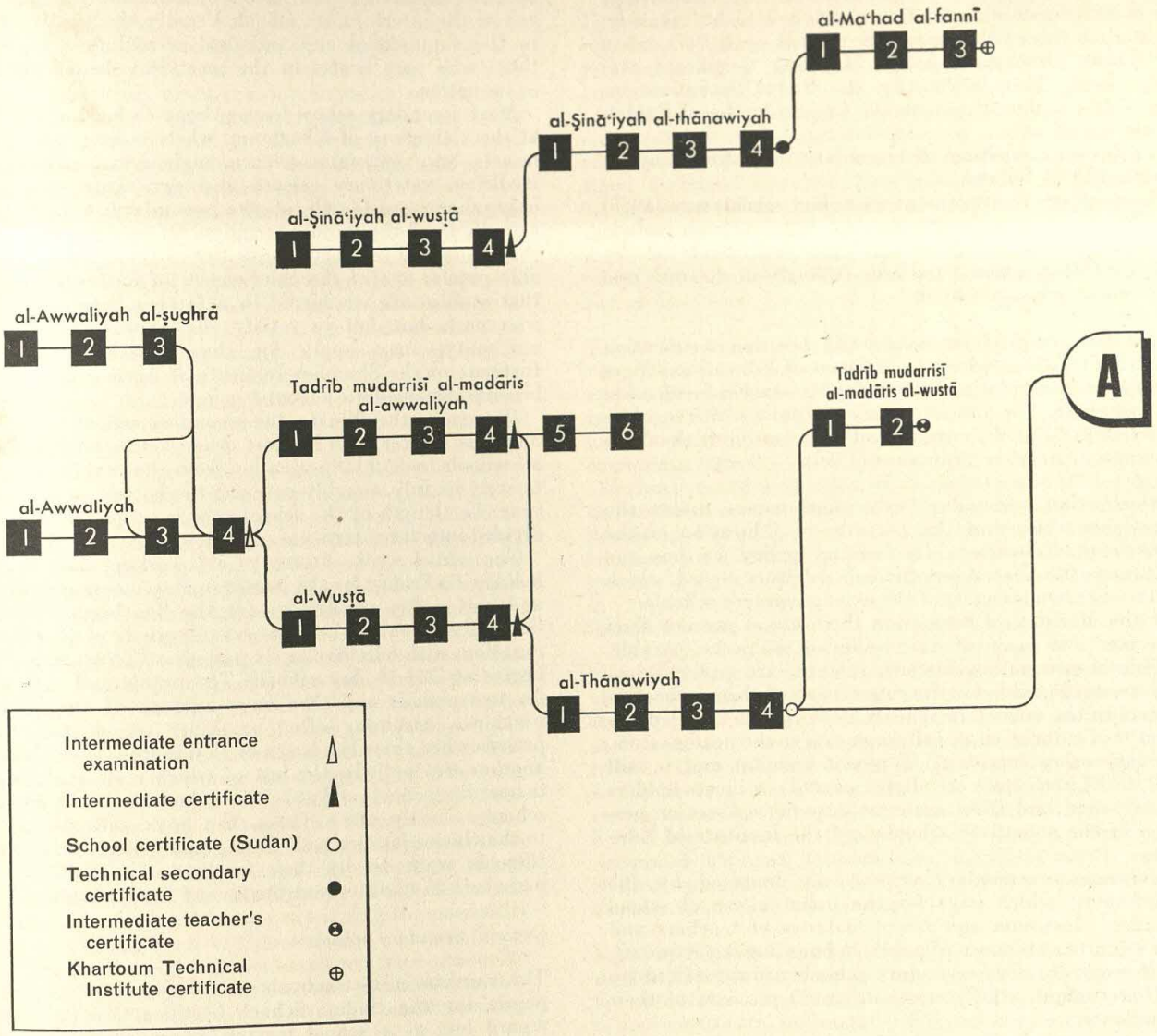
The present structure of the public educational system is shown in the diagram on page 1033. Teaching is in Arabic in the elementary and intermediate school. English is introduced as a foreign language in the first intermediate year and becomes the language of instruction in the secondary school.

Intermediate schools are of two types—academic and technical—and passage from elementary to intermediate school is by competitive examination. In 1959, 22 per cent of the boys and 12 per cent of the girls sitting the examination found places in the academic intermediate schools; a small extra proportion obtained admission to the technical intermediate schools. Passage from the intermediate level to the secondary is also by selective examination, and of 4,929 boys who sat the examination in 1959, 3,049 or 619.9 per cent passed, 1,330 or 27 per cent entered government secondary schools, and 345 were admitted to the teacher training institutes and fee-charging private secondary schools, thus bringing the total number admitted to post-intermediate education to 1,675 boys, or 34 per cent of the final intermediate class population. Of the 800 girls who sat for the final intermediate school examination, 432 or 54 per cent passed and 130 or 16.2 per cent were admitted to government secondary schools, 70 entered private secondary schools and 60 entered teacher training institutes—making a total of 260 out of 800 or about 33.5 per cent.

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary education of a professional (or strictly speaking, vocational) type began in the Sudan with the opening of the Gordon Memorial College at Khartoum, in 1902. In its earliest stage the college supported an industrial school, two higher primary schools and a small teacher training centre. Many of the boys admitted to the college in 1903 had received some schooling when a secondary division was started two years later. The college then comprised four sections—the primary school, a training college for teachers and Kadis (Islamic judges), the instructional workshop, and the secondary or upper school. A military school was opened in 1905 and affiliated to the college. The object of the college was to turn out teachers, Islamic judges, clerks, accountants, artisans, etc. When World War I came to an end in 1918, the college was still an educational 'maid of all work' and had only a small secondary division. Thereafter the increased demand for well-trained clerical and technical personnel to man the Civil Service, coupled with the expansion of the educational system generally, enabled the secondary section to grow rapidly. In 1924, it was decided to make the college a full-time secondary institution, and by 1930 it was educating 555 boys at the secondary level. Its curriculum provided 2 years' education in general subjects, followed by a further 2 years devoted largely to vocational training—engineering and surveying, teaching, accountancy, clerical work, science and Islamic law.

The Gordon Memorial College dropped its vocational bias and became a secondary school properly so-called after the De La Warr Commission visited the Sudan in 1937. That commission envisaged the rapid expansion of secondary and intermediate education and the establishment of a university college. In 1939, with the adoption of the commission's recommendation, the Gordon College began to prepare pupils for the Cambridge Local Syndicate School Certificate examination. After World War II a 10-year educational development programme was drawn up, and



GLOSSARY

al-awwaliyah (elementary school): complete lower primary school.
al-awwaliyah al-sughrā (sub-grade elementary school): incomplete lower primary school.
al-ma'had al-fannī (technical institute): college of engineering and technology.
al-ṣinā'iyah al-thānawiyah (technical secondary school): vocational secondary school.
al-ṣinā'iyah al-wusṭā (technical intermediate school): lower secondary schoo with vocational bias.
al-thānawiyah: general secondary school.
al-wusṭā (intermediate school): lower secondary school.
tadrīb mudarrisī al-madāris al-awwaliyah: teacher training school for teachers in elementary schools.
tadrīb mudarrisī al-madāris al-wusṭā: teacher training college for teachers in intermediate schools.

HIGHER EDUCATION

A. University of Khartoum, comprising faculties of agriculture, arts, engineering, law, medicine, science, veterinary medicine. There is also a school of pharmacy which comes under the Ministry of Health and is not part of the university.

more secondary schools were opened. The Cambridge School Certificate examination continued to be taken by the final classes of the secondary schools until 1951, when the Sudan Secondary School Leaving Certificate was inaugurated. This is run by the Sudan Examinations Council in collaboration with the Cambridge Local Examinations Syndicate.

The present position of secondary education may be summarized as follows.

The number of government secondary schools now (1959) total 15, 13 for boys and 2 for girls. Other schools include 6 Sudanese National Schools, 3 Egyptian schools run by voluntary bodies, and 3 Catholic, 1 Anglican, 1 Greek and 2 American mission schools.

Legal basis. The ultimate control and direction of education in the Sudan is vested in the Minister of Education. There are no laws or regulations governing the stages of education in the country. The only detailed set of rules which regulate one whole field of the educational organization is the Non-Government Schools Ordinance (1950).

Administration. Secondary education comes under the general supervision of the Director of Education of the Ministry of Education. In framing policy he has the assistance of the Secondary Schools Advisory Board, which includes the headmasters of the chief secondary schools.

At the Ministry of Education there are at present chief inspectors for each of the following subjects: Arabic, English, mathematics, history, science, art and religion. They are responsible for the supervision of their respective subjects in the secondary schools, reporting to the Deputy-Director of Education and through him to the headmasters. This inspection service is of recent creation and is still small. Chief inspectors are all degree and certificate holders and are recruited from amongst experienced senior personnel of the secondary schools and the Institute of Education.

Government secondary schools are financed by the Government, which pays for the maintenance of school buildings, classroom equipment, salaries of teachers and other staff, maintenance of pupils in boarding departments, etc. Non-government secondary schools are subsidized by the Government, which meets up to 40 per cent of their expenditure.

Government secondary schools and subsidized secondary schools charge fees, scaled to the income of the parents, the maximum being £S.30 a year for a boarder and £S.15 for a day-pupil. Private schools charge up to £S.80. The real cost of government secondary education is estimated as follows: boy (boarder) £S.117; boy (day) £S.81; girl (boarder) £S.154; girl (day) £S.103.

TYPES OF SECONDARY EDUCATION

The main type of secondary school is the academic secondary school preparing for the university but there are also a few commercial secondary schools. Technical secondary education at present comprises a stage in the Khartoum Technical Institute.

Entry to either the academic or vocational schools is by order of merit in the selective examination held at the end of the intermediate school. Usually the pupils who go to the commercial and technical secondary schools are those who pass lowest in the secondary school entrance examination.

Most secondary school leavers hope to become students at the University of Khartoum, where courses are offered in arts, law, economics, science, engineering, architecture, medicine, veterinary science and agriculture. However, only about one-fourth of the secondary school pupils actually reach the standard required for university entrance, even though a substantial number of them may be quite able pupils; one of the chief causes of failure is the fact that studies are conducted in a foreign language. Those who pass, but fail to satisfy the requirements of the university, may apply for the Khartoum Technical Institute or the Shambat Institute of Agriculture, or may become intermediate school teachers.

Because of the climate, the secondary school year in the Sudan is shorter than in most other countries, and nearly all schools have a long vacation from the middle of March to early in July, roughly covering the hottest period of the year. The length of the school year is normally 33 weeks, divided into three terms of equal length.

The school week consists of six working days, with a holiday on Friday for the Northern Provinces, and Sunday and half a day on Fridays for the Southern Provinces. Generally speaking there are seven periods of 40 minutes' duration, with only five or six periods on Thursdays. Work begins at 7.45 in day schools. The pupils and staff work for two periods and then have a break of one hour for breakfast, resuming after breakfast for another three periods when there is a break of 15 minutes. Then there are another two periods, the last of which ends at 1.35 p.m. in boarding schools and at 2 p.m. in day schools. In boarding schools, shortly after sunset, the boys and girls return to the classes for two periods of preparation, during which they do work set by their teachers. The first of these periods is 65 minutes and the second is 35 minutes.

General secondary schools

The main aim of the academic secondary school is to prepare pupils for the Sudan School Certificate, which pupils regard less as a school leaving examination than as a university entrance examination. The curriculum is largely determined by requirements for entrance to higher institutions, although there is also a substantial programme of physical education, dramatics and other activities. The development of the pupils' personality depends mainly on out-of-class activities.

Recruitment is by a competitive examination held at the end of the intermediate school course, when the pupils are 15 or 16 years old. The best candidates are admitted to government and government-subsidized schools, while those lower on the list go to private secondary schools.

Secondary schools have about 35 pupils in each class. Since all pupils take the same academic course, streaming is left until the end of their second year. At present the medium of instruction is English, but it is the intention of the Ministry of Education to substitute Arabic at an early date.

The subjects taught are Arabic, English language and literature, mathematics, science, history, geography, religion, and art and handicrafts. All these subjects are taught up to School Certificate standard and the best pupils can also study additional mathematics and science. Practical work is done only in the Art Departments—book-binding and pottery—and in the science laboratories. Physical education takes place in the mornings and games and cadet training in the afternoons.

Achievement testing varies from one school to another. In certain schools pupils sit an examination of one hour's duration every week to test their progress in a particular subject; in other schools examinations are held at the end of the first and second terms. But in all schools there is at the end of the school year in March a general examination, which is of particular importance for second year pupils since, on the basis of that examination, they are put into streams for their third year according to their attainments in the four major subjects: Arabic, English, mathematics and science.

At the end of each term the pupil's father is sent a report, with comments by the form master and the tutor of the boarding-house, on his work, diligence, behaviour, and participation in out-of-class activities. At the end of their fourth year the pupils sit the Sudan School Certificate examination in six, seven, eight or nine subjects—English, English literature, additional mathematics and additional science counting as separate subjects.

The teaching staff is mainly composed of Sudanese, but a good many expatriate teachers are also employed, the majority from Great Britain and Egypt; there are also teachers from India, Pakistan, Jordan, the Lebanon and Iraq. A number of Sudanese secondary school teachers have university degrees, either from the University of Khartoum or the University of Beirut, or Egyptian universities. Some have diplomas from the University of Khartoum or have attended training courses in Great Britain. At present there is no professional teaching course for secondary school teachers in the Sudan, but the Ministry of Education and the University of Khartoum are examining the possibility of starting a Department of Education.

Nearly all the foreign teachers employed have university degrees, some of them being honours graduates; a substantial number of them also have attended teacher training courses.

Vocational and technical schools

Commercial secondary schools. These are secondary schools with a commercial bias. They prepare boys for commercial occupations and for the Sudan School Certificate, which enables its holder to enter the university or the Khartoum Technical Institute. The subjects taught include Arabic, English, mathematics, history, geography, commerce, book-keeping, commercial arithmetic, typing and shorthand. No science or art is taught. The vocational subjects are carried to the standard of the School Certificate and are accepted by the Faculties of Arts and Economics of the University of Khartoum. Roughly one-third of the teaching time is given to vocational subjects and practice. The arrangement of the school session is the same as for the academic secondary schools.

The teaching staff includes Sudanese, British and Egyptians. Teachers of the vocational subjects are Sudanese who have graduated from Egyptian universities or have received training at the Khartoum Technical Institute and further studies at commercial institutes abroad.

Selected students with School Certificates from the commercial secondary schools proceed to the 3-year post-secondary course of the School of Commerce of the Khartoum Technical Institute. This leads to the Intermediate Examinations of the Association of Chartered and Corporate Accountants. The examination for the equivalent Ordinary Level Certificate in Commerce and the Senior Diploma of the Khartoum Technical Institute is taken at the end of the second year.

The technical course at the Khartoum Technical Institute. The Khartoum Technical Institute, opened in 1950, is responsible for technical education throughout the Sudan. It comprises the three main schools of Engineering, Commerce, and Fine and Applied Arts. It also has a Girls' Secretarial School.

Extensive and well-equipped workshops and laboratories are provided and emphasis is placed on the importance of providing a balance between practical and theoretical training. In addition to the specialized theoretical and practical subjects which form the basis, general education in English, history, geography, Arabic and religion is included in the curricula. Teaching is in English.

The School of Engineering is the largest; it is divided into the Departments of Civil Engineering and Building and the Mechanical, Electrical and Automobile Engineering. Students having passed their school-leaving examination at a technical intermediate school embark upon a 7-year course. The Ordinary National Certificate examinations, in engineering or building, and the Senior Diploma examinations of the Khartoum Technical Institute are taken in the fifth year, and the Higher National Certificate or Advanced Diploma examinations in the seventh year. Students may also sit for the School Certificate examination at the end of their fourth year.

School of Fine and Applied Arts. Two courses are offered at the institute for the training of art teachers: a 4-year course for ex-intermediate-school boys and girls, leading to the School Certificate, followed by a 3-year course ending with the Senior Diploma of the Khartoum Technical Institute. For the diploma, the students specialize in one branch of the subject, such as painting, pottery or sculpture.

Girls' Secretarial Department. Two courses were begun in 1958 at the Khartoum Technical Institute: a 2-year course training post-secondary girls to become bilingual private secretaries, and a 3-year course for post-intermediate girls enabling them to further their general education and to study Arabic and English typewriting. The two courses will lead to a Secretarial Diploma and a Typist's Certificate respectively.

Department of Further Education of the Khartoum Technical Institute. This Department is responsible for the organization of all short courses, evening classes, etc. These include various clerical and secretarial courses, recreational

art, a school certificate course, engineering and building trade courses leading to the Intermediate and Final City and Guilds of London Institute examinations. Courses leading to the corresponding Higher National Certificates in engineering and building are also available. Various evening classes are conducted at provincial centres.

Post-intermediate trade courses. These were started to enable boys having passed their intermediate school leaving examination, but not suited for academic schooling, to proceed to the Technical Institute for further education on more practical lines. There are at present three schools giving these courses and it is hoped to open two more. Engineering trade courses are offered at Atbara Technical Intermediate School and building trade courses at Omdurman and El Obied. The course is one of 5 years leading to final City and Guilds of London Institute examinations. The final 2 years of the course will be taken at the Khartoum Technical Institute.

Schools maintained by the Ministry of Agriculture and Forests. The Department of Agriculture maintains the Shambat Agricultural Institute which is post-secondary and gives a 3-year course in agriculture and animal husbandry. The Department of Forests runs similar classes for forest overseers.

Out-of-class activities

The prefectorial system, which exists in almost all schools aims at developing powers of leadership. Each boarding house in boarding schools, and each games house in day schools, has two or three prefects who are given a certain amount of authority in order to help the house tutor run the house efficiently. The head prefect of each house has a turn of being duty prefect for a week. The prefects are given other responsibilities: for example, those who serve on the food committee check the quality and the quantity of the school meals and report complaints. They also assist in the running of games and in the administration of their houses.

Sport is encouraged to keep the pupils fit and to develop the team spirit. The most popular games are football and basketball; other sporting activities are athletics, cross country running, tennis, volleyball, table tennis, and, where possible, swimming and sailing.

There are many other clubs and societies: literary and debating societies, societies for geography, history, photography, gardening, dramatic societies, scouting, etc. All boys belong to the school cadet corps and a popular feature of their training is the annual camp.

Sudanese society is religious; religion plays an important part in the daily life of the pupils and is a major foundation of character education. Almost all schools have their own mosques.

TRENDS AND PROBLEMS

With the exception of the few vocational schools, secondary schools have an academic curriculum, even although only about one-fourth of the students finally succeed in getting into the university. Perhaps about half as many again enrol in other institutions of higher education, making altogether about 40 per cent of the total. The remainder go out into life without having received adequate practical preparation. In further development the secondary school curriculum will have to be modified to provide for the non-academic pupil.

Another big problem is the shortage of secondary school places. The number of intermediate schools for boys and girls has increased and pressure on the existing secondary schools is growing. The proportion of intermediate school leavers entering the secondary schools fell sharply between 1958 and 1959, in the case of boys from 44.4 per cent to 34 per cent, and in the case of girls from 58 per cent to 33.5 per cent. Lack of funds is perhaps the greatest deterrent to the expansion of secondary education.

There is no institute for the training of secondary school teachers in the Sudan, and the university is not turning out enough students to man all departments of the Civil Service. The Ministry of Education gets its share of university graduates, but the numbers are insufficient and supplementary staff is recruited abroad, sometimes with difficulty. At present, for example, there is a shortage of teachers of English from Great Britain.

Expenditure on school buildings and the provision of boarding schools is disproportionately high. The Ministry's policy on these questions is at present under review.

The intention of the Ministry of Education to substitute Arabic for English as the medium of instruction in secondary schools will raise such problems as the preparation of Arabic textbooks, education of teachers, examinations, and the whole future of university education. A committee has reported to the Minister on the subject and the entire question is under consideration.

A Committee for Educational Planning recently spent some eight months studying the whole field of education in the Sudan, its aims and organization. Its recommendations are embodied in a report to the Minister of Education. This report is still confidential.

[*Text prepared by Mandour el Mahdi, Chief Inspector (History), Ministry of Education, Khartoum, in July 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 11,037,000.
Area: 967,918 square miles; 2,505,823 square kilometres.
Population density: 11 per square mile; 4 per square kilometre.

Summary of school statistics, 1955–57. In 1957, total school enrolment was 260,000, or about 2.5 per cent of the total population. Of these pupils, 89 per cent were in primary education, 10 per cent in secondary education (including intermediate schools), and less than 0.5 per cent in higher education. The proportion of girls was 23 per cent in primary schools, 10 per cent in general secondary schools, 34 per cent in teacher training schools, and 3 per cent in higher education. There were no girls enrolled either in vocational technical schools or at the teacher training college. Women teachers represented 21 per cent of the teaching staff in primary schools, and 11 per cent in secondary schools. Between 1955 and 1957 total enrolment increased by about 50 per cent, the increase in primary schools being about 44 per cent, while secondary enrolment more than doubled. In 1957 there was an average of 46 pupils per teacher in the primary schools. (See Table 1.)

Enrolment trends in secondary education, 1931–57. Table 2 shows that between 1931 and 1953, enrolment in general secondary schools, not including intermediate schools, had multiplied seven times. Between 1955 and 1957, taking into account the intermediate schools, pupil enrolment more than doubled again. Thus the rate of growth appears extremely rapid, yet the level of enrolment, when related to the estimated population 15–19 years old is still extremely low; for the period 1955–57, this ratio is less than two.

Examination results in secondary education, 1953–57. The number of pupils obtaining the Sudan School Certificate was 246 in 1953, 340 in 1955, 434 in 1956, and 484 in 1957. In the latter year, a further 152 pupils passed the Public Service examination.

Educational finance, 1957/58. For the fiscal year beginning in July 1957, total expenditure for education amounted to 4.4 million Sudanese pounds, approximately £0.4 per inhabitant. Of this amount, 94 per cent came from the Central Government, the rest from tuition fees and from sale of school products. Salaries to teachers accounted for 51 per cent of the total expenditure. (See Table 3.)

Source. Sudan: Ministry of Education, reply to Unesco questionnaire; *Annual report* 1957/58.

1. SUMMARY OF SCHOOL STATISTICS, 1955–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Sub-grade elementary schools	1957/58	1 128	2 820	233	86 700	12 950
	Elementary schools	1957/58	832	2 196	829	145 926	39 689
	Total	**1957/58**	**1 960**	**5 016**	**1 062**	**232 626**	**52 639**
	,,	1956/57	1 731	4 547	932	203 186	36 314
	,,	1955/56	1 137	3 229	712	161 144	31 595
Secondary *General*	Intermediate schools	1957/58	132	754	92	20 263	2 183
	Secondary schools	1957/58	40	290	25	5 080	343
	Total	**1957/58**	**172**	**1 044**	**117**	**25 343**	**2 526**
	,,	1956/57	98	1 011	90	14 104	1 810
	,,	1955/56	84	909	79	12 478	1 418
Vocational	Technical schools						
	Total	**1957/58**	**18**	**72**	—	**1 414**	—
	,,	1956/57	12	47	—	898	—
	,,	1955/56	7	36	—	749	—
Teacher training	Teacher training schools						
	Total	**1957/58**	**11**	**94**	**14**	**572**	**195**
	,,	1956/57	10	90	14	536	175
	,,	1955/56	10	90	14	496	160
Higher *Teacher training*	Teacher training college						
	Total	**1957/58**	**1**	**15**	—	**75**	—
	,,	1956/57	1	15	—	75	—
	,,	1955/56	1	20	—	100	—
General and technical	Technical Institute	1957/58	1	141	—	243	10
	University of Khartoum	1957/58	1	133	—	839	25
	Total	**1957/58**	**2**	**274**	—	**1 082**	**35**
	,,	1956/57	2	224	—	931	29
	,,	1955/56	2	212	—	883	22

2. TRENDS IN SECONDARY EDUCATION, 1931–57

School year [1]	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1931	613	31	...	...	...	...	[2]0.6	...	...
1935	1 302	25	...	...	...	...			
1936	1 073	26	...	...	...	...	[2]1.1	*585	[2]*0.2*
1937	1 002	22	...	...	...	...			
1938	853	15	...	...	...	...			
1946	2 544	25	...	...	...	...			
1947	2 508	10	...	...	...	...	[2]2.5	784	[2]*0.3*
1948	2 183	8	...	...	...	...			
1949	2 574	14	...	...	...	...			
1950	*3 500	...	390	...	...	...			
1951	3 754	9	484	—	...	...			
1952	4 210	...	730	...	...	...	[3]4.5	869	[3]*0.5*
1953	4 280	...	770	...	...	...			
1954	...	...	...	...	...	...			
1955	12 478	11	749	—	496	32			
1956	14 104	13	898	—	536	33	19	1 070	*1.8*
1957	25 343	10	1 414	—	572	34			

1. From 1931 to 1953, excluding intermediate schools; enrolment at these schools has been included for 1955, 1956 and 1957.
2. General education only.
3. General and technical education only.

3. EDUCATIONAL FINANCE, 1957/58 (in Sudanese pounds)[1]

A. RECEIPTS BY SOURCE

	Amount
Receipts[2]	**4 402 189**
Central Government	4 127 381
Tuition fees	265 864
Sale of school products	8 944

B. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure		...
Recurring expenditure[2 3 4]		4 402 189
For central administration	212 294	
For instruction		
Salaries to teachers, etc.	2 254 595	
Other instructional expenditure	1 147 231	
Other recurring expenditure	788 069	
Capital expenditure		...

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION[3]

	Amount		Per cent	
Total recurring expenditure		**4 402 189**		**100.0**
Central administration		212 294		4.8
Instruction[4]		3 686 565		83.8
Primary education	1 865 257		42.4	
Secondary education	1 754 590		39.9	
General	1 205 695		27.4	
Vocational	240 644		5.5	
Teacher training	308 251		7.0	
Adult education	66 718		1.5	
Other recurring expenditure, not specified		503 330		11.4

1. Official exchange rate: 1 Sudanese pound = 2.87 U.S. dollars.
2. Closed account. Receipts and expenditure of the provincial governments and local authorities are not known.
3. Recurring expenditure by the Central Government only.
4. Not including higher education.

SWEDEN

THE EDUCATIONAL SYSTEM

Regulations governing education are contained in Orders issued by the Crown and in instructions and directives drawn up by the central authorities (Board of Education and Board of Vocational Training), regional authorities (county school boards) and local authorities (school boards). In addition to public schools, private schools providing instruction for children of compulsory school age are subject to these regulations, to a certain extent, as also are schools for children over school age which receive any form of state or municipal grant.

The most important types of school for children of compulsory school age are the primary school (with a minimum of 7 compulsory years) and the comprehensive school (9 compulsory years), both of which are designed to provide instruction and training as a basis for further education. The intention is that all pupils shall get secondary education after taking a 6-year primary course. For the time being it is possible to go on to secondary school after 4 years in the primary school, but this alternative will eventually be eliminated. The 7-year primary school will gradually be replaced by the 9-year comprehensive school.

The structure of the school system is shown in the diagram on page 1041.

THE DEVELOPMENT OF SECONDARY EDUCATION

The most recent important reorganization of the upper secondary school (*gymnasium*) and lower secondary school (*realskola*) was effected by Parliament in 1927 and most of the changes introduced are still in force. In 1956 Parliament decided that a 3-year *realskola* should progressively become general for all pupils who have completed 6 years in the primary school and studied English in the 5th and 6th classes. Parallel with this school, the 4-year *realskola* was to be retained, providing a more leisurely course, whilst the 5-year lower secondary school following the 4th class in the primary school was to be gradually abolished.

The municipal lower secondary school was first introduced in 1909. About the middle of the 1930s a practical course (*praktiska realskolor*) was added, either as a separate institution with a 4-year course or as a practical stream in the two top forms of the *realskola*.

The present form of the municipal girls' school (*flickskola*) with a specially designed course was introduced. To begin with this school was a 7-year one following the 4th class in the primary school. A 6-year school was later established following the 6th class. The main form is now a 5-year girls' school following the 6th class of the primary school.

In 1950 Parliament decided on the introduction of a 9-year compulsory comprehensive school to replace gradually all other types of school for primary and lower secondary education. However, the practical type of lower secondary school and the municipal girls' school were not to be affected for the time being, as it was assumed that these could be assimilated to the comprehensive school.

The organization of the 9-year comprehensive school was to be worked out by means of extensive experimentation. This work has since been progressively intensified and as from the year 1962/63 it should lead to a general transition to the new type of school. Out of a total of 1,034 municipalities in the whole country, there were 143, representing 22.8 per cent of the total population, which had comprehensive schools in 1958/59. Special experimental upper secondary schools (*försöksgymnasium*) have been organized for students from comprehensive schools.

The folk high school is an institution that is peculiar to Scandinavia. The Swedish folk high schools came into being as a result of increased obligations concerning general social education which were placed upon municipal administrations by legislation about the middle of the nineteenth century. At the present time there are some 90 of these schools in the country.

Legal basis

Regulations concerning instruction at secondary schools are contained in the following legislation:

General Educational Statute of 23 May 1958, which sets forth instructions on the direction and administration of education in municipalities.

School Board Law of 21 December 1956.

Primary School Statute of 23 May 1958, containing directions, *inter alia*, concerning instruction in the higher stage of the comprehensive school.

Statute of 23 May 1958 on state general secondary schools throughout the country.

Statute of 23 May 1958 on municipal secondary schools (girls' schools, *realskolor* and practical *realskolor*).

Statute of 25 March 1960 concerning state-aided private secondary schools.

Folk High Schools Statute of 12 September 1958.

Administration

Central administration of the educational system is exercised mainly by the Board of Education and Board of Vocational Training which come under the Department of Education and Ecclesiastical Affairs. The Board of Education supervises all types of general education including practical lower secondary schools, folk high schools, etc. The Board of Vocational Training is concerned with vocational training as such. Regional control and administration of practically all types of schools in a county is carried out by the County School Board (*länsskolnämnden*) which also acts as a centre for the co-ordination and planning of municipal educational activities. Attached to each

County School Board are one or more school inspectors. Local administration of schools in each municipality is carried out by an elected school board (*skolstyrelse*) with full powers to deal not only with municipal schools (primary school, comprehensive school, municipal secondary schools, municipal vocational schools) but also with state secondary schools. In each municipality, under the authority of the school board, there is a superintendent of schools (*skolchef*) According to the number of schools in a municipality the superintendent may be a headmaster or a senior headmaster (who are also teachers), or, in a larger municipality, a school director.

Syllabuses for the various types of general school, applicable throughout the country, are drawn up under direct royal authority or by the Board of Education or by the Board of Vocational Training. Certain of these serve as standards for individual school syllabuses and leave room for local deviations. Instructions on methods are also issued by the boards in question but are intended merely as a guide.

Textbooks are prepared to conform to syllabuses. No textbooks may be adopted for general use except those that have been approved by the State Textbook Committee and have been incorporated in the official 'Textbook List'. Most of the committee's members are laymen but the work is also shared by educationists and other experts. Not only the contents of textbooks, but also the typography, price and general suitability must be approved.

As already mentioned, all private educational establishments attended by pupils of compulsory school age are subject to control by the educational authorities. As a rule this control is restricted to private schools receiving state grants; but there is a large number of such schools, all of which must meet certain approved standards in order to qualify for assistance.

Supervision and inspection. Central supervision of secondary schools is exercised by counsellors (inspectors), who are members of the Board of Education or the Board of Vocational Training. A number of consultants on various subjects are attached to these boards.

In the future, the County School Boards (which were set up in 1958) will also be responsible for direct inspection of secondary schools coming under their supervision. The inspection will be carried out by the county school inspectors. The aim of inspection is to obtain full information on the condition and needs of schools. The inspector must see that the regulations on the general organization of work are being complied with, observe lessons in progress, inspect premises and instructional materials, give advice to individual teachers, etc.

Some schools have parents' associations whose main object is to promote co-operation between home and school, encourage the exchange of information and advice, and work for improvements in matters relating to the education of children and adolescents. Most parents' associations are affiliated to the government-aided National Association of Parents and Guardians which was formed in 1945.

Finance. Finance for secondary and vocational education comes from two main sources—the State and the municipalities.

The financing authorities of the Central Government are directly responsible, with certain exceptions, for almost all payments made to state schools. The State also makes grants to schools run by municipalities and to certain

GLOSSARY

NOTE. The diagram does not show the 9-year compulsory comprehensive school (*enhetsskola*), at present known as experimental school, which had been introduced in a 143 municiaplities by 1958/59.

anstalt för lägre yrkesutbildning: lower vocational training school of home economics (*husligt arbete*), commerce (*handel*) and industry and trade (*industri och hantverk*).

daghem or *lekskola:* pre-primary schools.

fackskola för huslig ekonomi: vocational training school of home economics.

folkhögskolorna: institutions offering part-time general secondary education for adults.

folkskola: an institution covering the period of compulsory schooling and comprising a primary infant department (see *småskola*), a primary school proper and one or two continuation classes at lower secondary level.

folkskoleseminarium: teacher training college.

gymnasium: State upper general secondary school with three streams, the *latinlinje*, emphasizing literary and classical studies, the *reallinje* with scientific subjects, and the *allmänlinje*, emphasizing social studies and languages.

gymnastiska centralinstitutet: teacher training school for teachers of physical education.

handelsgymnasium: vocational secondary school of commerce.

högre flickskola: municipal general secondary school for girls, with curriculum emphasizing home economics and related subjects.

högre folkskola: lower general secondary school.

konsthögskola: vocational training school of fine arts.

småskola: lower infant department of primary school.

realskola: State lower general secondary school.

sjuksköterskeskola: vocational training school of nursing.

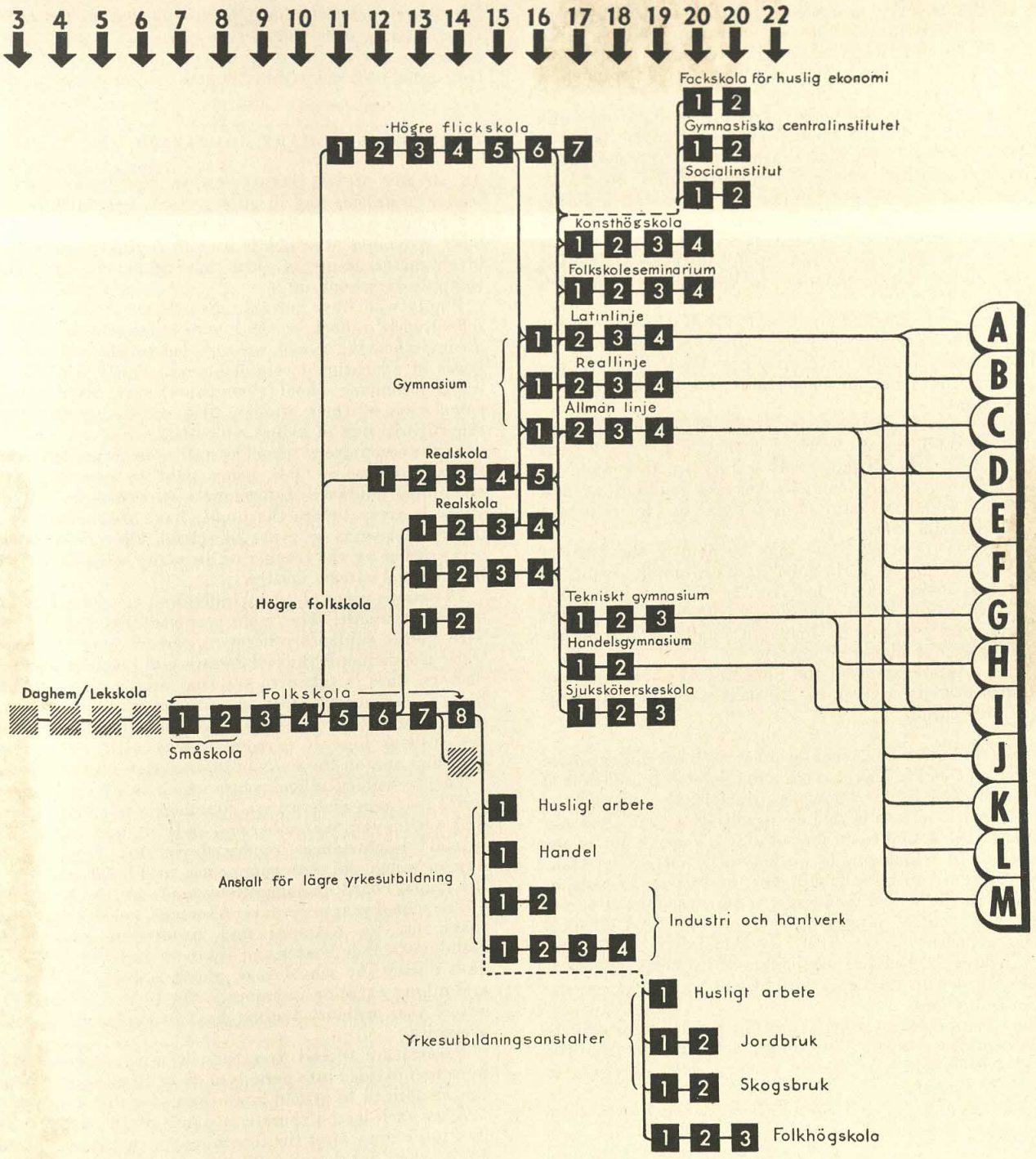
socialinstitut: vocational training schools for social welfare workers.

tekniskt gymnasium: vocational secondary school for technical training.

yrkesutbildningsanstalter: vocational training schools for pupils who have already had practical experience of domestic work (*husligt arbete*), agriculture (*jordbruk*) and forestry (*skogsbruk*).

INSTITUTIONS OF HIGHER EDUCATION

A. Theology.
B. Arts.
C. Social sciences.
D. Law.
E. Science.
F. Agriculture.
G. Forestry.
H. Technology.
I. Commerce.
J. Medicine.
K. Veterinary science.
L. Dentistry.
M. Pharmacy.


3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 20 22
Fackskola för huslig ekonomi
1 2
Gymnastiska centralinstitutet
1 2
Socialinstitut
1 2
Högre flickskola
1 2 3 4 5 6 7
Konsthögskola
1 2 3 4
Folkskoleseminarium
1 2 3 4
Latinlinje
Reallinje
Allmän linje
Gymnasium
1 2 3 4
Realskola
1 2 3 4 5
Realskola
1 2 3 4
Högre folkskola
1 2 3 4
1 2
Tekniskt gymnasium
1 2 3
Handelsgymnasium
1 2
Sjuksköterskeskola
1 2 3
A B C D E F G H I J K L M
Daghem / Lekskola
Folkskola
1 2 3 4 5 6 7 8
Småskola
1 Husligt arbete
1 Handel
Anstalt för lägre yrkesutbildning
1 2
1 2 3 4
Industri och hantverk
1 Husligt arbete
Yrkesutbildningsanstalter
1 2 Jordbruk
1 2 Skogsbruk
1 2 3 Folkhögskola

private schools. Developments during the past decades seem to indicate that the total cost of education is being borne by the State and the municipalities in almost equal proportions, but there is a general tendency for the proportion of state contributions to increase.

As a general rule the body responsible for the school is also responsible for the upkeep of the premises. There is an exception to this rule in the case of state upper secondary schools (*gymnasier*), where the municipalities attend to the upkeep of the premises. Financing of non-state building for educational purposes is also carried out to an increasing extent with state funds and this gives legal justification for the extensive advice given and supervision exercised by the central authorities in relation to the planning of such buildings.

Education at state and municipal schools is free of charge. At state-aided private secondary schools term fees may be collected, the amount thereof being determined by the Board of Education on suggestions put forward by the school board.

Pupils attending secondary and vocational schools have various possibilities of obtaining economic assistance from public funds. In addition, study grants are also made by municipalities, county councils, private foundations and donors and organizations of various kinds, and by industrial and commercial firms.

Assistance from the State may be paid in the form of general study grants and study grants to pupils unable to obtain instruction where they live, as well as scholarships subject to a means test granted to students with modest incomes, and educational loans to pupils at certain establishments for higher education.

Further information on the financing of vocational and technical schools is given in the section dealing with this type of education.

School welfare services. At all secondary schools under public control a school health service administered or subsidized by the State is in operation. In principle, the work of the school health service is mainly prophylactic and does not extend to the actual treatment of illness. Supervision of the conditions in which pupils work is also part of its task. The service is run by school doctors and nurses in collaboration with the school management and teachers. It comes under the central administration of the Chief Medical Officer attached to the Board of Education. Each pupil has a health card giving particulars of his state of health, illnesses, etc. This card goes with him as he moves from one school to another.

The school dental service is run by municipal or private social initiative, and receives no financial support from the State. Nevertheless, it covers 65 per cent of pupils in secondary schools.

Schools are not obliged to provide meals but if they do so government grants are available on condition that such meals are free of charge to the pupils. During the school year 1958/59 about 47 per cent of all pupils received free school meals.

As a result of arrangements made by the municipalities, certain schools have access to the services of school psychologists, but this is something that is not generally organized. In order to encourage this trend, two regional school psychologists have been engaged at government expense as from the school year 1958/59. Each of them is to experiment with the planning of this work and instruct local organizations within his area.

TYPES OF SECONDARY EDUCATION

As already stated, instruction in the lower secondary school (*realskola*) and in girls' schools generally follows a 6-year course at a primary or comprehensive school. The basic schooling of students at folk high schools is varied in character, many of them having passed through the compulsory school only.

Pupils who have passed through the lower secondary school, girls' school, or the higher stage (classes 7 to 9) of a comprehensive school, are entitled to proceed to certain types of educational establishment. Those who enter an upper secondary school (*gymnasium*) may, after successful completion of their studies, pass on to a university or other institution of higher education.

In the compulsory school as well as in secondary schools, much attention is now being paid to educational and vocational guidance. Information on future conditions of study is given before the pupils have to choose between different streams or types of school. This information is given either by the teacher or, in many secondary schools, by a special careers master.

In various types of school individual vocational guidance is also available. The main responsibility for this rests with youth guidance officers or careers masters, but the work also demands the collaboration of teachers and school doctors. Care is taken to see that advice given does not have a detrimental effect on a student's sense of responsibility and initiative. The final decision must be made by the student himself in consultation with his parent or guardian and on the basis of information given to him.

The secondary school year, which is divided into two terms (autumn and spring), commences not later than the first weekday in September and ends in June, except where special circumstances render deviations necessary. The day on which the term commences and finishes is fixed by the school board on suggestions made by the headmaster.

The school year must cover 38 weeks, apart from the time taken up by entrance and promotion examinations. Holidays include Easter and Whitsun and 5 to 7 additional days during the school year, about 3 weeks at Christmas and a long vacation in summer. On 10 to 12 days in each school year ordinary lessons must be replaced by outdoor activities.

Lessons are spread over the six working days of each week and divided into periods of 45 or 40 minutes. No pupil can be obliged to attend more than seven lessons a day.

After each lesson there is a pause of 10 to 15 minutes. Not later than after the fourth lesson in the day there is an interval for lunch, which must last for at least 45 minutes.

For folk high schools, however, special regulations apply.

Lower secondary schools (*realskolor*). The majority of these are state establishments, organized either as separate institutions or incorporated with an upper secondary

school (*gymnasium*) to form a state secondary school (*högre allmänt läroverk*). In addition, there are municipal lower secondary schools and municipal practical lower secondary schools. A common feature of all of them is that they cover part of the period of compulsory school attendance, that they are a voluntary type of school, and that at the end of the course there is some form of lower certificate examination (*realexamen*).

The task of the lower secondary school is to continue and extend the preparation for good citizenship begun in the primary school. The range of subjects taught is consequently somewhat more extensive and more varied than at a primary school. English is studied from the first class onwards and German in the top three forms. French may be taken as an optional subject in the top form, mainly by those intending to go on to an upper secondary school. Otherwise the subjects taken are, on the whole, the same as in the primary school, including handicrafts and domestic science.

In practical lower secondary schools the aim is to provide basic training for certain groups of trades in addition to general education, and for this reason they have been organized in various streams, the most usual being the commercial, technical and domestic science streams.

Entrance to lower secondary schools takes place mainly at the end of the school year in June and is dependent on the applicants' results in the primary school. To be considered for entry an applicant must have secured at least a medium mark as an average for the subjects he has taken and also reached a certain standard in the two basic subjects, Swedish and mathematics. In most places the actual requirements are considerably higher than the prescribed minimum, because competition is keen.

At secondary schools there must be a senior teacher for each subject. Where necessary the senior teacher gives advice and information to other teachers in the subject, especially to younger and less experienced ones. Teachers taking the same subject meet together for a subject conference under the chairmanship of the headmaster or senior teacher in the subject. Such a conference is called by the headmaster when necessary, its purpose being to draw up courses of lessons for each class in conformity with prevailing syllabuses and time-tables and to prepare plans and methods for the treatment of the subject at various stages. It also has to consider the need for new textbooks and make suggestions to the school board concerning the introduction of new books.

Marks are generally given at the end of each term. Conditions governing promotion to a higher form are set out in detail and must be strictly complied with. Provided pupils have attained a certain standard, they may be transferred from the second highest class of the lower secondary school to the 4-year upper secondary school. If they stay on to complete the top class they sit for the lower certificate examination (*realexamen*), which also entitles them to enter an upper secondary school (the 3-year school).

The lower certificate examination consists of a written and an oral part. The written examination is taken first and covers Swedish, English, German, and mathematics, although only Swedish and two other subjects are compulsory. The oral test must be taken in at least four subjects.

Girls schools (*flickskolor*). The functions of earlier private girls' schools have largely been taken over by municipal girls' schools which give secondary instruction to a somewhat higher level than that of the ordinary lower secondary schools, the course of study being particularly designed for girls. Conditions of entry, curriculum, textbooks, requirements for promotion and regulations are mostly the same as for a *realskola*. The rate of work is rather more leisurely, however, since the girls sit no examination at the end. After completion of the course, they are given a certificate entitling them to take up certain types of work, mainly on the same terms as applicants who have passed the lower certificate examination.

In the two top forms of a girls' school pupils are divided into three streams—humanistic, general and modern. Where the number of pupils justifies it, each stream can be divided into two branches. One of the six branches concentrates mainly on practical domestic training.

Comprehensive school, higher stage. A fundamental principle connected with work in the comprehensive school is the endeavour to let pupils acquire knowledge and skill through active work. The subject matter must be dealt with as a connected whole so as to create in pupils a desire for continued training of a theoretical or practical kind and to give them sound social guidance. Much stress is laid on co-operation with the home. Instruction in social science is continued throughout the whole school period and is intended to be of a concrete nature based on the pupils' own practical experience. There is a greater measure of individual tuition and group work than has generally been the case with the traditional type of school.

The comprehensive school has three stages: a junior stage (classes 1–3), a middle stage (classes 4–6) and a senior stage (classes 7–9). Most pupils in the senior stage come directly from the middle stage of the same school. Since attendance at a comprehensive school is compulsory, there is no selection of pupils and all who attain a sufficiently high standard to merit promotion pass on to the senior stage.

From the seventh class onwards there is a certain amount of differentiation of subjects, based on advice in relation to studies and on vocational guidance, as a result of which pupils may choose various options in addition to the compulsory subjects. This continues until real specialization begins in class 9, which is divided into three streams —a general stream (9a), a stream preparing for the upper secondary school (9g), and a vocational stream (9y).

In the senior stage of the comprehensive school the subjects taken are (with certain optional alternatives) practically the same as at a *realskola*, with German as a second foreign language and French compulsory in 9g but optional in 9a. The grouping of material, however, differs from that in the lower secondary school. The compulsory 9-year course offers scope for logical and homogeneous arrangement throughout the whole period of schooling. The programme content is further divided into matter to be taken by all pupils and matter to be taken by certain pupils either individually or in groups.

The aim is that pupils in comprehensive schools shall have the same opportunities as those in lower secondary schools to pass on to higher schools and have access to occupations in the same fields.

The upper secondary school (*gymnasium*). The upper secondary school's twofold object is to provide secondary education beyond the level of the lower secondary school and prepare pupils for entrance to university and other institutions of higher education.

Most upper secondary schools are state establishments combined with a lower secondary (*realskola*) stage to form a state secondary school (*högre allmänt läroverk*). There are also municipal upper secondary schools, but the existence of these may be regarded mainly as a transitional stage leading to full state administration. In addition there are a small number of private upper secondary schools.

Courses last either three or four years. Pupils attending the 4-year upper secondary school usually come from the top form but one of a lower secondary school. The 3-year upper secondary school is intended for those who have passed the lower certificate examination (*realexamen*), but there are certain other entrance requirements as well. Entry to an upper secondary school is also open to pupils from municipal girls' schools and comprehensive schools (higher stage). Special state experimental 3-year upper secondary schools have been set up to receive pupils from comprehensive schools and to make experiments towards freer and more active forms for upper secondary education.

As regards the general nature of studies, the upper secondary school is divided into three streams—classical, natural science and general. Provided a certain minimum number of students present themselves, each stream is divided during the last two years into two branches. A pupil's choice of branch must be approved by his parent or guardian. In the classical stream there is a semi-classical and a full classical branch (with Greek), in the natural science stream a biology and a mathematics branch, and in the general stream a social science and a modern languages branch. In schools where there is no general stream, the modern languages branch can be included in the Latin or natural science streams; the social science branch can be placed in the natural science stream.

Special upper secondary schools for adults are being introduced. In addition, there are some upper secondary schools with evening courses for adults and a continuation upper secondary school where adults may complete previous studies at this level.

In the main the subjects taken are the same as at a lower secondary school, with certain additions. Thus philosophy is studied and the languages may include also Latin and Greek and in certain cases Spanish, Russian, Finnish and Italian. On the other hand, handicrafts and domestic science are excluded. It may be regarded as characteristic of an upper secondary school that there is intensive concentration on certain groups of subjects according to choice of stream and branch, opportunities to choose a subject according to aptitude and background and to pursue individual study under school supervision. The method is designed to develop the pupils' capacity for private study. In natural science subjects laboratory work is of great importance. Conditions concerning marks, textbooks, senior teachers and subject conferences, are much the same as those mentioned in connexion with the lower secondary school. Here again, marks play an important part and detailed requirements are prescribed for the promotion of pupils to higher stages.

At the completion of his upper secondary school course a pupil sits the higher certificate examination (*student-examen*) consisting of a written and an oral part. The Board of Education plans this examination in its entirety and it is administered by examiners appointed by the board.

The written examination covers tests in three or four subjects, including a general essay in Swedish, and also English. The oral examination now covers three or four, or at most five, of the compulsory subjects taken at the highest stage. Within the fixed limits, the subjects for the oral examination are chosen by the examiners. In order to secure a pass the examinee must be adjudged competent by at least half of the examiners in his group, but certain minimum requirements are also prescribed.

Folk high school. The folk high school lays essential emphasis on education designed to promote intelligent, individual thought. Particular attention is paid to training in citizenship in relation to both national and international affairs. In addition, the aim is to impart to students such practical knowledge and skill as will best fit them for their life's work, and certain folk high schools have already commenced giving preparatory training for entry to certain vocational schools.

Most folk high schools are regional in character, and often managed by the county council. The remainder are run by cultural, social or religious organizations, and are generally attended by students from the whole of the country. The minimum age of entry is 18 but the average age is 21.

Organization varies with different schools. During the winter months there is a first course of 22 to 30 weeks and usually a second course of the same length at a higher level. Some folk high schools have also a third course as well as summer courses specially designed for female students.

The folk high school is characterized by its wide variety of categories of students and working programmes. There is considerable freedom in regard to the arrangement of instruction, and courses and lessons are often planned by teachers and pupils in collaboration.

Teaching staff. Assistant masters (*adjunkter*) and subject teachers (*ämneslärare*) are employed as teachers of theoretical subjects at those types of school corresponding to the lower secondary school and the higher stage of a comprehensive school. The normal qualifications demanded of a secondary school assistant master are that he shall have obtained the *fil. mag.* (Master of Philosophy) degree at a university and have completed a course in teaching practice (*praktisk lärarkurs*).

For the *fil. mag.* examination—in so far as it is intended as an examination for secondary school teachers—various combinations of subjects may be taken according to the type of school. A pass in the primary school teacher's examination together with certain university qualifications may equal a pass in the *fil. mag.* examination for teaching in the lower secondary school.

Where the headmaster concerned thinks it advisable, assistant masters (*adjunkter*) at a lower secondary school may be transferred for full-time or part-time service at an upper secondary school. Otherwise a teacher at an upper

secondary school belongs to a separate category and is known as a *lektor* (senior master). In addition to the *fil. mag.* examination and a course in teaching practice, the qualifications demanded of a *lektor* are a pass in the licentiate examination in some of the subjects included in the curriculum. The *lektorer* often have a doctor's degree.

Teachers at folk high schools are recruited mainly from persons with university qualifications.

Various measures are at present in force or in preparation with a view to relieving the shortage of teaching staff and providing fresh opportunities for the training of teachers. Endeavours are also being made to amalgamate different categories of teacher training by means of joint facilities. In Stockholm and Malmö, teacher training universities have been established where future teachers in the middle and senior stages of the comprehensive school and the secondary schools can receive their pedagogic training, and where the middle stage teachers also receive their subject training. Several teachers' universities of this kind are to be set up and will gradually replace the training colleges for primary school teachers (*folkskoleseminarierna*) and the courses in teaching practice for secondary school teachers.

The training of teachers in practical subjects is carried out in special institutions—gymnastics teachers at the Royal Central Gymnastics Institute, music teachers at the Royal Academy of Music, art teachers at the Swedish State School of Arts, Crafts and Design, all of which are in Stockholm. Teachers of home economics and needlework are trained at a number of colleges specializing in those subjects. For teachers of handicrafts for men there was no special institute apart from a private continuation school where summer courses were arranged, but a college for handicraft teachers is being established from the school year 1960/61.

For vocational teachers in the vocational stream at a comprehensive experimental school the principal qualification is vocational skill. Special courses in teaching practice for such teachers have been established.

For secondary school assistant masters and subject teachers there are openings for advancement to higher paid grades. The reorganization of the educational system as from 1 July 1958 has led, *inter alia*, to the introduction of an increased number of posts for heads of schools, which has greatly augmented the possibilities for teachers to gain promotion.

The question of teachers' salaries is being dealt with in negotiations between the Government and the large teachers' unions.

Vocational and technical schools

I. Gymnasier and similar-level establishments under the Board of Vocational Training

Technical secondary schools (*högre tekniska läroverk*). These are government establishments the costs of which are defrayed by the State, although the municipality is under an obligation to maintain the premises without help from public funds. The establishments are organized partly as technical *gymnasia* and partly as specialized technical schools (*tekniska fackskolorna*).

Training at a technical *gymnasium* presupposes the standard of knowledge obtainable at a *realskola* and the minimum age of entry is 16 (although younger entrants may be accepted for special reasons). Before entering the school the student must have had at least two months' practical experience in industry and before he can be promoted to the highest form this practical experience must have been increased to a minimum of six months. The course normally lasts 3 years at the end of which students sit for the *Gymnasium* Engineers' Examination.

Training at specialized technical schools is spread over 2 years for daytime students, the terminal examination being the Specialized Technical School Engineers' Examination. At certain of these schools training is restricted to evening classes during the first two years, the length of the course being extended in consequence to 3 years. At technical secondary schools in Stockholm there are 4-year specialized technical streams with classes in the evenings only.

To be accepted for full-time training at a specialized technical school a student must have had at least two years' practical experience. For part-time training two months' experience is required. Before he can be promoted to the highest class a student's practical experience must have been increased to a minimum of two years. In addition, his knowledge of certain subjects must be equal to that required for a pass in the *realexamen* or, in the case of mathematics, in some instances of a higher standard still. The minimum age of entry is 17.

The School of Mines, Filipstad. The school gives basic training for the iron and steel industry and mining. It runs 2-year specialized courses in metallurgy, metallurgical chemistry and mining technique. The requirements for admission are the same as for specialized technical schools.

Technical institutes. There are two institutes which provide training for managers, overseers and workers in the textile industry. The institute at Borås has both 1-year and 2-year full-time courses. The requirements for admission are usually a minimum age of 17 and a certain amount of experience in the trade. The Textile Institute at Norrköping runs a 1-year full-time course and a 1-year evening course. The minimum age of entry is 16 and some experience in the trade is required. Both these institutes receive grants from the State.

The School of Industrial Art (*Konstfackskolan*). This school, which is in Stockholm and is run by the State, is divided into the following seven departments: textiles, decorative painting, sculpture, ceramics, furniture and interior decoration, metalwork, advertising and book production. The full-time lower courses last 2 years, the evening courses 3. Students with the necessary aptitude are admitted to the lower courses between the ages of 15 and 34 years. There is a 2-year higher course, to which students are admitted between the ages of 17 and 36 years; entrants must have completed the lower course at the school or have similar qualifications, and have had two months' practical experience and good artistic talent.

Training for art instructors is also given by this school.

Commercial secondary schools (*handelsgymnasier*). These are usually municipal establishments, apart from a few which are administered by foundations. The course aims at giving theoretical and practical training for posts as correspondence clerks, book-keepers, etc. The final certificate awarded is a qualification for admission to the commercial university.

For pupils who have passed the *realexamen* or possess knowledge of a comparable standard the full-time course lasts 2 years. At certain commercial *gymnasier* there are also 4-year courses in the evening, corresponding to the 2-year day-time course. For *gymnasium* (general secondary school) graduates there is a 1-year course.

Fees and scholarships. At technical secondary schools no registration fees or term fees are payable. This is not the case, however, with commercial *gymnasier*, where in some cases the fees charged are relatively high.

Students at technical *gymnasier* and those taking 2-year courses at commercial *gymnasier* can obtain state assistance, partly in the form of special study grants without means test and partly in the form of scholarships subject to a means test, these being awarded on the same principles as are applicable to students at state-aided municipal and private vocational schools. Further details of such assistance are given in a subsequent section of this chapter. Where a student has dependents to support, or in cases of hardship, state loans are obtainable for study purposes.

Students attending full-time courses at the remainder of the establishments dealt with in this section may obtain state loans or, subject to a means test, scholarships up to 100 crowns a month.

Matters concerning assistance to students for the purpose of study at the schools mentioned in this section are dealt with by the Study Grants Committee. In addition, general study grants are payable to students of 16 to 17 years of age in accordance with the usual rules. A state grant may also be paid to students' hostels attached to secondary level establishments on Royal authority.

II. Other schools and courses under the Board of Vocational Training

State-aided vocational schools (*yrkesskolor*) may be municipal vocational schools or county council vocational schools or private vocational schools. These schools run full-time and part-time courses. Some schools have both types of course, others only the one. There are also schools run by private firms at which training is given in conformity with a curriculum approved by the Board and for which state grants are available. Special training courses, retraining courses and continuation courses are organized for the unemployed. In addition to ordinary vocational training in schools, the traditional training of apprentices is carried on in various trades and crafts.

Municipal and county council vocational schools. The municipal vocational schools may be administered by a single municipality or a combination of several of them. A county council vocational school may be run by a county council, a combination of county councils, or a combination of a county council and a town not coming under a county council.

About 30 per cent of those taking courses at municipal vocational schools for industry and handicrafts, commerce and domestic science are full-time students; the remainder take part-time courses. The proportion, however, varies from one district to another.

The length of part-time courses and the number of hours' tuition per week vary considerably. The account that follows will be confined to the more important forms of full-time instruction and the longer part-time courses.

Workshop schools. The name workshop school (*verkstadsskola*) is given to full-time courses at which the students receive both practical and theoretical training for some trade or craft. As a rule the instruction is intended to give a basic all-round training in the trade and only in exceptional instances is it concerned with specialized work within a trade. Instruction in trade processes is given in a school workshop but can also be given alternately in the school workshop and at some outside works connected with the trade (alternating system). Theoretical training generally covers 8–10 hours a week, but more time may be taken in the first year's course if training in general subjects is also included. In addition to this, there is usually physical training. The normal school year lasts 42 weeks with a total of 45 hours' tuition a week. Most courses last for 2 years but in some trades there are courses of 1, 3 or 4 years.

Apart from the usual type of workshop school referred to above, where both theoretical and practical training take place at the school, there are also 'incorporated' workshop schools at which the practical side of the training is done at an outside industrial undertaking. The firm concerned maintains the equipment necessary for such training in its production departments or in a special instructional department. It also provides the pupils with suitable tasks and the instruction is usually given by works managers or foremen. To this extent the school is 'incorporated' in the firm, but in other respects it is independent of it and comes under the municipal vocational school. Economic relations between the school management (municipality) and the firm are regulated by special agreement. A state grant is paid to the municipality in respect of theoretical training and to the firm for the vocational practice.

Technical schools. Municipal technical schools (*tekniska skolor*) give theoretical and technical training based on the knowledge the pupils have acquired in the primary school. The schools are under the supervision of the Board of Vocational Education and are state-aided. Instruction is divided into a technicians' course, and a subsequent higher specialized course for personnel whose work will be more in the nature of that of an engineer. At some schools there are courses for technicians only.

At full-time technical schools the technicians' course lasts 18 months and the higher specialized course a further year. At part-time technical schools (evening schools), which usually operate four evenings a week, the technicians' course lasts 3 years and the higher specialized course 2 years.

The first two terms at a technical school and the first

four at a technical evening school also serve as qualifying courses for those wishing to gain admission to secondary technical schools. There are also special preparatory courses for applicants to a higher technical school.

Seamen's schools. The purpose of seamen's school (*sjömanesskolor*) is to train deck and engine-room personnel, marine electricians and kitchen staff. Training is full-time and specialized in different branches. The average length of courses is 21 weeks.

Schools for commerce and office training. Training may be designed to cover either office work or retail trade. To gain admission the pupil must have finished his compulsory schooling; in certain cases a pass in the lower certificate examination at a secondary school (*realexamen*) or equivalent knowledge is required.

Those taking office training usually study Swedish with business correspondence, trade and commerce, social science and economics, economic geography, English, and shorthand and typewriting. They may also take certain general subjects as well as German and French. The subjects usually studied on the retail trade side are Swedish with business correspondence, retail trade, social science, economics and the study of merchandise; accompanying subjects, as well as English and German, may also be studied. In some cases instruction is organized on the 'alternating system' whereby part of the practical training is carried out at retail businesses.

As regards full-time instruction, one-year courses are the most common, as stated above. The school year generally lasts 37–39 weeks with 34–37 hours' tuition a week. The age of entry varies between 15 and 18.

The commonest form of part-time instruction consists of evening classes in typewriting, shorthand, book-keeping and foreign languages. Tuition can also be had in a number of other commercial subjects, such as commerce, commercial law, business correspondence in Swedish, and window-dressing and signwriting.

Schools for household management and nursing. The term 'domestic science school' (*husmodersskola*) refers to full-time courses in household management, usually comprising practical training in household management (preparation of food and the running of a home), needlework and the care of children, and in some cases weaving. Theoretical training covers the study of nutrition, housekeeping, economics, the theory of needlework and weaving, hygiene and home nursing, the care and upbringing of children, social science and family affairs. Some domestic science schools also teach general subjects (corresponding to the 9y stream in the comprehensive school), including Swedish, mathematics, geography, biology and hygiene, chemistry and English (optional).

The domestic science school in some cases constitutes compulsory preliminary training for those, for example, who contemplate taking posts as children's nurses, manageresses of boarding schools and similar establishments, teachers of domestic science, etc.

At some 20 municipal vocational schools there are shorter full-time courses for children's nurses and nursing assistants.

Private state-aided vocational schools. Private vocational schools are administered by associations, trade organizations, foundations, industrial and commercial firms and individuals. State grants are payable on certain conditions. Besides shorter courses for industry and handicrafts, commerce and domestic science, there are also more comprehensive forms of training.

Fees and scholarships. At municipal vocational schools fees may be charged to the extent determined by the Board of Vocational Training, but no fees are payable by pupils of compulsory school age. In general, fees are low. At municipal workshop schools, training is usually free for pupils domiciled within the municipality in which the school is situated. At central workshop schools and seamen's schools tuition is entirely free. At private vocational schools the fees charged vary in amount.

Pupils of 16 and 17 years of age following full-time courses of at least four months' duration receive general study grants of 34 crowns a month as a continuation of the general child allowance.

Pupils following full-time courses at state-aided vocational schools may also obtain special study grants and scholarships (for exceptions see below). Scholarships are granted on the basis of a means test, whereas with study grants this is not the case. The maximum amount per month of the study grant and the limits within which scholarships lie may be seen from the following table.

MAXIMUM AMOUNT OF STUDY GRANT
(per month)

Grant	Older pupils (18 years upwards)	Younger pupils (up to and including 17 years)
	Crowns	*Crowns*
For board and lodging:		
For courses lasting at least 2 school years	75	60
For courses lasting from 4 months to 2 years:		
(a) accommodation in students' hostel	40	30
(b) local accommodation other than in a students' hostel	65	50
For daily travel	50	40
For one meal	15	14
For additional meal	7	6
Scholarship	100–15	75–10

As indicated earlier, the rules and amounts shown in the above table are applicable also to students at a technical *gymnasium* and the 2-year stream in a state-aided commercial *gymnasium*.

Decisions concerning study grants for students at certain establishments for specialized training are made by the Study Grants Committee, whilst all other questions relating to state study grants for pupils at state-aided vocational schools are dealt with by the Board of Vocational Training.

Training of apprentices in handicraft trades. In recent times there has been a considerable increase of interest in the training of apprentices in handicraft trades, and trade organizations are doing all they can to make such training

as effective as possible. With this end in view a central organization for dealing with apprenticeship questions, the Central Vocational Committee, has been set up within the Swedish Organization for Handicrafts and Industry. One of its objects is to draw up curricula and regulations for journeymen's tests applicable to the different trades. There is no legislation governing the rights and obligations of employers and employees in the matter of training apprentices. State grants may be made on application to firms undertaking to carry out such training.

Training in industry. The Swedish Employers' Association and the Confederation of Swedish Trade Unions have set up a joint council to deal with matters affecting training in industry. The rules on the training of apprentices recommended by the main organizations include provisions on the length of apprenticeship, employers' responsibilities towards the apprentice, obligations of apprentices, wages, etc. In both industry and the handicraft trades, a written agreement must be drawn up when the apprentice is taken on.

Special vocational training. Special vocational schools for training physically handicapped persons have been set up in Stockholm, Göteborg, Hälsingborg and Härnösand, and are attached to the orthopaedic clinics at the hospitals there, the costs being borne mainly from public funds; the Board of Vocational Education exercises supervision in educational matters.

Special state institutions provide vocational training for persons suffering from other infirmities, such as the deaf and the blind. These establishments come under the Board of Education.

For the vocational training of children and adolescents being cared for in children's homes, etc., there are state vocational schools as part of the child and adolescent social welfare system administered by the Social Welfare Board. A certain amount of vocational training is also given at homes for juvenile delinquents administered by the Prisons Board. The Board of Vocational Education exercises some educational supervision over such training.

III. Vocational training in agriculture, fisheries and forestry

Farm schools (*lantmannaskolorna*), which must be combined with school farms, provide seasonal and longer courses of up to one year. Entrants must be at least 18 years of age and have worked in agriculture for at least one year. Most farm schools are owned by the county councils.

Agricultural schools (*lantbruksskolorna*), which work in conjunction with school farms, give full-time courses lasting one and two years. The minimum age of entry for the animal husbandry course is 19 and for the other courses 18, in addition to which at least one year's practical experience in agricultural work is demanded.

Rural domestic science schools (*lanthushållskolorna*). In these schools the courses, which last six months or one year, cover practical and theoretical training in domestic science, needlework, weaving, horticulture and the care of animals, with theoretical instruction in health and hygiene, the care of children, social science, family affairs, etc. The minimum age of entry is 17, but some pupils may be accepted at 16. Most of these schools are administered by the county councils.

Agricultural vocational schools (*jordbrukets yrkesskolor*) are intended for younger persons (the minimum age is 14) than those who gain admission to the farm schools and rural domestic science schools. The schools run courses of one to two years in agriculture for boys, and at two of them there is also a one-year course in rural domestic science for girls. Pupils are admitted after they have completed the primary school.

At agricultural, farm and rural domestic schools 90 per cent of teachers' salaries are paid from state grants and state funds are also available for operating and building costs. Practically all the pupils at these schools can obtain full board either in the school hostels or through arrangements made by the school, and state grants for study purposes.

Horticultural schools (*trädgårdsskolor*). Vocational training in horticulture comprises courses for the training of horticulturists and horticultural advisers, etc., travelling courses in horticulture, training courses for arboriculturists, and courses for apprentices.

Training in agriculture, including dairy-farming and horticulture, is administered by the Board of Agriculture, which comes under the Department of Agriculture. Certain agricultural courses at municipal vocational schools are also arranged in consultation between the Board of Vocational Education and the Board of Agriculture.

At a special fisheries school established by the Fisheries Board, there is a 2-year course in fishery protection, pisciculture and fishing instruction for those wishing to take up such occupations. For those engaged in fishing as a livelihood there are also navigation courses at certain folk high schools, as well as travelling courses in fishery protection, fishing legislation, etc.

Forestry schools (*skogsskolor*). There are two temporary and five ordinary state schools of forestry administered by the Board of Crown Lands and Forests, and one private school which runs one-year courses for training foresters and auxiliary workers. The minimum age of entry is 19 and the maximum 30. Applicants must have at least 20 months' approved experience and have completed a 4-month preparatory course in forestry. The schools of forestry are boarding establishments, and state scholarships are awarded to those attending them.

State-aided vocational training for forestry workers and owners of forests is dealt with by the Forestry Protection Board under the Forestry Board. It is given partly in the form of basic training for juveniles and apprentices aged 15 to 20 years with little or no previous experience and partly as supplementary training.

Some training in forestry is also given at most farm schools and agricultural schools and at a number of such schools special forestry departments have been introduced.

IV. Other vocational training

In fields of trade and industry other than those dealt with above, extensive vocational training is given in schools and courses connected with public institutions or social undertakings, such as professional and vocational training for the armed forces, postal and telegraph and customs services, railways, tramways, etc.

Out-of-class activities

In accordance with directives now in force with a view to educating pupils in comradeship and citizenship, pupils are expected to participate in the maintenance of school discipline so as to accustom them to self-administration and responsibility. More detailed regulations in this respect are worked out by the headmaster in consultation with the teachers. In some schools an elected committee of pupils is responsible for such duties as maintaining order at the morning assembly and in the playground, checking on late-comers in the morning, and supervising school dinners. This committee gives expression to pupils' views and wishes, for example, in matters relating to behaviour, drawing up disciplinary rules, distribution of work, and measures to promote increased facilities for recreation.

In the instructions on methodology there appears a reminder that the school should seek to develop in its pupils an intelligent interest in social affairs and political questions. Discussion groups are of assistance here. In a school that includes a *gymnasium*, for example, the following associations may exist: an athletics association, a general literary and humanistic association, perhaps including music, amateur theatricals and photography in its programme, an art group, a natural science group, one or more Christian associations, and a temperance association.

The principal organizations concerned with gymnastics and sport are the Swedish Gymnastics Association and the Swedish School Sports Association, which are special bodies attached to the Swedish National Sports Association. The latter's principal means of propaganda is the School Sports Badge, which includes many branches of sport suitable for young people, and the Youth Gymnastics Badge. Contests are organized annually in practically all branches of athletics and sport, e.g., local and district contests and national contests run by the Swedish School Sports Association or by special organizing bodies appointed to it. The number of school sports associations at the present time is 1,954 and the total membership is 320,600.

TRENDS AND PROBLEMS

The more important organizational alterations in Swedish education, the change-over to the 9-year school and the reorganization of the practical side of teacher training, have already been dealt with briefly. Difficulties encountered at the present time include a shortage of teachers, particularly teachers of science subjects, insufficient premises, and the general organization of the educational system with particular reference to thinly-populated districts.

[*Text prepared by the Swedish National Commission for Unesco in September 1959.*]

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STATISTICS

Total population (mid-year 1958 estimate): 7,415,000.
Area: 173,623 square miles; 449,682 square kilometres.
Population density: 43 per square mile; 16 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment (not including adult education) was nearly 1.3 million or about 18 per cent of the total population. Of these pupils, 2.5 per cent were in nursery schools and kindergartens; 69 per cent in primary or in special schools; 15 per cent in general secondary schools; 11 per cent in vocational schools, full-time or part-time; and 2.5 per cent in institutions of higher education including teacher training colleges. The proportion of girls was 49 per cent in primary education; 55 per cent in general secondary education; 65 per cent in teacher training; and 31 per cent in higher education.

Between 1953 and 1957, total enrolment increased by 9 per cent, the increase for general secondary education being 25 per cent; for vocational schools, 22 per cent; and for institutions of higher education, 32 per cent. In spite of a decline in the numbers attending teacher training schools (5,064 students in 1957 as compared with 6,395 in 1953), the average number of pupils per teacher in public primary schools and in all general secondary schools was still only 21 in 1957. (See Table 1.)

Enrolment trends in secondary education, 1930–57. Between 1930 and 1957, enrolment in general secondary education nearly tripled, and the proportion of girls rose from 50 to 55 per cent. Vocational school enrolment increased two and a half times between 1943 and 1957, but there was a drop in the number of pupils attending teacher training schools after 1950. Over the whole period the proportion of pupils in general secondary education fluctuated slightly around 60 per cent of the total secondary enrolment.

The secondary enrolment ratio, formed by relating average secondary enrolment to the estimated population 15–19 years old, steadily increased from the period 1930–34. (See Table 2.)

Examination results in secondary education, 1954–57. Comparing 1954 with 1957, the annual number of lower secondary (*realexamen*) certificates increased by 22 per cent, and of upper secondary (*studentexamen*) certificates by 36 per cent. In the latter year the proportion of girls among the successful candidates was 53 per cent for the *realexamen* and 45 per cent for the *studentexamen.* (See Table 3.)

Educational finance, 1956/57. In the fiscal year beginning in July 1956, the Central Government spent 1,280 million kronor, covering 59 per cent of the total public expenditure on education. The provincial and local authorities spent an additional 877 million kronor in the fiscal year beginning in January 1957, the local authorities contributing 38 per cent of the total educational expenditure. Average expenditure per inhabitant may be estimated at 295 kronor. Recurring expenditure accounted for 84 per cent of the total. (See Table 4.)

Source. Sweden: Board of Education, Statistical Section; replies to Unesco questionnaire.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools, kindergartens, public	1957/58	702				
	Nursery schools, kindergartens, private	1957/58	70	*780	*780	31 306	...
	Total	**1957/58**	**772**	***780**	***780**	**31 306**	...
	,,	1956/57	687	*745	*745	29 758	...
	,,	1955/56	654	*680	*680	27 105	...
	,,	1954/55	619	*640	*640	25 615	...
	,,	1953/54	580	*575	*575	22 960	...
Primary	Primary schools, public	1957/58	7 668	40 700	25 800	[1]804 416	[1]391 468
	Continuation schools, public	1957/58	...	[2]1 380	[2]740	45 105	20 507
	Teacher training practice schools, public	1957/58	23	340	150	4 909	2 440
	Schools for nomads (Lapps), public	1957/58	10	24	13	487	242
	Primary schools, private	1957/58	...	...	...	3 200	1 400
	Preparatory classes of secondary schools, private	1957/58	5	[3]29	[3]29	969	730
	Total	**1957/58**	**[4]7 701**	**[5]42 444**	**[5]26 703**	**[1]859 086**	**[1]416 787**
	,,	1956/57	[4]8 017	[5]41 514	[5]26 312	[1]854 334	[1]415 029
	,,	1955/56	[4]8 488	[5]40 314	[5]25 822	[1]844 338	[1]410 696
	,,	1954/55	[4]8 643	[5]38 954	[5]25 120	[1]822 370	[1]399 607
	,,	1953/54	[4]8 800	[5]37 634	[5]24 382	[1]796 472	[1]387 429
Secondary							
General	State secondary schools	1957/58	219	[6]*6 500	[6]*2 400	136 561	64 143
	Municipal girls' schools	1957/58	50	[6]1 220	[6]1 110	24 529	24 425
	Municipal *realskolor*	1957/58	63	[6]460	[6]170	12 008	6 903
	Municipal practical *realskolor* schools	1957/58	26	[6]670	[6]350	14 303	7 668
	Higher primary schools, public	1957/58	4	[6]10	[6]10	435	324
	Secondary schools, private	1957/58	34	[6]*540	[6]*210	11 556	5 999
	Total	**1957/58**	**396**	**[6]*9 400**	**[6]*4 250**	**[7]199 392**	**[7]109 462**
	,,	1956/57	394	[6]*9 040	[6]*4 060	[7]190 259	[7]104 184
	,,	1955/56	393	[6]*8 420	[6]*3 810	[7]176 802	[7]96 769
	,,	1954/55	395	[6]*8 000	[6]*3 610	[7]166 942	[7]91 452
	,,	1953/54	398	[6]*7 730	[6]*3 480	[7]159 355	[7]86 952

1. Including pupils in special classes, i.e., classes in regular schools for retarded children, socially maladjusted children and physically handicapped children (about 31,500 in 1957/58), in secondary classes attached to primary schools (about 6,500 in 1957/58), in regular classes 7–8 (about 86,000 in 1957/58), in voluntary classes 8–10 (about 4,000 in 1957/58), and in the upper stages of the 9 years compulsory school (about 23,000 in 1957/58).
2. Including part-time teachers.
3. Not including 13 (F.11) part-time teachers.
4. Public schools only, not including continuation schools.
5. Public schools only, not including part-time teachers, as follows: 1957/58, 4,800 (F.3,100); 1956/57, 4,700 (F.3,000); 1955/56, 4,400 (F.2,900); 1954/55, 4,100 (F.2,700); 1953/54, 3,900 (F.2,600).
6. Not including part-time teachers, as follows: 1957/58, *3,630 (F.1,460); 1956/57, *3,490 (F.1,440); 1955/56, *3,160 (F.1,320); 1954/55, *2,950 (F.1,230); 1953/54, *2,880 (F.1,250).
7. Not including enrolment in secondary classes attached to primary schools.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Second. [cont].							
Vocational	Technical and trade schools, public	1957/58	21	...	...	5 076	166
	Vocational schools, public	1957/58	519	...	...	[8]115 088	...
	Commercial schools, public	1957/58	24	...	...	2 996	1 264
	Industrial arts school, public	1957/58	1	...	...	868	448
	Vocational schools, private	1957/58	64	...	...	10 726	...
	Factory schools, private	1957/58	36	...	...	1 942	...
	Total	**1957/58**	**665**	**...**	**...**	**[8]136 696**	**...**
	,,	1956/57	580	...	...	[8]126 826	...
	,,	1955/56	564	...	...	[8]119 963	...
	,,	1954/55	548	...	...	[8]116 776	...
	,,	1953/54	525	...	...	[8]111 700	...
Teacher training	Teacher training schools, public	1957/58	37	...	...	3 286	2 360
	Teacher training schools, private	1957/58	10	...	...	453	453
	Total	**1957/58**	**47**	**...**	**...**	**3 739**	**2 813**
	,,	1956/57	47	...	...	3 962	2 802
	,,	1955/56	49	...	...	4 389	2 944
	,,	1954/55	50	...	...	4 587	2 916
	,,	1953/54	51	...	...	4 849	3 006
Higher							
Teacher training	Teacher training colleges, public						
	Total	**1957/58**	**[9]16**	**...**	**...**	**915**	**473**
	,,	1956/57	...	...	...	1 324	698
	,,	1955/56	...	...	...	1 552	797
	,,	1954/55	...	...	...	1 547	778
	,,	1953/54	...	...	...	1 546	776
General and technical	Universities, public	1957/58	5	861	...	18 628	7 291
	Institutes and colleges, public	1957/58	11	573	...	7 486	714
	Total[10]	**1957/58**	**16**	**1 434**	**...**	**26 114**	**8 005**
	,, [10]	1956/57	16	1 318	...	24 576	7 291
	,, [10]	1955/56	16	1 254	...	22 518	6 460
	,, [10]	1954/55	16	1 204	...	20 866	5 805
	,, [10]	1953/54	17	1 186	...	19 819	5 222
Special	Schools for deaf and blind children	1957/58	23	...	...	1 065	447
	Schools for feeble-minded children	1957/58	93	...	...	4 100	1 772
	Hospital schools	1957/58	15	57	38	450	151
	Reformatory schools	1957/58	22	...	...	714	196
	Classes in regular schools for socially maladjusted children	1957/58	[11](51)	[11] ...	[11] ...	542	40
	Classes in regular schools for retarded children	1957/58	[11](2 251)	[11] ...	[11] ...	29 931	11 328
	Classes in regular schools for physically handicapped	1957/58	[11](68)	[11] ...	[11] ...	845	330
	Total	**1957/58**	**[12]153**	**...**	**...**	**37 647**	**14 264**
	,,	1956/57	[12]143	...	...	36 102	13 625
	,,	1955/56	[12]132	...	...	33 822	12 696
	,,	1954/55	[12]128	...	...	30 664	11 546
	,,	1953/54	[12]126	...	...	28 301	10 688
Adult	Folk high schools						
	Total	**1957/58**	**91**	**604**	**...**	**11 615**	**7 767**
	,,	1956/57	89	564	...	10 863	7 381
	,,	1955/56	87	542	...	10 568	7 364
	,,	1954/55	85	528	...	10 250	7 088
	,,	1953/54	83	495	...	9 990	6 993

8. Including part-time pupils in public vocational schools, as follows: 1957/58, 91,976; 1956/57, 88,434; 1955/56, 85,764; 1954/55, 85,069; 1953/54, 81,989.
9. Fifteen of these schools are counted also in secondary teacher training.
10. Not including the 3 schools of social work and public administration in 1956/57, 12 teachers and 1,073 students (F.536).
11. Number of classes. Teaching staff is included with regular teachers of primary schools.
12. Special schools only.

2. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational[2]		Teacher training[3]				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	72 066	51	...	...	2 266	56			
1931	73 784	50	...	...	2 228	55			
1932	76 989	50	...	...	1 918	48	[4]79	551	[4]*14*
1933	80 630	50	...	...	1 779	47			
1934	83 543	51	...	...	1 623	46			
1935	85 456	50	...	...	1 096	43			
1936	86 899	51	...	...	1 030	45			
1937	88 091	51	...	...	1 115	51	[4]90	535	[4]*17*
1938	90 258	51	...	...	1 271	57			
1939	91 745	51	...	...	1 563	58			
1940	91 805	51	...	...	1 165	58			
1941	92 710	51	...	...	663	57			
1942	95 070	52	...	...	550	52	[4]96	493	[4]*20*
1943	97 324	52	51 064	...	858	67			
1944	100 076	52	56 496	...	1 713	70			
1945	102 773	52	64 047	...	2 539	68			
1946	105 266	52	69 768	...	3 875	64			
1947	109 065	53	76 363	...	4 643	62	194 ([4]116)	435	*44* ([4]*27*)
1948	115 688	53	86 093	...	5 569	62			
1949	124 609	53	91 114	...	6 272	61			
1950	134 840	54	95 128	...	7 087	63			
1951	143 180	54	99 551	...	6 758	61			
1952	151 078	54	105 053	...	6 451	60	263 ([4]158)	422	*62* ([4]*37*)
1953	159 355	55	111 700	...	6 272	59			
1954	166 942	55	116 776	...	6 009	60			
1955	176 802	55	119 963	...	5 812	63			
1956	190 259	55	126 826	...	5 162	66	322 ([4]194)	462	*70* ([4]*42*)
1957	199 392	55	136 696	...	4 524	71			

1. Not including secondary classes attached to primary schools.
2. From 1943 to 1953, including some pupils already counted in 'teacher training education'.
3. Including some students at third level.
4. Not including vocational education.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1954–57

Type of diploma or certificate granted	School year							
	1953/54		1954/55		1955/56		1956/57	
	Total	Female	Total	Female	Total	Female	Total	Female
Lower certificate examination (*realexamen*)	15 440	7 977	16 672	8 689	17 839	9 455	18 819	9 936
Higher certificate examination (*studentexamen*)	5 360	2 287	5 957	2 641	6 553	2 872	7 307	3 284
Diploma of teacher training schools for vocational education	261	235	323	290	277	244	324	296
Teacher training schools certificate for special education	21	18	17	12	27	21	26	23
Teaching certificate for:								
the junior primary school	641	641	545	545	543	543	548	548
the primary school proper	747	304	776	319	766	324	666	277

4. EDUCATIONAL FINANCE, 1956/57 (in million kronor)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**2 157**
Central Government	1 280
Provincial governments	50
Local authorities	827

B. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**2 157**
Recurring expenditure		1 807
For central administration	9	
For salaries to teachers, etc., and other instructional expenditure	1 620	
Other recurring expenditure	178	
Capital expenditure		350

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**1 807**		**100.0**
Central administration		9		0.5
Instruction		1 620		89.6
Primary education	1 065		58.9	
Secondary education	361		20.0	
General	225		12.5	
Vocational	105		5.8	
Teacher training	31		1.7	
Higher education	119		6.6	
Special education	35		1.9	
Adult education	40		2.2	
Other recurring expenditure, not specified		178		9.9

1. Official exchange rate: 1 krona = 0.193 U.S. dollar.

2. Closed account.

SWITZERLAND

The 25 cantons which make up the Swiss Confederation have full sovereignty over the organization of education. There is no legislation which applies to all Swiss schools; each canton promulgates its own laws and regulations, and this makes it difficult to give an overall picture of general and technical secondary education in Switzerland.

The fact that there are three national languages—German, French and Italian—constitutes another difficulty; in some cantons (Berne, Fribourg and Valais), different languages are spoken in different parts of the canton, and laws and regulations have to be promulgated in both German and French; the people of Grisons even have to deal with three languages—German, Italian and Romansch.

Another difficulty lies in the different terminology used. For example, the French equivalent of the Swiss German term *Sekundarschule* is not *école secondaire* but *école primaire supérieure*, i.e., it designates a school which offers a course at lower secondary level but which is considered an extension of the primary school and administered as such.[1]

THE EDUCATIONAL SYSTEM

The Federal Constitution laid down the general principles which should govern primary education and provided for a higher educational establishment to be opened in Zürich,

1. To avoid confusion the term 'general secondary school' will be used for schools which prepare pupils for higher education (*gymnase*, *Gymnasium*, *ginnasio*, etc.) and form the secondary school system, properly so called, and the term 'upper primary school' for those which provide a general education at lower secondary level but which are part of the primary school system.

the Federal Institute of Technology. (This is the only federal educational establishment.) There are no provisions regulating secondary education, but some laws have a more or less direct bearing on this level of schooling.

Examples of such laws are: the Federal Law of 24 June 1938 on the minimum age of workers, which prescribes that no one under 15 may become an apprentice, the effect of which is that the cantons are responsible for the education of children living within their boundaries until the age of 15; the Statute of 20 January 1925 on the recognition of the *maturité* certificate by the Swiss Federal Council (this will be referred to as the '1925 Statute'); the Federal Law of 13 June 1928 on the campaign against tuberculosis; the Federal Law of 26 June 1930 on vocational training, followed by the Federal Statutes of 23 December 1932, 11 September 1936 and 1 June 1956, on the same subject (the last of these deals with the teaching of domestic science and with vocational training for young peasant girls).

The 1925 Statute provides for a Federal Matriculation Commission authorized to draw up syllabuses, 'which shall be the same throughout the country', for the examination for the federal *maturité* certificate; this certificate is awarded to successful candidates at examinations organized in the three linguistic divisions of the country, both in state schools and in private schools which give certificates recognized by the federal authorities. There are three types of *maturité* certificate—type A, literary (Latin and Greek), type B, literary (Latin and modern languages) and type C, scientific. Only those who intend to train as doctors or dentists and those who wish to enter polytechnical schools are required to hold the federal *maturité* certificate, but in drawing up curricula the cantons have taken into account the requirements of the Matriculation Commission, which in any case are flexible enough to allow them a certain degree of freedom; as a result, there are marked differences between the schools which prepare pupils for these certificates. It is to be noted that the 'C' *maturité* certificate is fully recognized only by the Federal Institute of Technology, Zürich, the Polytechnical School of the University of Lausanne and the science faculties in the universities.

The law and federal statutes governing vocational training stipulate the methods to be used and the curricula to be followed in vocational training, and prescribe that such training shall be carried out under federal supervision through the Office Fédéral de l'Industrie, des Arts et Métiers et du Travail;[1] there is, therefore, much more uniformity in this branch of education than in others.

The role of the cantons and communes

The authorities of the cantons are responsible for the educational system, laws and regulations for the administration of the laws, the general supervision of schools, the preparation of curricula and the choice of textbooks and equipment. Normally, the Government or the Conseil d'Etat (the executive body) delegates its supervisory powers to the Department (or Directorate) of Public Education;[2] the Department of Agriculture and Industry is responsible for vocational training, and the Department of Public Works (in conjunction with the Department of Public Education) for the erection of school buildings, alterations and repairs.

In preparing plans for submission to the Conseil d'Etat and then to the Grand Conseil (the legislature) for approval, the Department is assisted either by: (a) *ad hoc* commissions, consisting partly or wholly of teachers concerned; or (b) a standing education board (*Conseil d'éducation, Erziehungsrat*), appointed by the Conseil d'Etat for the period of office of the legislature. There is an education board in many of the cantons; the number of members varies, and some boards have wider powers than others.

Cantonal and vocational schools are under the direction of a head teacher, assisted by a supervisory committee (*Commission de surveillance, Aufsichtskommission*) or a school council, which is appointed by the Government. These bodies perform the same work for these schools as communal school committees do for communal schools (see below).

1. Hereinafter referred to as OFIAMT.
2. Hereinafter referred to as 'the Department'.

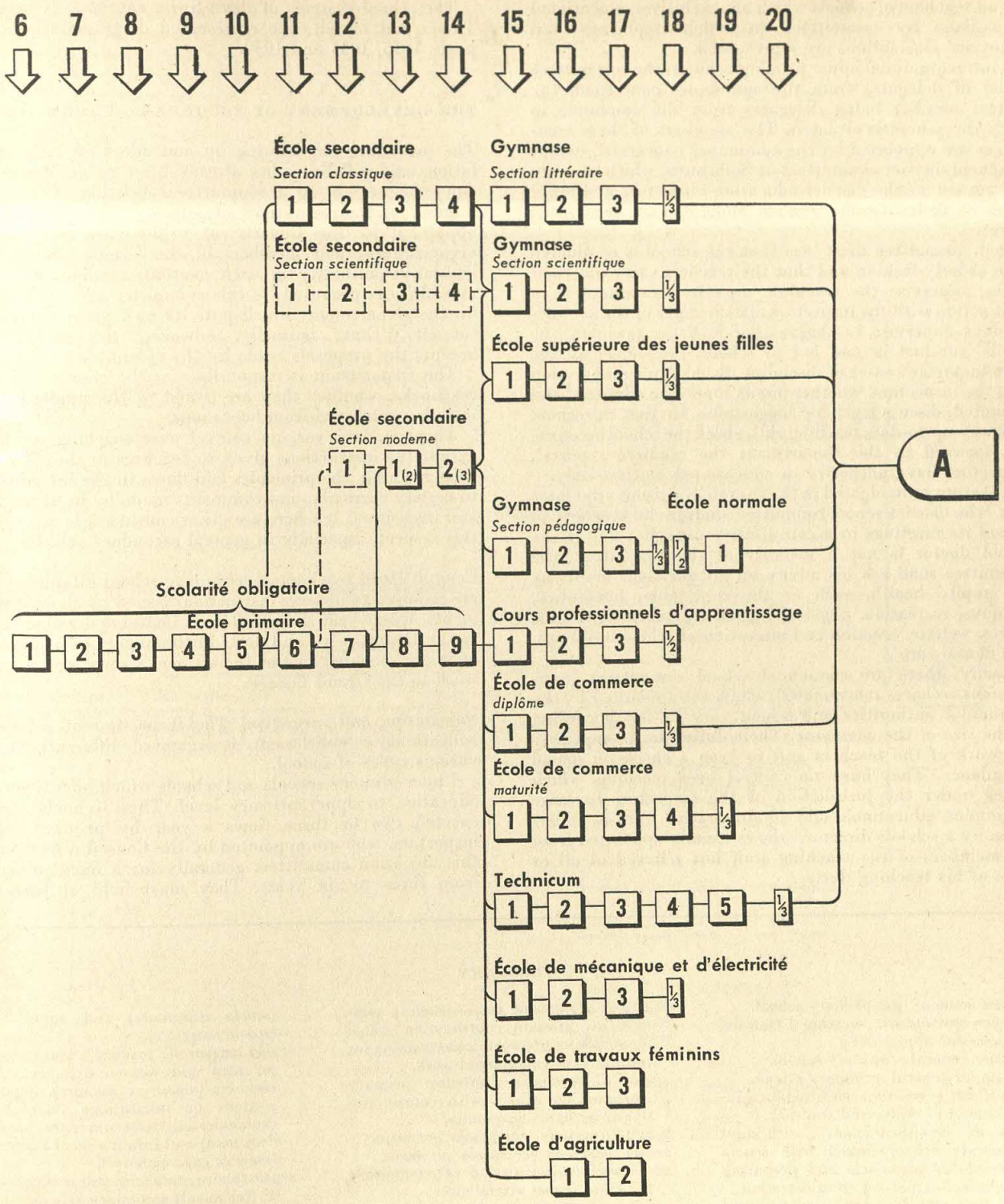
GLOSSARY

NOTE. Classes shown in dotted outline are projected.

cours professionnels d'apprentissage: part-time vocational training schools for apprentices.
école d'agriculture: vocational training school of agriculture.
école de commerce: vocational secondary school of commerce offering a diploma course (4 years), and a course for the commercial *maturité* certificate which admits to higher commercial education.
école normale: teacher training school.
école primaire: primary school.
école de travaux féminins: vocational training school of home economics.
école secondaire: lower general secondary school with *section classique*, comprising obligatory study of Latin, and Greek as an option; and *section moderne* without Latin or Greek. It is proposed to introduce a *section scientifique.*
école supérieure des jeunes filles: general secondary school for girls.
gymnase: upper general secondary school organized in three sections,
  section littéraire, emphasizing classical and literary studies,
  section scientifique, emphasizing scientific studies, and
  section pédagogique, preparing for professional training as a teacher.
scolarité obligatoire: period of compulsory full-time school attendance.
section classique: see *école secondaire.*
section littéraire: see *gymnase.*
section moderne: see *école secondaire.*
section pédagogique: see *gymnase.*
section scientifique: see *gymnase.*
technicum: vocational secondary school of industrial arts, including a section for the training of technicians, a section for the training of skilled workers, and an art school.

HIGHER EDUCATION

A. University of Neuchâtel and various specialized institutes.



CANTON OF NEUCHÂTEL

Head teachers of schools which are exclusively vocational are assisted by committees on which employers' and employees' associations are represented.

In intercommunal upper primary schools, the committees consist of delegates from the communes concerned, the greatest number being delegates from the commune in which the school is situated. The members of these committees are appointed by the communes concerned, except the school district committees at Solothurn, which in every case consist of the district education inspectors and other members, including one teacher, appointed by the Conseil d'Etat.

Each committee must 'see that the school is conducted in an orderly fashion and that the teachers carry out their duties, supervise the teaching, organize examinations in conjunction with the inspectors, fix the dates of the summer holidays, supervise, in conjunction with the teachers, the pupils' conduct in and out of school, pronounce on the more important cases of discipline, decide, in collaboration with the inspectors, whether pupils should be admitted and promoted, discuss teachers' suggestions, see that the school possesses up-to-date teaching aids, check the school accounts and forward to the Department the required reports'. Inspectors have authority in educational matters only.

A statute promulgated in the canton of Grisons stipulates that 'the district school committee shall invite teachers to attend its meetings in a consultative capacity, and if the school doctor is not a member of the committee, the committee shall ask his advice on all questions involving the pupils' health, such as the time-table, homework, holidays, recreation, physical hygiene, gymnastics, baths, sports, welfare, erection and alteration of school buildings, and dental care'.

Lastly, there are communal school committees (*commissions scolaires communales*), which are appointed by the communal authorities and which vary in size according to the size of the commune. Their duties are to supervise the work of the teachers and to keep a check on school attendance. They have no control over teaching, which comes under the jurisdiction of the inspector. In large communes, educational and administrative work is undertaken by a schools director, who is usually appointed from the members of the teaching staff but relieved of all or some of his teaching duties.

The school systems of three Swiss cantons—Neuchâtel, Ticino and Zürich—are represented diagrammatically on pages 1055, 1057 and 1059.

THE DEVELOPMENT OF SECONDARY EDUCATION

The procedure for drawing up and adopting laws, regulations and syllabuses has already been given. Where the Government sets up a committee consisting of an equal number of representatives of school principals, teachers appointed by the Department or by their professional organizations, and members of the Grand Conseil (the legislative authority in each canton), modifications and amendments proposed by this committee are not binding on the Department, which puts its own plans before the Conseil d'Etat; normally, however, the Department accepts the proposals made by the committee.

The Department is responsible for the choice of school textbooks, whether they are issued to the pupils free or must be purchased from bookshops.

There is, however, no control over teaching methods, except the instructions given to teachers in the course of their training, the principles laid down in the introduction to certain curricula, and comments made by head teachers and inspectors; teachers are given considerable latitude in this respect, especially in general secondary schools.

Control. Head teachers of secondary school establishments are required to observe instructions issued by their Departments. Every year they send in an inclusive detailed report to the Department, and parts of this report or a summary of it are included in the Department's own report on its work to the Grand Conseil.

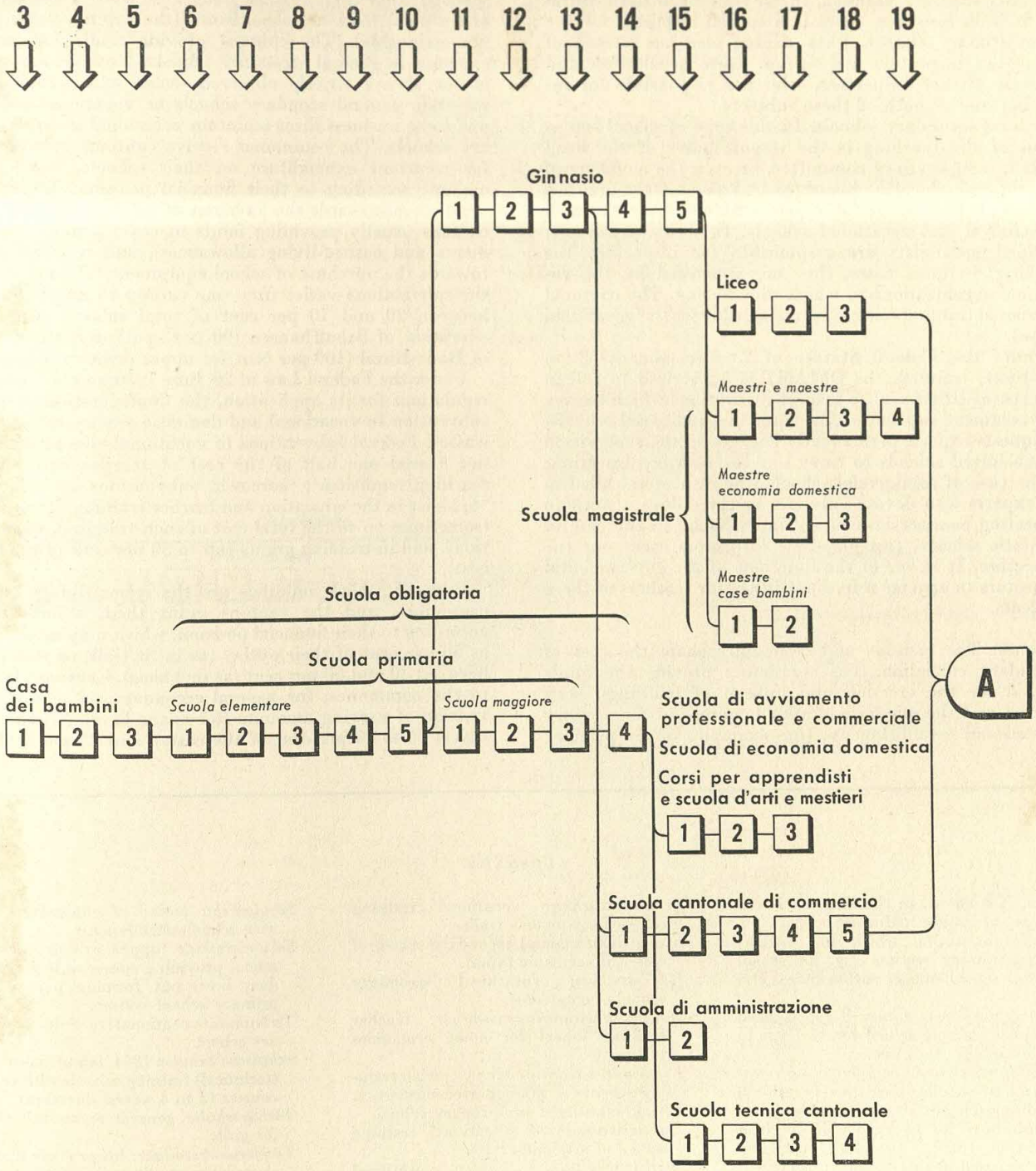
Supervision and inspection. The inspection of secondary educational establishments is organized differently in the various types of school.

Upper primary schools and schools which offer a general education to upper primary level. These schools are inspected two or three times a year by primary school inspectors, who are appointed by the Conseil d'Etat or by the education committee, generally for a fixed period of from three to six years. They must hold at least the

GLOSSARY

casa dei bambini: pre-primary school.
corsi per apprendisti: vocational training courses for apprentices.
ginnasio: general secondary school.
liceo: upper general secondary school.
scuola d'arti e mestieri: vocational training school of crafts and trades.
scuola di amministrazione: vocational secondary school linked with *scuola cantonale di commercio* and preparing for clerical careers in administration.
scuola cantonale di commercio: cantonal vocational secondary school of commerce.
scuola di avviamento professionale e commerciale: primary continuation school emphasizing pre-vocational training for industrial or commercial work.
scuola di economia domestica: primary continuation school with course emphasizing home economics.
scuola elementare: see *scuola primaria.*
scuola maggiore: see *scuola primaria.*
scuola obbligatoria: period of compulsory full-time school attendance.
scuola primaria: primary school, comprising a lower (elementary) stage (*scuola elementare*) and upper stage (*scuola maggiore*).
scuola magistrale: teacher training school for men and women primary school teachers (*maestri e maestre*). Separate sections or institutions train home economics mistresses (*maestre economia domestica*) and infant school mistresses (*maestre casa bambini*).
scuola tecnica cantonale: cantonal vocational (technical) secondary school.

A. Higher education.



CANTON OF TICINO

secondary teachers' diploma. In the cantons of Basle-Rural and St. Gall, however, there is a special inspector for the upper primary classes. Each canton also has a staff of gymnastics inspectors and one or more needlework and domestic science inspectors, who are responsible for inspecting one or both of these subjects.

General secondary schools. In this type of school supervision of the teaching is the responsibility of the head teacher, a supervisory committee, or even the members of the cantonal education board (as in Valais). Only in a few instances is there a special inspector for this type of school.

Technical and vocational schools. In technical schools, qualified specialists are responsible for inspecting the teaching; in most cases, they are appointed by the vocational organizations to which they belong. The cantonal vocational training centres are responsible for the vocational classes.

Under the Federal Statute of 23 December 1932 on vocational training, the OFIAMT is authorized to call in experts (of either sex) to inspect institutions which receive a government subvention. In trade and industrial schools, it requests experts permanently engaged in the supervision of subsidized schools to carry out the task of inspection; in the case of commercial schools, the inspectors called in are experts who devote only two or three days a week to inspecting commercial courses and schools; in the case of domestic science, two part-time inspectors carry out the inspection. It is one of the functions of the governmental inspectors to arrange refresher courses for teachers of these subjects.

Finance. The cantons and communes share the cost of secondary education. The communes provide the funds needed for the erection and upkeep of buildings, staff salaries and the purchase of school equipment for primary educational establishments (for example, upper primary schools) from their regular budget or from a special tax or (in part) from a 'school fund' (the capital of which is non-assignable). The cantons provide funds for similar expenses in general secondary schools. However, this rule is not always strictly observed—some urban communes maintain general scondary schools or vocational schools, and some business firms maintain vocational lower secondary schools. The communes receive cantonal subventions for recurrent expenditure on their schools, varying in amount according to their financial position. These subventions go towards the payment of teachers' salaries (the cantons usually providing funds to cover seniority increments and cost-of-living allowances), and in some cases towards the purchase of school equipment. The amount of the subventions varies from one canton to another—it is between 20 and 70 per cent of total salaries, with the exception of Schaffhausen (90 per cent) and the canton of Basle-Rural (100 per cent for upper primary schools).

Under the Federal Law of 26 June 1930 and the detailed regulations for its application, the Confederation grants a subvention to vocational and domestic science schools and classes. Federal subventions to vocational education 'shall not exceed one half of the cost of salaries and general teaching requisites'; moreover, subventions are allocated 'to assist in the education and further training of teachers' (sometimes up to the total cost of such training), examinations, and in-training grants (up to 50 per cent of the total cost).

Primary school buildings are the responsibility of the communes, and the cantons grant them a subvention according to their financial position, which may be as much as 50 per cent of their outlay (as in St. Gall) or may vary between 30 and 60 per cent (as in Valais). Cantons allocate to the communes, for general secondary schools, a subvention of varying amounts (for example, at Neuchâtel it covers 30 to 45 per cent of the costs), and 25 per cent for

GLOSSARY

NOTE. Not shown in the diagram is the College of Music (*Musikhochschule*), a private institution which has various teacher-training sections e.g. for school singing, school music, eurhythmics, etc.

Arbeitslehrerinnenseminar: specialized teacher training school for teachers in trade schools for girls.

Fortbildungsschulen (complementary vocational schools): part-time vocational training schools, attendance at which is compulsory for young people not in a full-time school at secondary level; they are grouped in three main categories—agricultural and industrial (*landwirtschaftliche und gewerbliche*), commercial (*kaufmännische*), and home economics (*hauswirtschaftliche*) schools.

Frauenfachschule: vocational training school for women's trades.

Gymnasium: general secondary school of classical academic type.

Handelsschule: vocational secondary school of commerce.

Haushaltunglehrerinnenseminar: teacher training school for home economics mistresses.

Kindergärtnerinnenseminar: teacher training school for kindergarten mistresses.

Kleinkinderschule: pre-primary school.

Kunstgewerbeschule: vocational training school of arts and crafts.

landwirtschaftliche Schule: vocational training school of agriculture.

Oberrealschule: general secondary school with scientific course.

Oberseminar: upper stage (professional training) at teacher training school.

Primarschule: primary school.

Schulpflicht: period of compulsory full-time school attendance.

Sekundarschule (upper primary school): school providing course at lower secondary level but forming part of the primary school system.

Technikum: vocational (technical) secondary school.

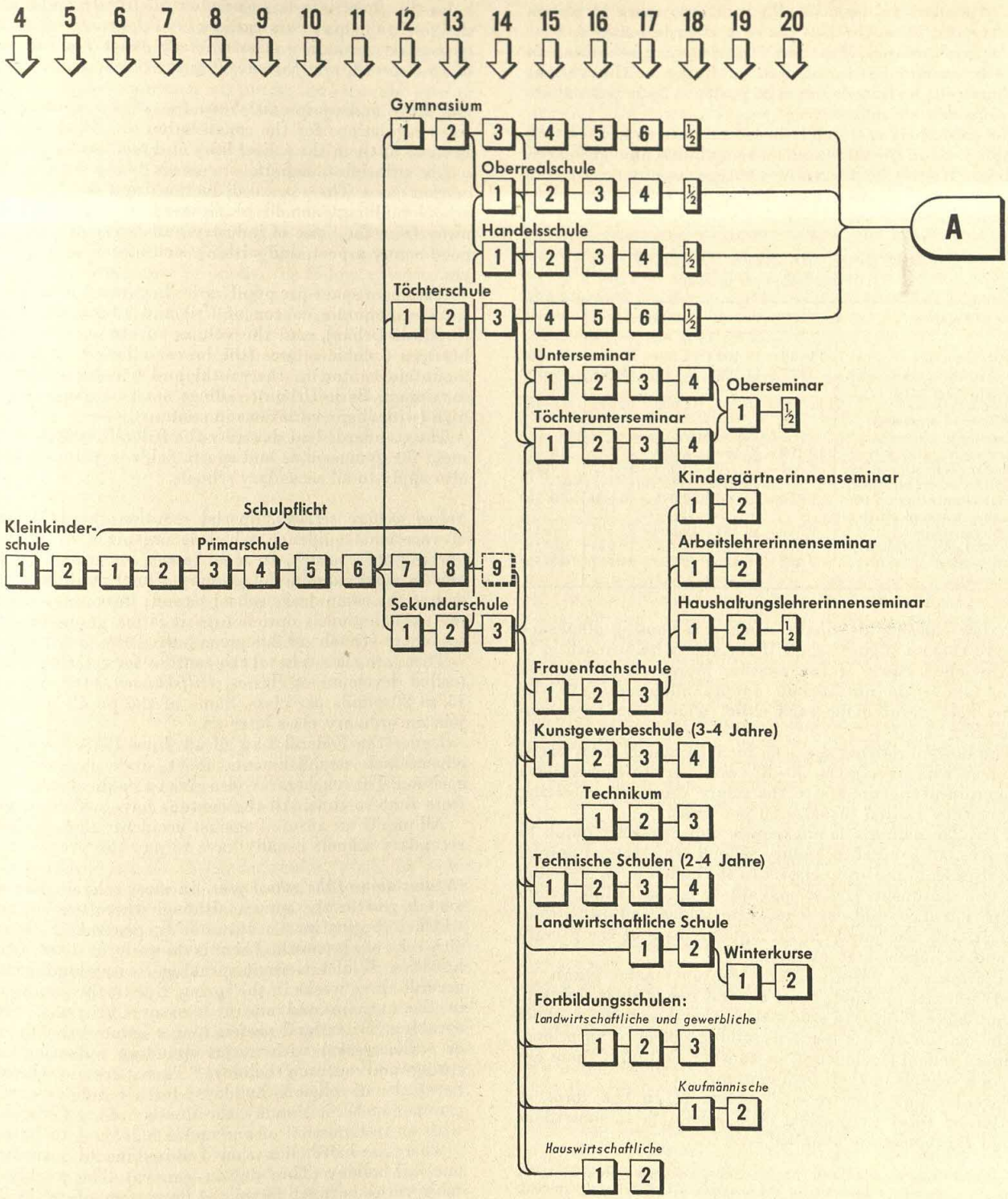
technische Schulen (2–4 Jahre): vocational (technical) training schools with various courses (2 to 4 years' duration).

Töchterschule: general secondary school for girls.

Töchterunterseminar: lower stage (general secondary studies) in girls' teacher training school.

Unterseminar: lower stage (general secondary studies) in teacher training school.

A. University or polytechnic.



CANTON OF ZÜRICH

buildings used in vocational education; there is also a federal subvention towards the cost of these buildings.[1]

Teachers' salaries. Teachers' salaries vary according to the educational level, the cost of living in the various cantons and the latter's financial position. Sometimes there is a considerable difference.

The table below, which is based on data supplied by 16 cantons, shows the minimum and maximum annual salaries (in Swiss francs) for the various categories of teachers, and the number of years' service before the maximum salary is reached in each case.

RANGE OF TEACHERS' SALARIES
(in Swiss francs per annum)

Category	Minimum	Maximum	Years
School inspectors	15 512 – 18 100	15 759 – 21 600	10–16
School inspectors (female)	9 828 – 11 700	12 074 – 16 300	10–16
Masters at a general secondary school	11 240 – 16 244	14 000 – 22 401	10–15
Mistresses at a general secondary school	As for masters in some cantons		
Mistresses at other schools	10 100 – 12 600	12 600 – 17 980	10–15
Secondary school masters	8 364 – 13 970	13 056 – 19 117	10–12
Secondary school mistresses	As for masters in some cantons		
Mistresses at other schools	9 800 – 12 000	12 074 – 16 600	10–16
Vocational school masters (general subjects)	9 500 – 16 537	10 500 – 22 401	10–15
Domestic science teachers	6 200 – 9 023	7 700 – 12 950	10–15
Needlework teachers	7 200 – 8 100	10 200 – 11 967	10–15

A few cantons also make teachers a housing allowance or pay them a higher salary if the school they teach at is in the chief town of the canton. Moreover, the figures given above do not include family allowances nor the allowances granted for each child, which also vary considerably.

The normal retiring age is 65 for men and 60 for women; teachers who have given 30–40 years' service then receive a pension proportionate to the salary they were receiving before they retired (usually 60 per cent).

Fees. The cantons do not require upper primary pupils to pay fees. In general secondary schools, the scale of annual fees rises from the lower classes to the higher ones, although in some cantons no fees are payable in classes falling within the period of compulsory school attendance. In Basle-Urban and St. Gall, the pupils in the upper classes of the general secondary schools pay no fees.

Assistance to parents. Many cantons make grants to needy parents to enable them to send two of their children, if they have ability, to study at a general secondary school in the canton or to a teacher training school or vocational training school (technicum) in another canton, if there are no such schools in their own canton.

Parents may also receive assistance in the form of partial or total exemption from school fees; sometimes school textbooks are supplied free.

1. An interesting case is that of the Technicum pour la Suisse Centrale, which was built at Lucerne for the cantons of Uri, Schwyz, Obwald, Nidwald, Zug and Lucerne. Under an agreement dated 14 October 1957, the first five of these cantons were together to pay 400,000 francs towards the construction of the building, and 65,000 annually, these amounts being divided in proportion to the population of each canton.

Lastly, there is a large number of private endowments designed to help certain categories of apprentices or pupils at general secondary schools. Very strict conditions are often imposed, and the subsidies are often small.

Buildings and equipment. Very few of the cantons have fixed regulations for the construction of school buildings; in most of them the school laws and regulations lay down a few principles, definite standards being fixed only in certain cases. The general deduction from the laws is that school buildings should be situated in a good position, away from the noise of industry and heavy traffic, with a good sunny aspect, and within reach of cafés, restaurants, etc.

Classroom space per pupil varies between 1 square metre (in the mountain canton of Uri) and 1.80 square metres (in Basle-Urban), and the volume of air per pupil varies between 4 cubic metres (the lowest allowed, in Ticino, a mountain canton in the south) and 6 cubic metres (the maximum, Basle-Urban); ceilings must be about 3 metres high (with slight variations in cantons).

The standards laid down by the federal military department for gymnasiums and sports fields in primary schools also apply to all secondary schools.

School welfare services. Special mention should be made of vocational guidance, which is organized in almost all parts of the country. In most towns, vocational guidance officers must examine all primary school pupils before the end of the compulsory school period; in country districts, the examination is optional (as it is for pupils in general secondary schools) and is given only if the parents wish it.

There are classes in all the cantons for retarded children (called development classes, *Hilfsklassen*, etc.), with from 15 to 20 pupils per class. Some of the pupils are able to join an ordinary class later on.

Under the Federal Law of 13 June 1928, pupils in all educational establishments must undergo medical inspection. The teachers are also given a medical examination from time to time. All the cantons have a dental service.

All pupils are insured against accident; those at general secondary schools usually have to pay the premiums.

Organization of the school year. In most schools, the school year begins in the spring, although there are cantons in which it begins in the autumn. In general, it comprises 40 weeks of classwork. There is no uniform distribution of holidays. Whilst German-speaking Switzerland generally accords three weeks in the spring, five in the summer, two in the autumn and one or two at Christmas, French-speaking Switzerland prefers longer summer holidays (six or seven weeks) with a corresponding reduction in the spring and autumn holidays. There are no classes on national and religious holidays; further holidays are now common on Whit Monday, the Monday of the Federal Fast, with an intermission of one and a half days in February.

There are half-holidays on Wednesday and Saturdays, or one full holiday (Thursday in Geneva). The weekly timetable varies between 30 and 34 hours, including the 2, and more frequently, 3 hours spent in gymnastics and, sometimes, in optional classes. The length of each lesson varies according to region between 40 and 50 minutes.

Choice of studies. Choice is left entirely to the discretion of parents. Teachers advise the parents of those children whom they consider suitable for entry to upper primary or general secondary schools. In primary education, the vocational guidance service examines all pupils between the ages of 15 and 16, and advises them about the choice of an occupation suited to their abilities.

In schools of Group II (see below)—with the exception of a very few establishments which have school psychologists—head teachers and teachers meet parents and advise them in choosing studies for their children. There is an increasing tendency to introduce in the early classes of these schools a kind of 'school guidance', based on the intellectual performance of pupils who follow a curriculum offering a wide range of optional subjects. The most advanced of these experiments is that of Vaud, where, during a period of two years (between the ages of 10 and 12), all pupils in the *collèges* (lower general secondary schools) follow the same curriculum, which permits a more methodical system of school guidance, without obligation to parents. In Geneva, parents receive 'advice reports', which provide detailed information on scholastic and vocational guidance.

TYPES OF SECONDARY EDUCATION

Educational institutions which succeed the primary school may be divided into three groups. The first comprises pre-apprenticeship or vocational guidance classes, upper primary schools and part-time continuation classes. The second group includes general secondary schools which lead to higher education, and the third is teacher training schools.

Group I

Pre-apprenticeship or vocational guidance classes. These are, strictly speaking, primary classes strongly directed towards manual occupations, and are attended by pupils between 14 and 15 who are unable or do not wish to receive more extensive schooling.

Upper primary schools (*Sekundarschulen*, etc.). In some cases these are considered to be reserved exclusively for the better pupils from the fifth or sixth years of the primary cycle who will enter employment on completing the course; in other cases they are also intended to prepare pupils for the lower general secondary schools and eventually for more advanced studies.

Most upper primary schools hold an entrance examination (in some cantons the marks obtained in the last year of primary studies are also taken into consideration); in Appenzell-Outer Rhoden, however, the school committee, acting on the proposals of teachers, decides on admission, and at St. Gall written work from the final year of primary school must be submitted to the school committee.

Where examinations are held, they are based on the curriculum of the primary class which precedes entry to the upper primary school; teachers of the latter form the jury for the examination, which in most cases comprises only two parts (mother tongue and arithmetic). A study of the curricula of upper primary schools reveals a close similarity between them. The following compulsory subjects are found everywhere: religion, mother tongue, second national language, arithmetic, algebra, geometry, accounting, history, geography, natural sciences, physics, chemistry, handwriting, freehand drawing, technical drawing (for boys), singing, gymnastics, and needlework (for girls). Uri, which is close to Ticino, adds Italian to this list. More variety may be noted in the optional subjects.

As an example, the table on page 1062 gives the weekly time-table for the upper primary schools of St. Gall (3 years of studies) and of Basle-Urban; in the latter canton, children enter upper primary school (the boys' schools are known as *Realschulen*) at the age of 10, and remain for 5 years if they are to enter employment, and for 4 years if they intend to enter a commercial school, a school for domestic science mistresses or the section for kindergarten mistresses in the teacher training school.

Continuation or complementary courses. These courses, which are compulsory for young people not attending a post-primary establishment, are held during the winter; they are intended for adolescents between the ages of 15 or 16 and 19, and last 9 or 10 weeks, with a time-table of 6 hours each week. Their aim is 'the intellectual and moral development of young people, as well as training for citizenship, with due regard to local requirements and the needs of practical life'; the general curriculum includes reading, essays or composition, arithmetic, history and civics, geography, gymnastics and singing, subject to changes introduced in the light of the occupational requirements of the young people; in addition, there are also 'lectures and practical courses'. In some cantons the curriculum is restricted to the following subjects: reading, handwriting, arithmetic, correspondence, accounting, civics (Uri); other cantons, such as Solothurn, divide these subjects into three groups—vocational subjects (technical drawing, machine shop, work organization, work contracts and accounting), civics, and cultural subjects (character-building, the mother tongue and practical skills).

In the rural continuation courses, concepts of agriculture and arboriculture are added to the basic curriculum; teaching of these subjects is entrusted to specialists.

Domestic education (for girls only) is provided in the last year or two years of the primary cycle, in the final year of upper primary school (rarely in general secondary schools), or in complementary domestic courses. This subject receives considerable attention in all cantons, and is organized in various ways. Some cantons include domestic education in the general curriculum, where it is taught for a few hours each week over a period of 2 or 3 years.

Girls who have not received domestic education at school must take an annual course, consisting of a minimum of 240 hours, or two annual courses of 120 hours minimum. Only those girls who are attending a post-primary establishment, or who hold a firm apprenticeship contract are exempt from this obligation. The curriculum of these courses is exclusively practical. At St. Gall, the 120 hours of the first-year course are divided as follows: mother tongue, 30; needlework, 70; household activities, care of clothes and family hygiene, 20. The second year covers: mother tongue, 20 hours; civics and law, 30; cooking and nutrition (including household budgeting), 70.

TIME-TABLE FOR UPPER PRIMARY SCHOOLS
(in hours per week)

Subject	ST. GALL						BASLE-URBAN				
	Year						Year				
	1		2		3						
	M	F	M	F	M	F	1	2	3	4	5
Compulsory											
Religion	2	2	2	2	2	2	–	–	–	–	–
Mother tongue	5	5	5	5	5	5	5	5	5	5	5
Second national language	5	5	4	4	4	4	5	5	5	5	5
Third national language or English	–	–	–	–	–	–	–	–	–	–	3
Arithmetic	4	4	3	3	3	3	5	4	4	4	
Geometry and geometrical drawing	2	–	3½	–	4	–	–	–	2	3	8
Accounting	–	–	1	1	2	2	–	–	–	–	
History and civics	2	2	2	2	2	2	–	2	2	3	2
Geography	2	2	2	2	2	2	2	2	2	2	2
Natural sciences	1½	1½	2	2	1	1	2	2	2	3	2
Chemistry and physics	2	1	2	1	2	1					
Calligraphy	1	–	–	–	–	–	2	2	2	1	–
Drawing	2	2	2	1½	2	2	2	2	2	2	2
Singing	1½	1½	1½	1½	1	1	2	2	2	–	–
Gymnastics and sport	3	2	3	2	3	2	[1]3	[1]3	[1]3	[1]3	[1]3
Manual training	–	3	–	3	–	3	2	2	[2]1	[2]1	–
Home economics	–	2	–	4	–	2	–	–	–	–	–
Totals	33	33	33	34	33	32	30	31	32	32	32
Optional											
Latin	4	4	4	4	3	3	–	–	–	–	–
English	–	–	3	3	2	2	–	–	–	3	–
Algebra	–	–	–	–	2	2	–	–	–	2	2
Geometry (girls)	–	2	–	2	–	2	–	–	–	–	–
Handwriting	–	–	1	[3]1	1	[3]1	–	–	–	–	–
Shorthand	–	–	–	–	–	–	–	–	–	–	2
Typing	–	–	–	–	1	1	–	–	–	–	–

1. In summer, the third hour is replaced by an afternoon of sport.
2. Two hours during the winter term.
3. Compulsory for pupils whose handwriting is bad.

Group II

This group includes the lower and upper general secondary schools (*progymnases* and *gymnases* and the commercial secondary schools). All candidates for the lower general secondary schools (*progymnases*) and for the commercial schools must pass an entrance examination based on the curriculum of the immediately preceding primary class. This examination comprises a test of the mother tongue and an arithmetic test. However, some commercial schools admit without examination those pupils of *progymnases* who fulfil the normal conditions for promotion to a higher class; this is the case in Geneva and Lausanne, among others. Lausanne even accepts into the second-year class (at the age of 15) those pupils who have the upper primary certificate, and into the third-year class (at the age of 16) those pupils who hold the lower secondary certificate (*progymnases*).

In all cases, however, admission is provisional: candidates are admitted for several weeks or a term, after which the teachers decide, on the basis of marks received for conduct and for work, whether or not they are to be retained.

Parents of pupils in *progymnases*, general secondary schools and commercial schools regularly receive a report (*bulletin de notes*).

The average grading obtained in the two or three annual reports is the deciding factor for promotion to a higher class. Norms are fixed by the cantonal or school authorities. The grading scale of marks varies according to the school; sometimes it goes from 0 (zero) to 10, sometimes from 1 (unsatisfactory) to 6 (excellent), and sometimes from 6 (unsatisfactory) to 1 (excellent). To be promoted, the pupil must obtain an average of at least 6 or 4 or 3.5, according to the system adopted. It often happens that to emphasize the importance of some of them, subjects are divided into two or even three groups, for each of which the average must be obtained; gradings obtained within a given group may compensate each other, but compensation never extends from one group to another.

Lower and upper general secondary schools. Since the schools which prepare pupils for university studies base their syllabuses on those established by the Federal Matriculation Commission, it may be useful at the outset to note the main elements of the 'Regulations for federal *maturité* examinations' (20 January 1925). As already pointed out, three types of *maturité* certificate are recognized: type A—literary, with Latin and Greek; type B—literary, with Latin and modern languages; type C—scientific.

Subjects common to the syllabuses of examinations for all three types of certificate are mother tongue (French, German or Italian), second national language, history, geography, mathematics, physics, chemistry, natural sciences, drawing.

The examination syllabus for type A also includes Latin and Greek, that for type B Latin and the third national language or English, that for type C descriptive geometry and the third national language or English.

The regulations require the following written examinations: a composition in the mother tongue; translation into the foreign modern languages; translation from the ancient languages (from a printed text); problems in mathematics, physics and descriptive geometry; drawing from life or still life or of a simple object.

The purpose of the examination is clearly defined:

'The examination should make it possible to judge whether the candidate possesses the maturity of thought and independence of judgement necessary for advanced studies. Maturity of thought presupposes a certain amount of positive knowledge, but purely bookish learning is not sufficient. The candidate should be capable not only of replying to questions on the subjects from the examination syllabus, but also of understanding problems of an equivalent depth, penetrating them, and providing a correct and exact solution.'

Holders of a *maturité* certificate of type C may be admitted to the federal examinations in medicine only if they have satisfied the Federal Matriculation Commission in an additional examination in Latin, which includes written and oral parts.

Candidates may take the examination in one or two sessions; they indicate their preference in their application, which states the optional subject to be taken, and is accompanied by various documents such as civil papers (the candidate must be 18 years of age), certificates from the schools attended, curriculum vitae, indications of the candidate's future studies etc.

Teachers from the locality in which the examination is held are responsible for preparing the written and oral papers, and also interview the candidates. In the gradings awarded, which extend from 1 (very poor) to 6 (excellent), those for the following subjects count twice as much as the others: type A—mother tongue, mathematics, Latin and Greek; type B—mother tongue, second national language, mathematics and Latin; type C—mother tongue, second national language, mathematics and physics.

The certificate is refused to candidates whose gradings include the following: one 1, or two 2's, or one 2 and two 3's, or more than three 3's, or who obtain fewer than 58 marks for the 11 subjects.

Pupils in public and private general secondary schools recognized by the Confederation take the *maturité* examinations in the school which they attend. A candidate who has failed may take the examination again after a minimum interval of six months; if he does so within two years, he may be exempted from papers for which he received at least 5 the first time, and earlier-acquired gradings of 5 and 6 are credited to him.

In the additional examination in Latin, the candidate must obtain 'an average grading of at least 4 in written and oral parts'. In case of failure, he may take the examination again within a year, but no third attempts are allowed.

Candidates who are dissatisfied with the decision of the Federal Matriculation Commission may appeal to the Federal Department of the Interior within 14 days, but only 'if such a decision shall have violated a formal provision' of the regulations.

Although general secondary schools are authorized to suspend the teaching of certain subjects during the year or two years preceding the *maturité* examinations, few of them take advantage of this opportunity. In practice, only drawing and geography are dropped before the conclusion of the secondary school course.

General secondary schools preparing pupils for the type B *maturité* examination simply replace Greek by English (this is the case in Catholic secondary schools, in the classical secondary school and the girls' general secondary school of Lausanne, and in some public German-speaking general secondary schools), or give greater importance to the 'real' disciplines.

The general secondary schools of type C, whose forerunners were the so-called industrial schools of the nineteenth century, have retained some links with the past, and often admit pupils at a later age than the other general secondary schools, and after two or three years of upper primary school. It is difficult to lay stress on general culture in this type of general secondary school, which is influenced by the university future awaiting its pupils. It may, however, be said that the humanities (languages, history, philosophy and religion) account for 40–45 per cent of the time-table, and the mathematics-science group accounts for between 31 and 46 per cent (with extremes of 37–56 per cent in the first group and 31–48 per cent in the second).

The content of the courses leading to the various types of *maturité* certificate is shown in the following selection of time-tables.[1]

The examples chosen for type A are those of three public general secondary schools in German-speaking Switzerland —Zürich (6½ years), Basle (8 years) and Frauenfeld (6½ years); two public general secondary schools in French-speaking Switzerland—Neuchâtel (4 years of *progymnase* and 3½ years of *gymnase*) and Geneva (7 years); one Catholic general secondary school—that of the Benedictine Abbey of Einsiedeln (8 years); and one Protestant—that of the Evangelische Lehranstalt of Schiers (Grisons, 7 years). The figures represent the percentage of the total number of hours accorded to each compulsory subject in the curriculum of each general secondary school under consideration.

For type B, the examples given are those of the *Real-gymnasia* of Zürich and of Basle, whose curricula provide the greatest contrast with type A.

The examples for type C refer to the *Oberrealschule* of Zürich, the *Mathematisch-naturwissenschaftliches Gymnasium* of Basle and the *Gymnase scientifique* of Lausanne (with its *progymnase*).

1. Taken from '*Les programmes de l'enseignement du second degré en Suisse*', by Marcel Monnier, a report prepared for the European regional conference on secondary school curricula convened by the French National Commission for Unesco and held at Sèvres in 1958. The author of the present text has frequently consulted Mr. Monnier's report in preparing the section on general secondary schools.

TIME-TABLES FOR *MATURITÉ* CERTIFICATE COURSE

TYPE A

(percentages of total teaching time)

Subject	Zürich	Basle	Frauenfeld	Neuchâtel	Geneva	Einsiedeln	Schiers
Religion	–	–	3.2	–	–	5.8	4.8
Philosophy	–	–	–	2.2	1.9	4.2	1.2
Aesthetics	–	–	–	–	–	1.2	–
Maternal language	10.8	10	11.2	17.2	15.8	10.8	12
Second national language	9.9	10	8.7	10	11.2	9.6	9.2
Latin	18.9	22	16.5	17.2	18.1	19.5	16
Greek	13.2	11.6	11.3	13.4	10.7	10.3	11.2
History	8	8	7.6	7.3	8.4	7.1	7
Geography	3.9	4.2	4.6	2.6	4.7	3.8	4.4
Mathematics	11.6	11.6	11.9	12.5	10.3	10	11.4
Physics	2.9	2.1	3.7	1.7	1.4	2.5	3.2
Chemistry	1.8	0.8	2.3	1	0.9	1.3	2
Biology	3.8	3.4	4.6	2.6	4.2	4.3	4.4
Drawing	4.5	2.9	4.1	3.5	4.5	3.1	4
Music	1	2.1	3.3	1	0.9	0.4	1.6
Handwriting	–	1.7	0.9	–	–	0.4	0.8
Shorthand	0.2	–	–	–	–	–	–
Accountancy	–	–	–	–	–	0.4	–
English	–	–	–	–	–	1.6	–
Gymnastics	9.5	9.6	6.4	7.8	7	3.3	6.8

TYPE B

(percentages of total teaching time)

Subject	Zürich	Basle
Mother tongue	11.2	14
Second national language	11.5	13.6
Latin	16.6	14
Third national language or English	5.9	6.4
Geography	5.2	5.2
History	8	6.4
Mathematics	14.2	12.8
Physics	4.4	2.4
Chemistry	2.9	1.6
Biology	4.9	4.8
Drawing	4.5	4.8
Music	1	2
Handwriting	0.2	2.4
Gymnastics	9.5	9.6

TYPE C

(percentages of total teaching time)

Subject	Zürich	Basle	Lausanne
Philosophy	–	–	1.5
Mother tongue	13.5	14.7	20.6
Second national language	12.2	14.7	11.3
Third national language or English	8.1	6.6	4.7
History	8.1	6.4	7.4
Geography	4.7	5.2	3.9
Mathematics	19.3	18.3	20.6
Descriptive geometry	4.7	3.2	
Physics	6.5	4.4	4.7
Chemistry	4.7	2.3	3.1
Biology	5.4	5.6	5.5
Drawing	4	4.8	4.3
Music	–	2	3.1
Manual training	–	–	3.9
Handwriting	–	2	–
Gymnastics	9.1	9.6	5.4

Commercial secondary schools. The commercial secondary schools and the commercial sections of general secondary schools serve both a cultural and a practical purpose. This is defined as follows:

'The aim of the teaching provided in commercial schools shall be to provide pupils with sufficient training for their future occupation, together with a good general culture. Taking its subject-matter from modern culture and economics, the commercial school shall aim at developing logical reasoning, a lively mind and the capacity for clear and correct self-expression. The other tasks of the school are to show pupils the way to intellectual maturity, to make them understand life's duties, to educate their will and to develop their character. The school should awaken and strengthen the pupil's liking for his work and his ambition to reach a higher degree of general and professional culture, even when school has been left behind.'

Commercial schools frequently have a lower division, with courses lasting 2 years (between the ages of 14 and 16) and an upper division, which lasts 3 or 4 years; they comprise two sections, of which one prepares for the diploma, the other for the *maturité* certificate. Whilst the former is of a practical nature and trains its pupils for offices and commerce, the latter aims at a general training which enables its pupils to enter without difficulty the Commercial University of St. Gall, the faculties of schools of higher commercial studies in the other universities and even the faculties of law in certain universities. The distinction between the two sections is, however, not always very clear, since, in some schools, pupils all study in the diploma section before moving into the *maturité* section; on the other hand, in schools where the sections are separated, pupils who have obtained the diploma but who are not accepted into the postal or railway services may be deflected into the *maturité* section.

The commercial school diploma is recognized as equivalent to the Federal Proficiency Certificate (*Certificat fédéral de capacité*) awarded by the commercial professions at the end of the apprenticeship.

In most cases, the diploma section is one year shorter than the *maturité* section (2 years in Zug); in contrast, at Basle and Fribourg, both sections are of the same length: 2 years in the lower division (the commercial school proper) and 4 years in the commercial secondary school—with the special case of Basle, where boys and girls follow separate curricula in the diploma section, and attend mixed classes in the *maturité* section. Although there are federal 'normal curricula', commercial schools utilize the freedom left them in the matter, which explains the differences in curricula from one canton to another.

Nevertheless, comparison between the time-tables of the two German-speaking cantons, two French-speaking cantons and the federal normal curriculum, clearly shows that these differences are minor ones, and it may be said that there is a certain uniformity in the organization of the commercial secondary schools.

Finally, some commercial schools have a special class which prepares for entry into public administrations (the postal, railway, and customs services). This 'administration class' follows the first two years of commercial school. Differences in the curriculum are the following (in Lausanne): no algebra, office practice, commercial law or

TIME-TABLE FOR *MATURITÉ* COURSE IN COMMERCIAL SECONDARY SCHOOLS

(in total weekly hours over entire course)

Subject	Federal normal curriculum[1]	Zürich[1]	Zug[1]	Fribourg[2]	Geneva[2]
Catholic religion	–	–	9	4	–
Protestant religion	–	–	(3½)	–	–
Philosophy	–	–	–	2	2
Mother tongue	19	18	18	17	17
Second national language	15½	15	18	16	16
English or Italian	13½	13½	14½	12	16
Mathematics, Algebra, Commercial arithmetic, accountancy and office practice	31	31	34	32	34
History and civics	9	10½	9	8	7
Geography and economic geography	7	7½	7	8	7
Chemistry	4	4	7	2	5
Knowledge of merchandise	4	3½		3	3
Economic and political science	2½	2	2½	7	2
Law	–	–	–	–	4
Commercial economics and commercial law	13½	11½	10	4	–
German commercial law	3	7½	3	2	–
French commercial law	–	1½	–	1	–
English commercial law	–	1	–	–	–
Natural sciences	1½	2	1	2	–
Physics	3	3	3	3	2
Handwriting and secretarial work	–	2	–	–	2
Shorthand	3	2	4	5	7
Typing	3	3	4	3	
Singing	–	–	2	–	–
Gymnastics	9	13½	9	8	5
Optional subjects[3]	7	–	–	–	–

1. 4½ years.
2. 4 years.
3. Commercial subjects, transportation, mathematics and insurance, natural sciences, technology, calligraphy and shorthand, hotel administration, psychology, singing, orchestra.

commercial economics, less accounting (2 hours instead of 4), but, on the other hand, more arithmetic (4 hours instead of 3), more geography and history (5 and 4 hours respectively instead of 2 and 2).

Group III

Teacher training schools. Teacher training schools train male and female primary school teachers (including infant class teachers and teachers for the classes for retarded children and for direction-finding classes). They are part of the secondary school system.

It may be asked whether teacher training schools should not be classed as vocational schools, since their purpose is clearly to train teachers. They have been classed here as general secondary schools for two reasons: they give their pupils a general education similar to that given in commercial schools; and in some of the cantons they are now simply general secondary schools (e.g., in Neuchâtel and Zürich), vocational training being given in the advanced teacher training institutions. In Geneva and Basle, teacher training schools have merged with the general secondary schools, and the term itself is no longer used; in these two cantons, those who wish to become teachers must hold a *maturité* certificate.

Where the teacher training school is a separate institution, the pupils are admitted at the age of 15 or 16; they are drawn from primary schools, upper primary schools or general secondary schools. Candidates for admission take an entrance examination, the object of which is to select the best pupils (the number of pupils to be admitted is fixed every year according to the needs of the canton or district) and also to ascertain whether they are suited for teaching. For this reason, there is a growing tendency to give psychological tests as well as the usual examinations (in the mother tongue, arithmetic, singing and sometimes drawing).

As to studies, the trend is towards separating their general education from their practical training; in Geneva, Basle, Zürich and Neuchâtel the two are completely separate. The curriculum for the 'educational sections' of a general secondary school or a lower teacher training school is, therefore, the ordinary general secondary school curriculum. Certain special conditions must be complied with before a pupil is admitted to an advanced teacher training institution; he must, for example, pass a psychological test.

There are many teacher training schools which award a teachers' certificate, their curriculum consisting of general educational subjects and vocational subjects, more emphasis being placed on the latter in the last year or two years.

Infant teachers in Switzerland are always thoroughly trained, either in special schools or in a special department of the teacher training school. Girls are admitted at the age of 16 or 17, the entrance requirements being similar to those in teacher training schools. The object of the training is to produce infant teachers who will possess sound judgement, general culture, a thorough knowledge of child psychology, and wide practical experience with children.

Irrelevant to this section is the training of teachers for lower and upper general secondary schools or for commercial schools: all of these hold university degrees. The same is true of upper primary school teachers. In the German-speaking cantons they receive all their training at the university, and in the French-speaking cantons part of it.

Vocational and technical schools

Complementary vocational courses. Towards the end of the last century, trade organizations for arts and crafts, industry and commerce began to systematize training for their employees. The Swiss Arts and Crafts Union arranged training in industry and the crafts, and the Swiss chambers of commerce and junior chambers of commerce for bank clerks and business employees. The cantons assisted by promulgating decrees, in 1884, 1891 and 1895, granting subventions to promote vocational training for youths in industry and commerce, and also to promote training in domestic science for girls. Some towns and cantons set up apprenticeship workshops (to train mechanics), watch-making schools (the first of their kind), industrial art

schools and commercial schools. Entrance to the various trades, however, was mainly through apprenticeship under contract, which was arranged in private firms. So that there should be a single system valid throughout Switzerland, instead of the various cantons having different requirements, the Confederation promulgated the Law of 26 June 1930, which came into force on 1 January 1931; this law 'governs the training required for engaging in handicrafts, industry, transport, commerce and similar occupations'. It is not applicable to agriculture, forestry, fishing, shipping, the fine arts, the sciences, education, or the care of the sick. It states the points to be included in apprenticeship contracts (which are obligatory), defines the duties of both apprentices and the heads of firms, lays down the conditions for the supervision of apprentices, their training, and their qualifying examinations, and prescribes the terms for the award of federal subventions. The cantons are responsible for enforcing the law, under the general direction of the OFIAMT.

The proficiency certificate (*certificat de capacité*) which is awarded to successful candidates at examinations held at the end of the apprenticeship, is a federal certificate, valid throughout Switzerland, but awarded by the canton in which the apprentice has received his training.

At intervals, the OFIAMT publishes a list of the occupations which come under a federal apprenticeship regulation. Another law is being enacted, which will extend the control of apprenticeship by the Confederation to all occupations.

The conditions governing complementary vocational education for apprentices are set out in detailed regulations. Not less than 200 hours' instruction must be given per year and not more than 320, if the training includes instruction in drawing; if drawing is not taught, the minimum is 160 hours and the maximum 240 hours.

The curriculum for industrial training covers 'knowledge of the trade itself' (materials and trade technology) and usually drawing, the mother tongue, ordinary correspondence, computation, book-keeping, civics and the economic system of the country.

The compulsory commercial curriculum includes instruction in the mother tongue, at least one foreign language, business correspondence, applied mathematics, accounting, civics and the economic system of the country; other subjects usually taught are applied law, economic geography, typewriting, shorthand, knowledge of merchandise and sales technique.

Classes must not be held later than 8 p.m. or on Saturdays, Sundays or public holidays; time spent in the classroom counts as part of the apprenticeship period.

Model curricula are issued by the OFIAMT, to help the cantons in their work. They are not compulsory, but serve as a guide for the cantonal authorities whose duty it is to organize vocational training courses. They include advice on the organization of classes, tables and schedules showing the allocation of periods in the complementary courses and in specialized schools, and a detailed curriculum.

Those responsible for organizing courses must keep closely to the federal standards: for example, if the number of hours of instruction in any subject is less than the prescribed minimum, the Confederation is entitled to withdraw the subvention for that subject.

The cantons apply the law and supervise teaching, but they may delegate to large municipalities or professional associations the task of organizing courses. Printers and type-setters associations, for example, are responsible for the complementary training of their apprentices; the Swiss chambers of commerce and junior chambers of commerce organize courses for business apprentices.

The cantons are responsible for ensuring that apprentices in other occupations all have an opportunity to take courses organized for them, and that they attend such courses regularly; where necessary, the canton pays the apprentices' fares. If in any canton, there is no course in a particular occupation the authorities of that canton make arrangements with the authorities of a neighbouring canton to accept their apprentices.

Agriculture. The Federal Law of 3 October 1951 on agriculture deals with vocational training for young peasants, and prescribes a period of not less than two years' apprenticeship under contract, to be organized by the cantons; it recommends continuation classes of 'at least two winter terms for young peasants of both sexes who are not taking any other courses at the same standard'; in these courses, a fixed proportion of the time must be devoted to actual instruction in agriculture by 'technically trained instructors'. The object of these courses is the same as that of specialized schools, i.e. 'to develop general knowledge and interest in peasant traditions, as well as to train the pupils in their chosen vocation'.

The Confederation provides financial assistance for schools and courses. Under the regulations governing all subventions of this type, such assistance must be not more than half the cost of salaries and general teaching equipment.

Domestic science. The Federal Statute of 1 June 1956 lays down the conditions governing domestic science teaching and vocational training for peasant girls. Domestic science (cooking, housekeeping and gardening) may be one of the subjects on the curriculum in the last two years of compulsory schooling. The subjects for continuation courses in domestic science are: cooking, including a knowledge of foodstuffs; food hygiene; housework, including domestic economy; needlework; hygiene, child care and nursing; gardening; household arithmetic and book-keeping; the mother tongue; character training; civics.

Most domestic science schools in country districts have boarding accommodation, and the following additional subjects are studied: market gardening, the use of local agricultural products (particularly baking, spinning and weaving, and the elements of agricultural economy). These schools give courses of at least 18 weeks' duration.

Household apprenticeship in country districts is arranged for girls of 14 and over; a contract must be drawn up in writing for a period of not less than one year. At the end of the apprenticeship there is an examination, organized by the cantons, the papers for which are set by a committee of women. 'No family or household may take in apprentices unless it can guarantee that they will be trained in accordance with the prescriptions and that neither their health nor their morals will be endangered.' The Confederation has no jurisdiction over household apprenticeship in the towns, the responsibility for which devolves entirely upon the cantons.

Schools of agriculture. Most cantons have schools of agriculture. Some take pupils for a period of two years, starting in the spring, and almost all of them admit pupils only if they have reached the age of 17, and have received 'a good primary education'; a year's practical experience on a farm is sometimes required. In most schools, classes are held in winter and practical outdoor courses in summer. Some agriculture schools hold an entrance examination.

The Cantonal School of Agriculture at Marcelin-sur-Morges may be taken as an example. It is divided into three sections—for farmers, for vine-growers, and for viticulturists and orchardists. The school farm has approximately 54 acres of agricultural land (including pasture-land and forests), 9 acres of vineyards and 7 acres of market gardens.

There are a number of schools for peasant girls (*Bäuerinnenschulen*) which provide 5-month courses in both summer and winter for girls aged 16 and over, who have completed their period of compulsory schooling. The curriculum is similar to that of the continuation courses for peasant girls.

There are two cantonal schools of horticulture, one at Niederlenz in Aargau and the other at Châtelaine (Geneva). The latter admits pupils from the age of 15, and the former from the age of 16. Pupils who enter the school at Niederlenz must have done satisfactory work at an upper primary school, and those who enter at Châtelaine must have completed a course at a complementary agricultural school or a *collège moderne.* Courses in both schools are of 3 years' duration; the pupils pay school fees and live in.

Lastly, there are a number of cheese-making schools, which admit pupils from the age of 16 or 17. The course is of one year's duration.

Domestic science boarding schools. In the cantons of Aargau, Berne, Lucerne, St. Gall, Solothurn, Thurgau, Vaud and Zürich, there are resident schools and institutions which offer 5- or 6-month courses in domestic science for girls of 16 or 17. Tuition is free (except in Berne and St. Gall) and all pupils pay a small boarding fee.

Technical schools for women. There are many technical schools for women in Switzerland, some of which are maintained by the cantons and some by private individuals. Pupils are admitted at the age of 14 (to a preparatory class) or—most frequently—at the age of 15. Large numbers of candidates apply for admission, and they must pass a fairly simple entrance examination. School fees are charged.

All offer 3-year courses for dressmakers, most have courses for seamstresses (2½ years), and some, courses in embroidery (2½ years). In Basle-Urban there is a course for saleswomen (2 years) and in Berne a course in weaving (2½ years).

Craft schools and technicums. Most of the so-called craft schools provide compulsory courses for apprentices. These have been described above. Here we are concerned with schools which offer a full-time course of technical or craft training. Admission is between the ages of 15 and 16. In many cases there is an actual apprenticeship contract, and the pupil obtains the Federal Trade Proficiency Certificate after passing the leaving examination.

The technicums have sections to which students of 18 years of age and over who have finished their apprenticeship are admitted. Some have sections both for technicians and for skilled workers.

Entrance to the craft schools or technicums is almost always by examination, the subjects being mother tongue, arithmetic, geometry, drawing and, for engineering schools, algebra. Candidates who can submit satisfactory reports from an upper primary or general secondary school, however, are admitted without examination.

The following table shows the weekly time-tables for two precision engineering schools.

TIME-TABLES FOR TECHNICAL SCHOOLS
(PRECISION ENGINEERING)
(in hours per week)

Subject	GENEVA				SAINTE-CROIX			
	Year				Year			
	1	2	3	4	1	2	3	4
French (commercial correspondence)	2	1	1	1	–	–	1	1
Law (civics)	–	–	1	1	–	–	–	1.5
Book-keeping	–	–	1	1	–	–	–	1.5
Arithmetic and algebra	2	2	1	1	3.5	2	1.5	2
Use of the slide-rule	1	–	–	–	0.5	–	–	–
Geometry, trigonometry	2	1	–	–	1.5	1.5	2	0.5
Physics	1	1	–	–	1	1	–	–
Engineering, resistance of materials	1	2	2	2	1	1	–	–
Electricity	–	–	2	2	–	1	1	1
Chemistry	–	1	–	–	–	0.5	–	–
Machine drawing	4	4	4	4	4	4	4	4
Trade technology	–	1	1	1	2.5	3	4.5	2.5
Gymnastics	1	1	1	1	–	–	–	–
Practical work	30	30	30	30	30	30	30	30
Total	44	44	44	44	44	44	44	44

In the watch-making industry, which is highly specialized, a more or less long apprenticeship, ranging from 15 months to 4 years, is required for each skill.

Three-and-a-half years of training are required for the wood industries. The theoretical curriculum is the same for joiners and cabinet-makers, but the practical curriculum for these two trades differs after the first year. The final semester is spent as a probationary period of work at a master joiner's or cabinet-maker's, except for one half-day per week at the school.

Training for the public services. Schools for the training of workers in the major public services, such as the postal and telecommunications service and the federal railways may also be included under the heading of vocational and technical schools.

Other specialized schools

The vocational courses given at the school of hotel management and the conservatories of music (*Musikhochschulen*) are open only to students above the age of 18, and will therefore not be dealt with here. The Ecole Hôteliere de la Société Suisse des Hôteliers, in Lausanne, however, runs a 20-week course in hotel and restaurant duties, including

theory and practice, for students from the age of 17 upwards.

The catering school (*Gastgewerbeschule*) at Zürich takes pupils from 17 years of age and provides a 6-month course in restaurant keeping.

Out-of-class activities

The annual summer excursions known as 'courses', which are organized by all schools throughout the country, can hardly be treated as out-of-class activities; although these outings are, in the senior classes, organized partly or entirely by the pupils, they are still part of the school programme. They last for one day in the junior classes and from two to five or six days in the senior classes.

The ski camps which are now run by all schools are part of the normal school programme.

This is not the case, however, with school clubs and associations. These do not exist in the lower grades of general secondary schools and are rare in the upper grades; usually they are independent of the school. The school regulations explicitly lay down that the authorities can forbid any child to join a club if his work and behaviour in class may suffer as a result. In boarding schools, on the other hand, the children readily form sports, chess and other clubs which remain under the supervision of the school authorities.

At the end of the nineteenth and the beginning of the present century some general secondary schools had a cadet corps which practised military exercises, particularly rifle shooting. Nearly all these institutions have now either disappeared or changed their character. A typical example is that of the Thurgau cantonal school, for which the Order on Cadets of 2 May 1919 lays down that 'specifically military exercises for cadets, in particular company drill and combat exercises, shall be replaced by exercises which are a modified form of compulsory gymnastics and are an extension of this by means of a modern physical education'. Little remains of the former military exercises in many schools except brass bands and shooting matches.

TRENDS AND PROBLEMS

Swiss secondary education is passing through a period of transition, and this makes it more difficult than usual to present a clear picture. Many cantons are preparing new legislation on education which will alter the very structure of their educational system. The reason is that the whole problem of training the young is being called in question by the rapid advance of science. A polite but intensive struggle is being waged between the humanists and those who support a basically modern type of education biased towards foreign languages, technology and science. This problem is particularly important in Switzerland. A further complicating factor is the pressure of the school population on the general secondary schools, where the problems of curriculum planning, teacher training and vocational guidance are becoming acute.

Further, it is clear that efforts are being made to co-ordinate the curricula of the lower secondary schools so as to allow pupils to transfer from one section to another without too much difficulty.

Apart from these general problems, some cantons have problems of their own. Aargau, Basle and Zürich are planning to extend compulsory schooling to nine years and to use the ninth year for a pre-vocational class. Ticino is hoping to expand its vocational school. Valais is working towards a longer period of schooling. The canton of Basle-Rural is trying to remodel the general secondary school by dividing it into five sections.

All this indicates a lively desire to keep up with the times by giving children educational opportunities to develop their specific abilities, so that they may more easily find their place in the world of today.

These concerns, however, do not mean that the prime purpose of all education is being relegated to the background. This purpose is well expressed in the introduction to the primary school syllabus for the canton of Appenzell (Outer Rhoden), which can be equally well applied to all secondary education: 'The aim of the people's schools is to educate the child, in co-operation with the parents, so as to produce a well-balanced, sturdy personality of strong will and stable character. The school must therefore concern itself with training the human being as a whole. A strong and virtuous character, a clear mind and a healthy body are the elements of a vigorous personality. Learning must not be an end in itself but a means of training the judgement and educating the memory so as to produce a rounded intelligence.'

[*Text prepared in August 1959 by Georges Chevallaz, formerly director of the Ecole Normale of the Canton of Vaud, and transmitted by the Swiss National Commission for Unesco.*]

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STATISTICS

Population (mid-year 1958 estimate): 5,185,000.
Area: 15,941 square miles; 41,288 square kilometres.
Population density: 325 per square mile; 126 per square kilometre.

Summary of school statistics, 1953–1957. Data are generally available only for public schools and are incomplete for some years and certain levels of education.

Total enrolment in 1956/57 in all public educational

institutions, excluding teacher training courses, was about 727,000. Of this total, 77 per cent were in primary and special schools, 17 per cent in general secondary schools, 4 per cent in vocational schools and 2 per cent at university level. Girls made up almost half the enrolment at primary and general secondary schools, but only 15 per cent at university level institutions. The full-time teaching staff in primary and general secondary schools numbered 26,438, of whom 46 per cent were women. University staff numbered 2,195 in 1957/58, an increase of 13 per cent over 1953/54. The pupil-teacher ratio in public primary schools was 27 in 1956/57 and 22 in public secondary schools, excluding part-time staff. Compared with 1953/54, enrolment in 1956/57 had increased by 7 per cent in primary, by 28 per cent in general secondary and by 5 per cent in university level institutions. (See Table.)

Examination results in secondary education, 1957/58. The only data available refer to diplomas granted in secondary technical education (technicum diploma) which numbered 751 in 1957/58, an increase of 22 per cent on diplomas awarded in 1955/56.

Educational finance, 1957. The estimated total for recurring expenditure only during the fiscal year beginning January 1957 was 776.2 million Swiss Francs. No breakdown of this sum by level and type of education is available. Official exchange rate: 1 Swiss franc = 0.233 U.S. dollar.

Source. Switzerland: Bureau fédéral de statistique. Reply to Unesco questionnaire.

SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools						
	Total	**1956/57**	**3 011**	**20 613**	**10 979**	**548 875**	**270 066**
	,,	1955/56	3 011	...	...	...	...
	,,	1954/55	3 011	...	...	...	...
	,,	1953/54	3 011	18 824	9 728	511 405	252 125
Secondary							
General	Secondary schools	1956/57	...	3 325	719	77 316	37 851
	Junior high schools	1956/57	130	1 102	137	33 204	14 375
	Senior high schools	1956/57	43	1 398	198	15 437	5 224
	Total	**1956/57**	**...**	[1]**5 825**	**1 054**	**125 957**	**57 450**
	,,	1955/56	...	...	...	...	...
	,,	1954/55	...	...	...	...	...
	,,	1953/54	...	[2]4 990	921	98 605	44 878
		1956/57	7	...	...	2 187	...
Vocational[3]	Technical schools	1956/57	18	...	...	[4]8 577	[4]3 516
	Vocational schools	1956/57	30	...	...	[4]4 915	[4]1 321
	Apprenticeship schools	1956/57	41	...	...	8 316	4 262
	Commercial schools	1956/57	4	...	...	462	41
	Administration schools	1956/57	40	...	...	2 879	–
	Agricultural schools	**1956/57**	**140**	**...**	**...**	**27 336**	**...**
	Total	1955/56	...	...	...	...	...
	,,	1954/55	...	...	...	...	...
	,,	1953/54	...	...	...	...	...
	,,						
Teacher training			...	...	...	...	...
Higher							
Teacher training			...	...	...	...	...
		1957/58	7	1 627	...	13 599	2 467
General and technical	Universities	1957/58	1	451	–	3 384	142
	Polytechnical school						
	School for higher economic and administrative studies	1957/58	1	103	2	642	16
	Theological Faculty	1957/58	1	14	–	63	–
	Total	**1957/58**	**10**	**2 195**	**...**	**17 688**	**2 625**
	,,	1956/57	10	2 096	...	16 530	2 466
	,,	1955/56	10	2 005	...	16 021	2 343
	,,	1954/55	10	1 965	...	15 684	2 204
	,,	1953/54	10	1 936	...	15 680	2 170
	,,						
Special	Special classes in primary schools						
	Total	**1956/57**	[5]**...**	[5]**...**	[5]**...**	**8 531**	**3 577**
	,,	1955/56	[5]...	[5]...	[5]...	...	...
	,,	1954/55	[5]...	[5]...	[5]...	...	...
	,,	1953/54	[5]...	[5]...	[5]...	6 645	2 644
	,,						

Note. The above table refers to public schools only unless otherwise indicated.

1. In addition there were 1,231 part-time teachers.
2. In addition there were 1,040 part-time teachers.
3. There were in addition two private evening technical schools, enrolment 1,272, in 1957–58.
4. Including pupils in some private schools.
5. Schools and teachers of the primary schools.

THAILAND

THE EDUCATIONAL SYSTEM

The main statutory provisions governing education in Thailand are the Primary Education Act (1935), the Private School Acts (1937 and 1940) and the National Plan of Education (1951). They may be summed up as follows.

Every individual shall enjoy absolute freedom in education so far as is consistent with the educational laws and public safety.

Every child who has reached the age of 7 plus must attend a primary school up to the age of 14 plus unless he or she has passed the final examination of the *Prathom* Course (4 years primary education) of the Ministry of Education or another syllabus approved as equivalent.

It is the duty of the State to promote and foster education. All educational institutions are under the control of the Government. Universities and colleges may organize and administer their own courses within the limits of the law.

In establishing schools and institutions, the State employs the principle of division of labour, that is, the Government will establish a certain number of schools, and will allow individuals or groups of individuals to establish the balance of schools below college level.

The State shall give scholarships to encourage deserving students.

The State takes responsibility for organizing teacher training with a view to supplying various institutions with qualified teachers.

The State has the power and responsibility to control, advise, and supervise activities in all schools, and to hold examinations at all levels as provided by the regulations of the Ministry of Education.

Education is organized at the following levels:

1. Kindergarten or pre-primary education provides training for children prior to compulsory education, to prepare them for education in the primary school.
2. Primary education provides fundamental knowledge and covers a period of 4 years.
3. Secondary education is divided into three branches, namely: (a) post-primary education, which is a continuation of the work of the primary school plus basic studies relative to citizenship and covers a period of 3 years; (b) directed secondary education, which provides a foundation for further study and vocational training and covers a period of 3 years at lower level and 3 at upper level; (c) vocational secondary education, which provides training in fundamental vocational knowledge and skills and may be begun after primary, post-primary or directed secondary education. There are two levels, lower and upper (referred to as elementary and intermediate vocational education), each level covering a period of 3 years.
4. Pre-university education which provides a foundation for education in universities, colleges, or higher vocational institutes and covers a period of 2 years.
5. Advanced vocational education which provides an extension of vocational secondary education to increase earning capacity, and a background for training at the university and college levels.
6. College and university education which is provided at five institutions for higher learning and research.

The structure of the school system is shown in the diagram on page 1071.

DEVELOPMENT OF SECONDARY EDUCATION

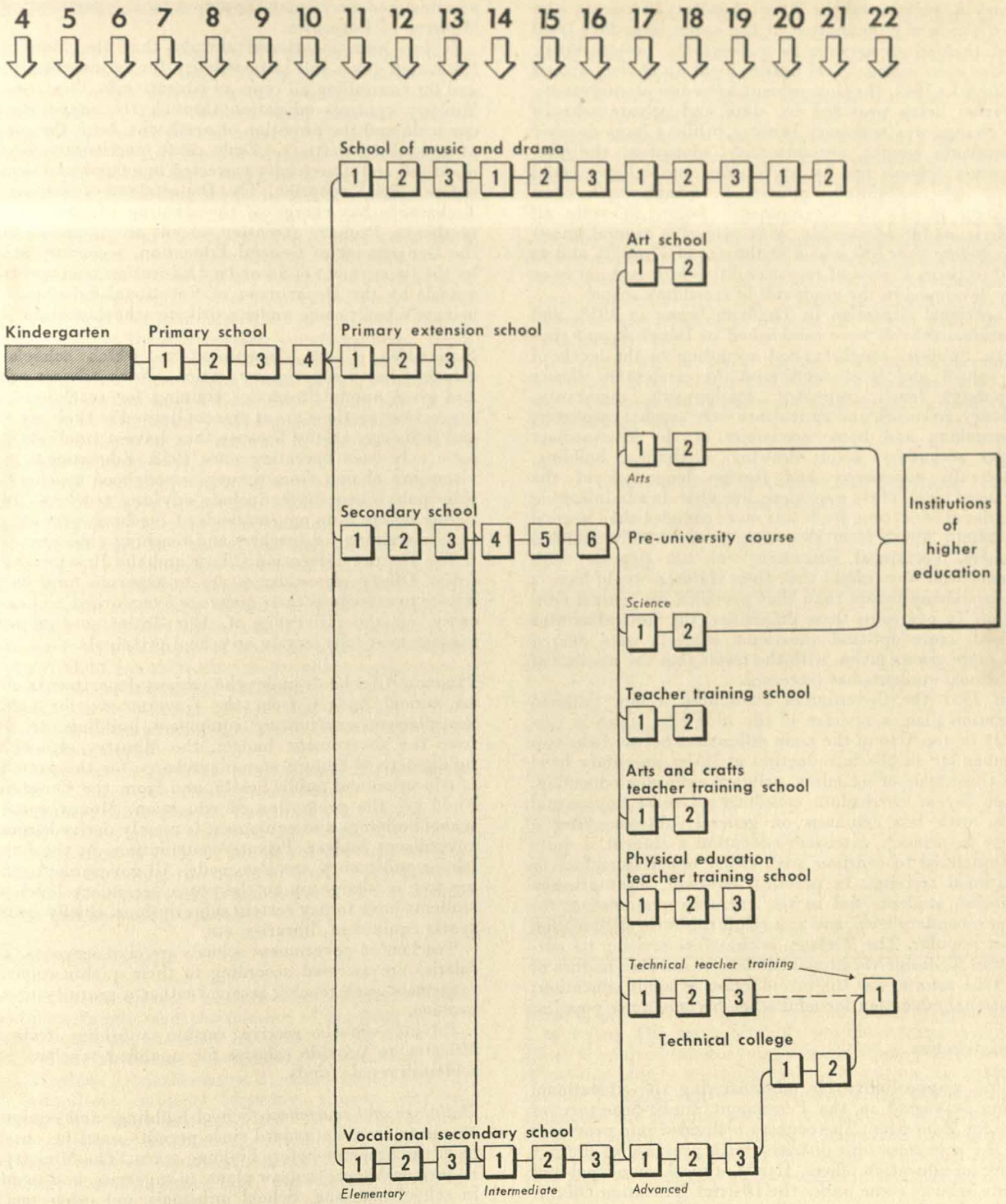
Statutory provision for education in Thailand dates from 1898. Education was then of two types: 'general', involving the study of such subjects as the Thai language, foreign languages, mathematics, ethics, and civics; and 'special', including the study of special optional subjects, according to the interests and aptitudes of students. Development and improvement continued until 1913, when an education plan was introduced which provided for 8 years of general secondary education based on the first 3 years of a 5-year primary school, and led to special education and the university.

In 1915 an 8-year secondary course was provided for special education, both general and special secondary education being divided into three cycles. In 1928 a new curriculum was devised for the third secondary cycle which was divided into a 'neutral' section, comprising general subjects as in the former curriculum, a language section which limited work in other subjects, and a science section. Students were allowed to choose any section, according to their aptitudes, and with a view to the usefulness of their studies in their future careers. After five years' trial, the neutral section was abolished.

The Revolution of 1932 turned Thailand into a constitutional monarchy, based on democratic principles. One of these principles was universal general education. An Educational Council was set up to prepare a national plan of education, which was revised in 1936. The plan was as follows.

After completing the 4-year primary school, which was made compulsory, students might continue at either the lower general secondary or lower vocational secondary level. These led to either the upper general or upper vocational secondary level. From either of these they could enter the pre-university level. Students who preferred vocational training could continue their advanced studies in a technical school.

Secondary education was provided in government and private schools. Pre-university education was arranged by universities and colleges; for example, Chulalongkorn University had its own pre-university course, as did Thammasat University, the University of Agriculture, the


4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
School of music and drama
1 2 3 1 2 3 1 2 3 1 2
Art school
1 2
Kindergarten
Primary school
1 2 3 4
Primary extension school
1 2 3
1 2
Arts
Secondary school
1 2 3 4 5 6
Pre-university course
Science
1 2
Institutions of higher education
Teacher training school
1 2
Arts and crafts teacher training school
1 2
Physical education teacher training school
1 2 3
Technical teacher training
1 2 3
1
Technical college
1 2
Vocational secondary school
1 2 3 1 2 3 1 2 3
Elementary
Intermediate
Advanced

Military Academy and the Naval Academy. Students who passed the final examination at the upper secondary level would themselves arrange to undergo the pre-university entrance examination of the university at which they wished to study. In 1941, the Government agreed to pre-university education being provided by state and private schools. This change was necessary because, while a large number of students sought pre-university education, the pre-university schools run by universities and colleges could accept only a limited number of entrants each year. Moreover it was the Government's policy to equip all children, as far as possible, with extensive general knowledge before they left school at the age of 17 or 18, and to instil in them a sense of responsibility which had not been fully developed in the graduates of secondary school.

Vocational education in Thailand began in 1913, and vocational schools were established in Bangkok and elsewhere. Subjects taught varied according to the levels of the school and local conditions. At elementary (lower secondary) level, carpentry, leatherwork, metalwork, masonry, ironwork and agriculture were taught; carpentry, dressmaking and home economics at the intermediate (upper secondary) level; drawing, mechanics, building, housecraft, commerce, and foreign languages at the advanced level. There were more difficulties in administering vocational education, for it was more complex than general education. Apart from the scarcity of suitably-qualified teachers, vocational education was not popular with parents who were afraid that their children would have a less promising future than that provided by general education. To overcome these difficulties, the curriculum was revised, more optional vocational subjects were offered and more grants given, with the result that the number of vocational students has increased.

In 1951 the Government introduced a new national education plan, a revision of the 1936 one, which is currently in use. One of the main differences between the two schemes lay in the introduction at lower secondary level of a third type of schooling, primary extension education, whose 3-year curriculum concentrated more on manual skills, with less emphasis on general subjects. After a course in primary extension education a student is quite well qualified to continue with either upper secondary or vocational training. In practice, however, most primary extension students fail in the entrance examination for upper secondary level, and as a result this form of education is not popular. The Ministry is therefore revising its curriculum for lower vocational education. Another feature of the 1951 reform was the introduction of adult education; vocational education for adults has become quite popular.

Administration

General responsibility for administering the educational system is vested in the Permanent Under-Secretary of State for Education. The country is divided into provinces and the provinces into districts, each province or district having an education officer. Heads of local, municipal and private schools come under the District Education Officer, and heads of government schools or colleges under the Provincial Education Officer. In the central region, however, all schools and colleges, government and private, are administered directly by the appropriate department of the Ministry of Education.

It has been mentioned already that the Ministry of Education takes full responsibility for formulating policy and for controlling all types of education in Thailand. The Ministry controls education through the preparation of curricula and the provision of textbooks, both the concern of special committees. Each draft curriculum is fully discussed and if necessary corrected in a curricular seminar before official adoption. The Department of Educational Techniques has charge of the printing of curricula and textbooks. Primary extension schools are administered by the Department of General Education, secondary schools by the Department of Secondary Education, and vocational schools by the Department of Vocational Education. All private schools come under a private schools section.

Supervision. Every department to which schools are attached has a supervisory section, which advises schools and gives annual in-service training for teachers. These supervisory sections are at present limited in their activities and influence, chiefly because they have a small staff and have only been operating since 1953. Educational supervisors are chosen from among experienced teachers and principals. Their duties include advising teachers, undertaking research on new methods of teaching, providing in-service training for teachers and teaching aids, etc.

The District Education Officer and the Provincial Education Officer whose duties are to supervise and to give advice to schools in their areas are overworked and cannot carry out the full range of their duties so that school management falls largely on school principals.

Finance. All schools under the various departments obtain an annual budget from the Government for salaries, miscellaneous expenditure, equipment, building, etc. Apart from the government budget, the Ministry also obtains funds, derived from a stamp surcharge for the promotion of education and public health, and from the Counterpart Fund for the promotion of education. Money spent on school buildings and equipment is mostly derived from the government budget. Private contributions in the form of labour and money are also made. All government schools are free of charge up to the upper secondary level when students have to pay certain subscriptions, chiefly spent on sports equipment, libraries, etc.

Teachers in government schools are civil servants. Their salaries are assessed according to their qualifications. On retirement each teacher receives either a gratuity or a life pension.

Private schools receive certain subsidies from the Ministry to provide salaries for qualified teachers or to replenish repair funds.

Buildings and equipment. School buildings and equipment are more or less standard since permits must be obtained from the Ministry before building starts. The Ministry has its own architects to draw plans, to supervise, and to advise in school planning. School principals and other teachers are responsible for ensuring proper school sanitation. Most school buildings are in good condition, because the Government builds schools to serve as models for private schools.

TYPES OF SECONDARY EDUCATION

When a student has completed his primary education he may continue in one of the following government schools: primary extension school, lower secondary school or vocational school. Each student must pass an entrance examination, as only a limited number of applicants can be accepted each year. Any student who fails in the secondary entrance examination may study in a private school of similar type or a coaching school in order to prepare himself for the public examination for the certificate of lower secondary (*Matayom* 3 Certificate), upper secondary (*Matayom* 6 Certificate) or pre-university education.

Students who have successfully completed the first part of secondary education (a 3-year course) at a lower general secondary school can graduate either to the upper general secondary level or the intermediate vocational level. Those who have attended a primary extension school have similar alternatives. But those going from primary school to vocational education can continue their studies only at the intermediate vocational level. After upper general secondary education, students may continue at pre-university or advanced vocational level.

The general secondary course offers a better opportunity and a wider choice for further study at a higher level, and it is not surprising therefore that students prefer this to the vocational line. In view of this and also of the fact that the student in the lower vocational school, immature mentally and physically, cannot derive maximum benefit from vocational study, the Ministry intends to revise the curriculum of secondary education. It is considered preferable to have only one type of lower secondary education, so that a student can thereafter choose either a general or a vocational course at upper secondary level. The new curriculum will be well balanced so that students of both lines will have a similar chance to study important subjects related to their work.

All schools have adopted the same school year, as follows: first term, 17 May to 23 August; second term, 1 September to 1 December; third term, 11 December to 16 March.

Formerly every school had a six-day week, but in 1958 schools were allowed to open five or six days per week as they saw fit. However, the hours of study must total 33 per week for vocational schools and 30 per week for primary extension and secondary schools.

General secondary schools

Primary extension schools. These are all government schools. The subjects taught and the number of teaching periods allotted to each are the same for each year of the 3-year course and are as follows: *Compulsory*—social studies, 4; Thai, 4; English, 2; mathematics, 3; elementary science, 2; other compulsory subjects (drawing, singing, physical education, Boy Scout or Junior Red Cross activities, elementary carpentry or domestic science), 9. *Optional*—(metalwork, creative handicraft, machine shop, sewing, embroidery, practical agriculture, weaving), 6; total, 30.

Secondary schools. These may be either government or private schools.

Lower secondary: a 3-year course after primary education. The subjects taught and the number of teaching periods allotted to each are the same in each year and are as follows: social studies, 4; Thai, 6; English, 6; mathematics, 4; elementary science, 3; hygiene, 1; drawing, 1; singing and practical work, 3; physical education and Boy Scout or Junior Red Cross activities, 2; total, 30.

Upper secondary: a 3-year course after the lower secondary level. The subjects taught and time-allotment are the same for each year of the course and are as follows: social studies, 5; Thai, 5; English, 6; mathematics, 6; general science, 3; drawing, 1; practical work, 2; physical education and Boy Scout or Junior Red Cross activities, 2; total, 30. The students who complete this level of education (*Matayom* 6) are qualified to study at pre-university level or advanced vocational level. They also possess the minimum qualification for employment as a clerk, the lowest grade in the Civil Service.

Pre-university: a 2-year course after upper secondary education. It is sub-divided into two sections, arts and science, and the study hours for each subject are shown in the following table.

TIME-TABLE OF PRE-UNIVERSITY COURSE
(in hours per week)

Subject	Arts		Science	
	1st year	2nd year	1st year	2nd year
Compulsory				
Thai	2	2	2	2
English	10	10	9	9
Social studies B	–	5	–	–
Mathematics	5	4	6	6
Physics, chemistry, biology	–	–	6	9
Other foreign languages	5	4	–	–
Geography, history	3	–	–	–
Electives				
Foreign language I	–	–	4	4
Foreign language II	–	4	–	4
Art I	3	3	3	3
Art II	–	3	–	3
Social studies A	–	–	3	3
Mathematics	–	4	–	–
General science I	4	4	–	–
General science II	–	4	–	–
Secretarial course	3	3	3	3

Evening private schools. This type of school is open from 2 to 9 p.m. The hours of study are about three per day. There is no fixed rule for total hours of study per week, this depending largely on the school itself and on the subjects taught. Evening school work mostly comprises lessons in languages and coaching for the examinations of *Matayom* 3, *Matayom* 6, and of Pre-University. Many students registered at this kind of school are full-time students of other schools who wish to undertake extra studies in the evening.

Each secondary school organizes its own examinations and has the right to pass its students at all grades, with the exception of *Matayom 3*, *Matayom 6* and Pre-University

examinations which are public or state examinations organized by the Ministry itself.

Teachers must have at least a Teaching Certificate in Primary Education or its equivalent. But this regulation naturally does not extend to private schools. Most qualified teachers are graduates of teacher training schools, or hold teaching certificates awarded by the Ministry which arranges a special examination for teachers each year.

Vocational and technical schools

There are three types of vocational schools: those run by the Department of Vocational Education at the Ministry of Education; those run by other ministries for training staff according to their needs; and private vocational schools.

Vocational schools of the Ministry of Education. Vocational schools in this category offer the following subjects: carpentry, commerce, agriculture, building, leatherwork, mechanics, dressmaking, shipbuilding, weaving, metalwork, hairdressing, languages, painting, sculpture, carving, block-making, metal ornaments and jewellery making, etc. Time-tables for a few vocational schools are as follows:

For Certificate in Vocational Education, elementary level. Women's course: 2 years of study after primary education. Subjects and time-allotment identical in each year of course: civic duties and ethics, 1; Thai, 2; English, 2; arithmetic and book-keeping, 2; drawing, 2; physical education, 1; dressmaking—clothes for women and children, 6; clothes for men, 3; needlework, 6; flower arrangement, 2; cooking, 3; total, 30. *Carpentry:* 3 years of study after primary education. Subjects and time-allotment for each year of course are: civic duties and ethics, 1; Thai, 2; English, 2; arithmetic and book-keeping, 2; physical education, 1; carpentry, 19 first year, 17 second year, 16 third year; mechanical drawing, 3; free-hand drawing, 2 each in second and third years; cost estimation (taught in third year only), 1; total 30.

For Certificate in Vocational Education, intermediate level. Women's course: 3-year course after obtaining Certificate in Vocational Education, elementary level, or completing primary extension or lower secondary education. Subjects and study periods per week identical in each year of course: civic duties and ethics, 1; Thai, 2; English, 2; mathematics and book-keeping, 2; drawing, 2; physical training, 1; dressmaking—clothes for women and children, 6; clothes for men, 3; needlework, 6; optional subjects, 2; flower arrangement, 3; total, 30. *Building, carpentry:* 3-year course after obtaining a Certificate in Vocational Education, elementary level, or passing primary extension or lower secondary level. Subjects and time-allotment are the same as in the carpentry course at elementary level.

For Certificate in Vocational Education, advanced level. Carpentry and building: 3-year course after obtaining a Certificate in Vocational Education, intermediate level, in building and carpentry. Subjects taught and weekly time-allotment in each year of the course are: civic duties and ethics, 1; Thai, 2; English, 4 in first year, 3 in second and third years; mathematics and book-keeping, as for English; physical education, 1; principles of construction, 2; cost estimation, taught in second and third years only, 2 periods per week; drawing, 6; practical work, 10; total, 30.

Curricula for other vocational courses are based on these models.

Technical College. Two types of students are qualified to enter the Technical College: those who have gained *Matayom* 6 Certificate can take a 3-year course in printing, photography, carpentry or surveying; those who hold the Certificate in Vocational Education, advanced level, can take a 2-year course in building, metalwork, mechanics, electricity, radio, accountancy, secretarial work, dress-making, dress-designing, or dietetics.

When they have finished this level, students who wish to be teachers may take a 1-year course in teacher training. Only technical subjects are taught in the departments which admit students with the advanced vocational certificate. In the departments which offer courses in printing, photography or surveying, general subjects are also taught as in any advanced vocational school. The Technical College is a new institute, at present operating on temporary syllabuses.

Vocational schools run by other ministries. This group includes schools for the following careers: Posts and Telegraphs, railway engineering, nursing, mapping, and aeronautical engineering. Their syllabuses are issued by the ministries concerned. Schools of this kind accept only students holding the *Matayom* 6 Certificate, with the exception of the Practical Chemistry School, which admits only those with the Pre-University Certificate.

Private vocational schools. This type of school usually gives short courses: in typing, shorthand, accountancy, radio, television, mechanics, printing, building, hairdressing, dressmaking, or driving. Each has its own syllabus, but must have permission to operate from the Ministry of Education.

Teacher training schools

There are two kinds of teacher training schools at secondary level which prepare teachers for primary school teaching: for general teacher training; and for vocational teacher training. Both types are controlled by the Department of Teacher Training and both offer a 2-year course. An entrance examination and examinations on completion of each subject are obligatory.

Subjects taught in general teaching training schools are social science, science, language arts, mathematics, fine arts (Thai and occidental), health, physical education, handicrafts, drama and public speaking, education and psychology, and either home-making or practical agriculture.

In vocational teacher training the courses in both boys' and girls' schools include geography (general), physical geography of Thailand, government and civic duties, Thai culture and etiquette, recreational activities, health and safety education, languages (Thai and English), mathematics and book-keeping, education and psychology, and teaching practice. The course for boys also offers instruction in principles of construction and carpentry, designing and drawing, sketching, cost estimation, and building materials; girls learn drawing, dressmaking, needlework, dietetics and various crafts.

There are two other teacher training schools—the Art and Crafts School and the Health and Physical Education School, both co-educational.

The Arts and Crafts School, controlled by the Department of Vocational Education, provides 3 years of study after *Matayom* 6. The following subjects are taught: theoretical—Thai, English, general knowledge of art, education and psychology; practical (compulsory)—traditional portrait painting, figure drawing, animal drawing, landscape painting, composition, decoration; practical (optional)—woodwork, bamboo-craft, metalwork, pottery, weaving-patterns by dyeing, lacquer-work.

The Health and Physical Education School, controlled by the Department of Physical Education, offers a 2-year course after *Matayom* 6 and subjects include Thai, English, social studies, hygiene, physical education, education.

Other specialized schools

The Art School, under the Department of Fine Arts, has a 2-year course after *Matayom* 6, serving also as a preparatory school for further study at university level. It has two sections—one for painting and modelling, and the other for archaeology. The former offers Thai, English, mathematics, as general subjects, and modelling, architecture, Thai interior decoration, projection, perspective, research in Thai art and history of art, theory of colour, drawing, painting, composition, interior decoration, anatomy, as technical subjects. The archaeology section offers Thai, English, French, Pali, history (Thai and European), as general subjects, and archaeology, oriental art, occidental art, Thai history, religion, culture, drawing, planning, Thai decoration, as technical subjects.

The School for Classical Dancing, Drama and Music is controlled by the Department of Fine Arts and accepts young students after primary education. It is divided into four successive courses. The weekly time-tables for the various courses are as follows; unless otherwise stated the subjects taught in any particular course and the time-allotment per subject are the same in each year.

Elementary level, lower class (3-year course): social studies, 3; Thai, 4; English, 4; mathematics, 4; hygiene, handicrafts and drawing, 3; singing, 2; classical dance, 10.

Elementary level, higher class (3-year course): social studies, 4; Thai, 5; English, 5; arts and crafts, drawing and singing, 1; musical theory, 2; art theory, 1; classical dance, 10.

Intermediate level (3-year course): professional ethics, 1; Thai, 6; English, 6; drawing, 1; musical theory, 2; art theory, 1; Thai classical dance, 7 or 6; Thai classical music, 6 or 7; education and psychology (third year only), 8. Third-year students devote one term to teaching practice and two terms to study.

Advanced level (2-year course): professional ethics, 1; Thai, 4; English, 6; Thai classical dance, 8 or 6; Thai classical music, 6 or 8; education and psychology, 5.

Out-of-class activities

In every type of school, students play an active part in school life by participating in student councils and student committees, outdoor and indoor games, school celebrations, athletic competitions and other activities.

TRENDS AND PROBLEMS

Over 405,000 students complete primary education every year and all are eager to continue their studies at a higher level. Secondary schools all over the country are faced with this urgent demand. Every government school has had to adopt a two-shift system and students take turns to come to school for lessons. At the same time the Ministry is increasing the number of secondary schools and trying to enlarge most of the existing ones, so that more students can be accepted and the two-shift system abolished. Despite great efforts, the problem is not yet solved, mainly because of limits imposed by the national budget. The Ministry is also seeking to deal with this problem by encouraging people to take an active part in the management and development of local education.

The increased number of students has led to a grave shortage of teachers. In order to solve the immediate problem, the syllabus of the teacher training school for primary education has been reduced temporarily from three to two years. The Ministry is well aware that a student with a *Matayom* 6 Certificate and two years in teacher training is still immature and cannot be a well qualified teacher.

Most institutions of higher education are in Bangkok. Students from the provinces flock to the capital for higher education, creating a serious problem of overcrowding in colleges or universities. The Ministry therefore initiated a Regional Education Development Project in 1958, which provides for the establishment of institutes of higher education in all 12 provinces.

There is a lack of co-ordination in the curricula for secondary education. The Ministry recently appointed a committee to revise the curricula at all educational levels, and to devise a master plan. Revised curricula for the primary, secondary, pre-university and advanced vocational levels are now in operation for a trial period.

Normally students can complete a primary course in four years, usually at an age when they are too young to earn a living. The Ministry plans to extend compulsory education from four to seven years. The educational ladder will then follow a 7+3+2 pattern, for primary, secondary and higher secondary education respectively.

[*Text prepared by the Thai National Commission for Unesco in July 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 21,474,000.
Area: 198,456 square miles; 514,000 square kilometres.
Population density: 108 per square mile; 42 per square kilometre.

Summary of school statistics, 1953–57. Total enrolment in full-time educational institutions at all levels was 3,744,262 pupils in 1957, representing approximately 17 per cent of the total population. There were in addition some 33,300 people attending adult education courses. Of total enrolment, over 87 per cent were in pre-primary and primary schools, nearly 10 per cent in general secondary schools, under 2 per cent in secondary technical schools and just over 1 per cent in higher teacher training courses and universities.

The proportion of girls was 47 per cent in primary schools in 1957 compared with 44 per cent in 1953, and 35 per cent in general secondary schools against 31 per cent at the beginning of the period under review. Girls made up 47 per cent of enrolment in post-secondary teacher training courses and 24 per cent at the universities. The number of teachers at all educational institutions from primary to university level was over 112,000 in 1957 of whom 30 per cent were women. Compared with 1953, the number of primary school teachers increased by 9 per cent and the average pupil-teacher ratio was 35 in 1957 against 36 in 1953. In general secondary schools, although the teaching staff increased by nearly 56 per cent, the pupil-teacher ratio was 28 in 1957 compared with 24 in 1953. Enrolment increased at all levels of education during the period under review: by 7 per cent in primary schools, 80 per cent in general secondary schools, 341 per cent in teacher training colleges and 5 per cent in the universities. The exceptional increase in enrolment in teacher training colleges is explained by the cessation of teacher training schools (secondary level) in 1955 and the subsequent expansion of higher teacher training courses. (See Table 1.)

Enrolment trends in secondary education, 1930–57. From 1930 to 1957 the estimated child population 15–19 years old more than doubled. Over the same period, however, average total enrolment of children attending general secondary schools increased from 33,000 in 1930–34 to 331,000 in 1955–57. The proportion of girls has steadily increased from 20 to 35 per cent of total enrolment in general secondary schools. The number of students attending technical schools has also risen spectacularly over the last 20 years. Teacher training at secondary level ceased in 1955 and enrolment data are not available before 1940.

The secondary enrolment ratio has steadily improved since 1930 with the exception of the immediate post-war years 1945–49. This ratio stood at 15 in the three-year period 1955–57 compared with only 3 in the years 1930–34. (See Table 2.)

Examination results in secondary education, 1953–57. The number of students awarded the general certificate more than doubled between 1953/54 and 1957/58 and the number of girls increased by 147 per cent over the same period. Vocational certificates, at different levels, were obtained by 9,634 students in 1957/58, three times more than in 1953/54. (See Table 3.)

Educational finance, 1957. Total expenditure on education in 1957 (fiscal year beginning January) was 1,032,962,000 baht, representing about 49 baht per inhabitant. The principal sources of funds, apart from the central government budget, were a postage stamp surcharge and counterpart funds from United States aid. Together these contributed about 9 per cent of total receipts. Capital expenditure amounted to 170,000 baht, or about 16 per cent of the total spent. (See Table 4.)

Sources. Thailand: Ministry of Education Statistics Section, reply to Unesco questionnaire.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1957	52	154	154	3 732	1 834
	Pre-primary classes in teacher training school, public	1957	1	22	22	299	232
	Pre-primary classes in municipal schools, public	1957	48	59	56	1 835	928
	Pre-primary classes in local schools, public	1957	479	485	480	12 970	6 359
	Kindergartens, private	1957	262	689	646	13 174	6 062
	Total	**1957**	**842**	**1 409**	**1 358**	**32 010**	**15 415**
	„	1956	621	1 220	1 111	31 310	14 872
	„	1955	499	1 451	1 183	29 093	13 874
	„	1954	371	1 219	988	21 282	10 165
	„	1953	485	1 034	774	27 372	12 193

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary classes in kindergartens, public	1957	42	152	150	3 157	1 760
	Primary classes in teacher training schools, public	1957	4	30	21	768	444
	Municipal primary schools, public	1957	290	2 326	1 461	88 992	42 979
	Local primary schools, public	1957	20 037	79 494	16 434	2 854 728	1 367 227
	Primary extension schools, public	1957	545	1 866	585	48 025	16 396
	Elementary schools, private	1957	1 118	8 462	5 974	241 000	108 302
	Total	**1957**	**22 036**	**92 330**	**24 625**	**3 236 670**	**1 537 108**
	,,	1956	21 695	88 081	24 189	3 091 101	1 461 755
	,,	1955	20 995	86 445	21 362	2 971 387	1 400 548
	,,	1954	20 449	83 313	20 936	2 951 196	1 394 079
	,,	1953	19 971	84 762	22 401	3 030 594	1 346 261
Secondary							
General	Secondary schools, public	1957	312	4 897	2 708	149 564	56 624
	Secondary departments in teacher training schools, public	1957	5	80	54	1 709	1 288
	Pre-university departments in secondary schools, public	1957	50	393	279	5 733	2 498
	Secondary departments in vocational schools, public	1957	1	7	3	338	48
	Secondary schools, private	1957	1 324	7 470	2 618	204 346	67 050
	Pre-university departments in secondary schools, private	1957	31	300	89	5 706	1 610
	Total	**1957**	**1 723**	**13 147**	**5 751**	**367 396**	**129 118**
	,,	1956	1 626	7 616	3 640	335 060	113 084
	,,	1955	1 051	10 381	4 520	290 739	95 267
	,,	1954	989	9 237	3 969	245 689	78 125
	,,	1953	960	8 450	3 592	204 016	62 432
Vocational	Technical schools, public	1957	169	2 277	915	51 310	14 545
	Agricultural schools, public	1957	16	288	–	3 502	–
	Commercial schools, public	1957	3	161	49	4 452	1 760
	Total	**1957**	**188**	**2 726**	**964**	**59 264**	**16 305**
	,,	1956	194	2 353	883	44 929	14 007
	,,	1955	195	2 173	848	43 141	14 027
	,,	1954	192	1 935	751	36 654	11 876
	,,	1953	191	1 909	719	32 802	10 297
Teacher training	Teacher training schools, public						
	Total	**1957**	–	–	–	–	–
	,,	1956	–	–	–	–	–
	,,	1955	2	–	–	152	–
	,,	1954	30	224	85	2 046	778
	,,	1953	30	203	79	2 299	860
Higher							
Teacher training	Teacher training colleges, public	1957	33	632	345	9 263	4 587
	Teacher training departments in vocational schools, public	1957	5	58	9	1 159	355
	Total	**1957**	**38**	**690**	**354**	**10 422**	**4 942**
	,,	1956	38	546	258	8 386	3 843
	,,	1955	33	577	319	5 450	2 622
	,,	1954	10	272	161	3 163	1 583
	,,	1953	10	241	147	2 365	1 197
General and technical	Universities, public	1957	5	1 691	486	33 713	7 938
	Technical schools, public	1957	3	205	34	2 387	665
	Total	**1957**	**8**	**1 896**	**520**	**36 100**	**8 603**
	,,	1956	8	1 641	415	30 558	6 968
	,,	1955	7	1 362	324	26 077	5 844
	,,	1954	6	1 319	300	21 937	4 859
	,,	1953	6	619	112	34 271	4 460
Special	Schools for handicapped children						
	Total	**1957**	**5**	**101**	**67**	**2 400**	**1 013**
	,,	1956	3	68	39	1 509	582
	,,	1955	3	56	41	1 325	560
	,,	1954	3	53	41	560	93
	,,	1953	2	37	27	387	62
Adult	Primary and secondary schools						
	Total	**1957**	**509**	**1 531**	**641**	**33 337**	**12 120**
	,,	1956	199	529	196	11 033	4 741
	,,	1955	565	1 379	239	34 172	10 072
	,,	1954	454	880	182	19 380	8 201
	,,	1953	426	660	137	15 890	5 498

2. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment[1] (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio[1]
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	24 788	20	2 093	...	...	...			
1931	29 402	21	2 324	...	...	...			
1932	30 126	22	2 022	...	...	...	36	1 220	*3*
1933	35 235	24	2 411	...	...	...			
1934	44 784	26	4 411	...	...	...			
1935	54 047	27	34 675	...	...	...			
1936	60 992	27	36 587	...	...	...			
1937	72 140	27	18 048	...	...	...	95	1 358	*7*
1938	76 402	28	16 525	...	...	...			
1939	87 880	28	19 602	...	...	...			
1940	100 060	27	22 192	...	...	...			
1941	113 291	27	11 002	...	...	...			
1942	113 032	28	9 770	36	1 153	39	126	1 681	*8*
1943	119 543	28	10 110	35	1 885	29			
1944	122 024	28	9 276	32	1 445	25			
1945	100 104	28	7 511	28	860	19			
1946	102 121	27	7 286	29	1 503	28			
1947	100 944	28	9 625	35	1 542	35	115	1 935	*6*
1948	106 899	28	11 246	34	2 245	36			
1949	117 340	28	13 643	36	2 602	36			
1950	132 453	29	17 845	35	2 642	34			
1951	153 767	30	25 171	34	2 559	35			
1952	186 018	30	29 574	33	2 449	37	213	2 246	*10*
1953	[2]204 016	31	32 802	31	2 299	37			
1954	[2]245 689	32	36 654	32	2 046	38			
1955	[2]290 739	33	43 141	33	152	–			
1956	[2]335 060	34	44 929	31	–	–	380	2 483	*15*
1957	[2]367 396	35	59 264	28	–	–			

1. Calculated for general secondary and vocational education only.

2. Excluding primary extension classes which may be included for previous years. The number of pupils involved is not, however, great.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Secondary certificate . . .	14 283	4 488	15 769	5 012	17 804	5 232	23 788	7 254	32 948	11 102
Pre-university certificate . .	2 519	815	2 371	588	3 068	1 093	3 914	1 276	5 383	1 817
Vocational certificate . . .	1 755	723	2 252	927	3 488	1 572	4 334	1 794	5 759	1 922
Higher vocational certificate .	966	248	1 251	337	1 321	386	1 935	579	3 875	1 037
Teaching certificates[1] . . .	2 242	859	1 976	780	32	–	–	–	–	–

1. Teacher training at secondary level ceased in 1955.

4. EDUCATIONAL FINANCE, 1957 (in thousand baht)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**1 032 962**
Central Government	937 543
Other sources	
Postage stamp surcharge Counterpart Fund	95 419

B. EXPENDITURE BY PURPOSE

		Amount
Total expenditure[2]		**1 032 962**
Recurring expenditure		862 545
For central administration	35 187	
For instruction		
Salaries to teachers, etc.	696 240	
Other instructional expenditure	121 372	
Other recurring expenditure	9 746	
Capital expenditure		170 417

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**862 545**		**100.0**
Central administration		35 187		4.1
Instruction		817 612		94.8
Pre-primary education	4 350		0.5	
Primary education	560 820		65.0	
Secondary education	211 173		24.5	
General	128 700		14.9	
Vocational	44 463		5.2	
Teacher training	38 010		4.4	
Higher education	25 146		2.9	
Special education	2 146		0.25	
Adult education	13 977		1.6	
Other recurring expenditure, not specified		9 746		1.1

1. Official exchange rate: 1 baht = 0.0478 U.S. dollar.

2. Closed account.

TOGO

THE EDUCATIONAL SYSTEM

Owing to the trusteeship which France exercised over Togo, the educational system of the latter country follows the French pattern. The fundamental text governing the entire system is Order No. 32/E of 18 January 1935. Togo's accession to independence and the rapid expansion of education during recent years have now made it necessary to revise the educational laws.

The Ministry of National Education directly administers public secondary schools and exercises a control over private schools. The relations between the State and private education are defined by Order No. 655/E of 30 November 1943. New regulations are under consideration. The Ministry of National Education grants or refuses authorization to teach or to open schools, and allocates subventions.

In Togo, education comprises primary education, which lasts 6 years and leads to the primary certificate (*certificat d'études primaires*—CEP), and secondary education, which is open to children who, after completing the 6-year primary course, pass a competitive examination. Secondary education is given at the following establishments: schools providing continuation courses (*cours complémentaires*), leading to the lower secondary school certificate (*brevet*) after 4 years' study; *collèges* and *lycées*, leading to the *baccalauréat* after 7 years' study; a technical school, which provides a 4-year course leading to the vocational proficiency certificate (*certificat d'aptitude professionnelle*—CAP).

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary education dates from 1920, when a 2-year *cours complémentaire*, later extended to 3 years, was begun at Lomé. The best pupils were sent on to schools in French West Africa. It was only after the second world war that secondary education proper was introduced into Togo. In 1950, the *lycée* at Lomé prepared pupils for the *baccalauréat* for the first time.

Administration

Secondary education is at present governed by Order No. 160/E of 23 February 1950. A new text is now being prepared.

Under the general control of the Minister, the Director of Education, assisted by an advisory committee, is responsible for the organization of secondary education. He exercises direct control over public secondary schools and supervises them from the standpoint of administration and teaching. He may also inspect private secondary schools.

The services of inspectors-general of the French Ministry of National Education are enlisted, particularly for the supervision of French officials temporarily serving in the Republic of Togo.

The head of each school is assisted by a board of management.

Public schools are owned by the State and financed out of the general budget. Education is free of charge and funds are assigned to each educational establishment for equipment and scholarships. Teachers' salaries are paid by the Finance Service.

Private secondary schools also receive a quarterly subvention for staff and equipment. Pupils of private schools may be awarded scholarships under the same conditions as pupils of public schools.

The School Medical Inspectorate keeps a check on the health of teachers and pupils.

TYPES OF SECONDARY EDUCATION

Secondary schools in Togo provide full-time courses. On the basis of an examination and of a report by their respective headmasters, and with due regard to their aptitudes, primary school leavers are considered by the commission specially set up for that purpose and are directed towards the 'long course' (*enseignement long*) provided in *lycées* or *collèges*, or towards the 'short course' (*enseignement court*) of the *cours complémentaires*, or towards technical education.

This orientation can be modified during the pupil's studies, on the proposal of the teachers' council.

The school year begins on 1 October and ends on 30 June. It comprises three terms, separated in December and March by holidays lasting from 10 days to a fortnight. Class lessons are given every morning, the afternoons being reserved for supervised studies, sport and art education.

General secondary schools

General secondary education is given at schools providing the long course or the short course.

Secondary schools providing the long course. There are four schools in this category: the *lycée* at Lomé and the *collège classique et moderne* at Sokodé, and two private schools (Catholic) at Lomé—the Collège St. Joseph and the Institution Notre-Dame des Apôtres (for girls). These schools provide teaching which gives the most gifted pupils access to higher education.

The subjects taught include French, moral instruction, civics, Latin, Greek, history, geography, modern languages (English, German and Spanish), mathematics, natural sciences, physics and chemistry (classes of the second cycle), philosophy (terminal classes), physical education, drawing and music. Pupils are classed in order of merit every three months and are promoted at the end of the year if their yearly average is equal to at least 10 out of 20.

They are admitted to the terminal classes after they have passed the first part of the *baccalauréat;* they can then opt for either philosophy, experimental sciences, or mathematics. Success in the second part of the *baccalauréat* enables them to undertake higher studies abroad.

Teachers employ the active methods which are advocated by the Inspectorate-General of the French Ministry of National Education. They are recruited from among university graduates (*agrégés*, holders of diplomas, holders of the *licence*). Staff regulations for Togo teachers are now under consideration.

Secondary schools providing short courses (*cours complémentaires*). There are eight schools of this category, including five public schools (at Vogan, Palimé, Kouméa, Bassari and Dapango), two Catholic schools (at Tsévié and Lama-Kara), and one Evangelical school (at Lomé). Their task is to train middle-ranking staff for the public service or private firms.

At the end of their studies (4 years), pupils sit for the examinations for the *brevet élémentaire*, or the *brevet d'études du premier cycle.* The best of them are then admitted, on the proposal of the teachers' councils, to schools providing the long course; some of them are directed towards the vocational training schools which, with the exception of the teacher training schools and the Togo School of Administration, are situated abroad; the others immediately find employment, without having to comply with any formality or pass an examination or a competitive test.

The *cours complémentaires* comprise only one section, in which instruction is given in the same subjects as are taught in the modern sections of the schools providing 'long courses' (first cycle) but only one modern language (English) is taught.

The methods of recruiting and selecting pupils and the teaching methods are the same as those applied in the schools providing long courses.

The teaching staff is recruited from among teachers holding the *baccalauréat* or the *licence.* In general, the members of this staff have received a year's professional training.

Vocational and technical schools

Owing to the present economic situation of Togo, there is only one vocational and technical school at the secondary level, a *centre d'apprentissage* which is situated at Sokodé

and called the Vocational School of Commerce and Industry (Ecole Professionnelle de Commerce et d'Industrie–EPCI).

As in the general secondary schools, an examination is organized every year for the recruitment of the pupils of the EPCI. During the first year all pupils take the same course; in the following year they are distributed according to their aptitudes among the various sections, where they receive a general education as well as theoretical and practical vocational training. The school comprises industrial sections (fitting, auto mechanics, electricity, carpentry, masonry) and commercial sections (shorthand and typing, book-keeping).

The course lasts 4 years and leads to the *certificat d'aptitude professionnelle.* The best pupils are awarded scholarships to enable them to continue their studies at technical schools or colleges abroad. The others can obtain immediate employment in the field of work which they have chosen.

Teachers of general subjects are recruited from among holders of the *baccalauréat;* those entrusted with technical teaching have been trained in France.

Teacher training schools

There are two teacher training schools, one public and the other Catholic. The latter (Ecole Normale Catholique de Togoville) is subordinate to the Directorate of Catholic Education, but is supervised by the Directorate of Public Education. It is run on similar lines to those of the public teacher training school.

The public teacher training school of Atakpamé was reorganized by Order No. 206/PM-MEN of 25 October 1958 and it now provides a 4-year complementary course. This is followed by a year's teacher training proper, for which the syllabuses were laid down by Order No. 10/MEN of 6 November 1958.

Pupils of the teacher training section are recruited by competitive examination among candidates holding the *brevet élémentaire* or the *brevet d'études du premier cycle.* After a year's professional training, they sit for the examination for the teacher training certificate (*certificat de fin d'études normales*); successful candidates are appointed on probation; after a year's probation, in order to receive a permanent appointment they must pass the practical and oral examinations for the elementary teacher's certificate (*certificat élémentaire d'aptitude pédagogique*).

The teaching staff is recruited from among teachers holding the *baccalauréat* and teachers of secondary schools providing the long course.

Out-of-class activities

Sports occupy an important place in school activities; they include, in particular, athletics, football, basket-ball and volley-ball. In addition to the national championships, competitions are organized with school teams from the neighbouring countries, particularly Dahomey. Some schools also organize choral and dramatic activities.

Efforts are also made to interest pupils in school government. Thus, at the *lycée* at Lomé, discipline is maintained by the pupils themselves. The pupils responsible for this task report to the headmaster every Sunday on the week's activities and indicate improvements which could be made. They are consulted on any changes to be made in the boarding-school system.

TRENDS AND PROBLEMS

The most important problem is naturally that of the expansion of secondary education, which is hindered by the limited nature of the Togo budget. However, the establishment of a new *lycée* better adapted to the needs of modern education is envisaged.

Another problem is that of girls' education. Owing to the very important social role which African women are called upon to play, it is essential to make secondary education accessible to as many girls as possible and to adapt education to their future tasks. With this end in view, it is planned to establish a girls' *collège* and secondary domestic science school.

Owing to the increasingly large number of pupils who obtain the *baccalauréat* each year, it is also necessary to envisage the establishment, in the near future, of a teacher training school at post-secondary level.

Another problem now being studied is that of the adaptation of the syllabuses, particularly those for history, geography and the natural sciences, to national conditions and needs.

[*Text prepared by the Ministry of National Education, Lomé, and transmitted by the French National Commission for Unesco in May 1960.*]

STATISTICS

Population (mid-year 1958 estimate): 1,100,000.
Area: 22,000 square miles; 57,000 square kilometres.
Population density: 50 per square mile; 19 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58 there were 73,798 pupils enrolled in all schools (not including courses for adults), representing approximately 7 per cent of the total population. About 96 per cent of these pupils were enrolled in primary schools, divided almost equally between public and private schools. There were 24 per cent girls in the primary school enrolment, and 19 per cent in the secondary schools. The pupil-teacher ratio in public schools was 51 in the primary schools and 19 in the secondary schools. Between 1953 and 1957, there was a 34 per cent increase in total enrolment. (See Table 3.)

Enrolment trends in secondary education, 1950–57. Enrolment in all types of secondary education more than doubled between 1950 and 1957; the increase of pupils in teacher training was five and a half times. The average enrolment was 1.7 per cent of the estimated population 15–19 years old for the period 1955–57, as compared with a ratio of 1.2 for the period of 1950–54. (See Table 1.)

Examination results in secondary education, 1953–57. Total number of certificates granted in 1957/58 was almost three times as many as in 1953/54. There was a steady increase during this period for each category except the *brevet* (secondary schools, lower stage) and the *baccalauréat*, first part, where the highest number of certificates was awarded in 1956/57. (See Table 4.)

Educational finance, 1958. For the fiscal year beginning in January 1958, the educational budget was 461 million C.F.A. francs. Including another 48 million francs from the Investment Fund for Economic and Social Development (FIDES), the total amount of nearly 509 million francs represented an average expenditure of 463 francs per inhabitant. Capital expenditure was about 15 per cent of the total. (See Table 2.)

Source. Togo: Department of Education, replies to Unesco questionnaires.

1. TRENDS IN SECONDARY EDUCATION, 1950–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1950	671	19	237	–	65	2			
1951	693	20	345	17	137	6			
1952	747	23	319	26	234	11	1.3	109	*1.2*
1953	857	21	450	25	281	13			
1954	862	22	470	21	274	12			
1955	911	23	552	23	328	14			
1956	994	23	568	20	363	13	1.9	113	*1.7*
1957	1 210	19	543	22	361	12			

2. EDUCATIONAL FINANCE, 1958 (in thousand C.F.A. francs)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts	**508 880**
Government of Togo	461 080
Investment Fund for Economic and Social Development (FIDES)	47 800

B. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure		**508 880**
Recurring expenditure		431 060
For general administration and salaries to teachers, etc.	285 152	
For subsidies to private education, etc.	81 000	
Other recurring expenditure	64 908	
Capital expenditure		77 820
Educational facilities	[2]65 760	
Other expenditure	12 060	

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**431 060**		**100.0**
Central administration		8 229		1.9
Instruction		312 243		72.4
Primary education[3]	219 585		50.9	
Secondary education	53 628		12.4	
General	38 869		9.0	
Vocational	7 465		1.7	
Teacher training	7 294		1.7	
Higher education (scholarships for students in France)	37 320		8.7	
Physical training and sports	1 710		0.4	
Other recurring expenditure		110 588		25.7
Hygiene	2 000		0.5	
Scholarships	27 588		6.4	
Subsidies to private education, etc.	81 000		18.8	

1. Official exchange rate: 100 C.F.A. francs = 0.48 U.S. dollar (approx.).
2. Includes 47,800,000 C.F.A. francs from FIDES (7,000,000 francs for public education and 40,800,000 for private education).
3. Includes special and adult education.

3. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1957/58	2	2	2	64	39
	Kindergartens, private	1957/58	5	5	5	1 000	504
	Total	**1957/58**	**7**	**7**	**7**	**1 064**	**543**
	,,	1956/57	5	5	5	573	353
	,,	1955/56	6	6	6	696	521
	,,	1954/55	6	6	6	606	560
	,,	1953/54	9	9	9	682	304
Primary	Primary schools, public	1957/58	249	697	...	35 414	7 780
	Primary schools, private	1957/58	223	...	...	35 186	9 282
	Total	**1957/58**	**472**	**[1]697**	**...**	**70 600**	**17 062**
	,,	1956/57	465	[1]606	...	66 025	15 503
	,,	1955/56	421	[1]571	...	62 035	14 174
	,,	1954/55	390	[1]543	...	57 409	12 692
	,,	1953/54	351	[1]506	...	52 697	11 371
Secondary *General*	*Lycée*, public	1957/58	1	37	...	395	79
	Collège, public	1957/58	1			196	14
	Cours complémentaire, public	1957/58	1			37	6
	Collège, private	1957/58	1	...	...	377	115
	Cours complémentaires, private	1957/58	2	...	...	205	20
	Total	**1957/58**	**6**	**[1]37**	**...**	**1 210**	**234**
	,,	1956/57	5	[1]38	...	994	224
	,,	1955/56	5	[1]35	...	911	207
	,,	1954/55	5	[1]34	...	862	187
	,,	1953/54	5	[1]30	...	857	179
Vocational	Apprenticeship centre, public	1957/58	1	6	...	132	1
	Manual training centres, public	1957/58	6	6	1	183	36
	Apprenticeship courses, private	1957/58	3	...	...	145	–
	Manual training centres, private	1957/58	2	...	...	83	83
	Total	**1957/58**	**12**	**[1]12**	**...**	**543**	**120**
	,,	1956/57	12	[1]11	...	568	113
	,,	1955/56	11	[1]10	...	552	129
	,,	1954/55	9	[1]9	...	470	98
	,,	1953/54	9	[1]9	...	450	113
Teacher training	Teacher training school, public	1957/58	1	7	...	131	32
	Teacher training school, private	1957/58	1	...	...	159	–
	Teacher training course, private	1957/58	1	...	...	71	12
	Total	**1957/58**	**3**	**[1]7**	**...**	**361**	**44**
	,,	1956/57	3	[1]7	...	363	47
	,,	1955/56	3	[1]6	...	328	47
	,,	1954/55	3	[1]6	...	274	34
	,,	1953/54	3	[1]5	...	281	37
Special	School for delinquents, public						
	Total	**1957/58**	**1**	**1**	–	**20**	–
	,,	1956/57	1	1	–	20	–
	,,	1955/56	1	1	–	22	–
	,,	1954/55	1	1	–	22	–
	,,	1953/54	1	1	–	23	–
Adult	Courses for adults						
	Total	**1957/58**	**30**	**30**	–	**1 350**	**...**
	,,	1956/57	72	72	–	3 240	...
	,,	1955/56	78	78	–	3 510	...
	,,	1954/55	65	65	–	2 925	...
	,,	1953/54	213	213	–	1 585	...

1. Public schools only.

4. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Lower secondary certificate, (*brevet*)	64	...	50	...	82	...	164	...	157	...
Baccalauréat										
First part	16	...	19	...	19	...	43	...	29	...
Second part	9	...	12	...	11	...	18	...	51	...
Vocational proficiency certificate (*CAP*) (industrial and commercial)	4	...	10	...	13	...	17	...	32	...

TRUCIAL OMAN

A modern form of education is a comparatively recent arrival in the Trucial States. There is still no secondary education properly so-called, and the primary-intermediate schools will accept pupils of age groups more usually found in secondary schools. It is hoped that secondary education proper will develop as a generation arises which has completed a full primary-intermediate course of study.

Meanwhile it is worth pointing out the strides which have been made in primary-intermediate education since the first two volumes of the *World Survey of Education* were written. Dubai now has four boys' schools (compared with two) with 1,115 pupils and two girls' schools with 325 pupils. Sharjah boys' school has been nearly doubled in size to accommodate 900 pupils, and there are now 200 girls in the girls' school. The Sheikhdoms of Abu Dhabi, Ajman, Umm al Quwain, and Ras al Khaimah all have modern boys' schools, and a new one is being built in Khor al Fakkan, in Sharjah's eastern territories.

The educational system is that of Kuwait, and many of the teachers in the Trucial States are provided by the Kuwait and Qatar Education Departments, who have also provided financial assistance and school stationery. A further point worth mentioning is that the newest school in Dubai was financed largely by public contributions.

A trade school was opened in Sharjah in 1958. It is financed by the British Government which, like the Kuwait and Qatar Governments, has given considerable financial assistance towards education in the Trucial States. At the trade school 32 boys are taking courses in carpentry, fitting, and other trades. The only other technical training is provided by a British-financed agricultural school in Ras al Khaimah.

There is no teacher training within the Trucial States, but the British Government, in conjunction with the Ruler of Dubai, provide funds for about ten boys to go each year to Bahrain for teacher training.

[*Text prepared by the Agency, Dubai, in February 1960.*]

STATISTICS

Population (mid-year 1958 estimate): 86,000.
Area: 32,278 square miles; 83,600 square kilometres.
Population density: 3 per square mile; 1 per square kilometre.

THE EDUCATIONAL SYSTEM

Tunisia's educational system is governed by Presidential decrees and decrees of the former Beys which have not been annulled, and school laws, supplemented by instructions and circular directives issued by the State Secretary for National Education. The Secretariat controls all matters relating to education.

The public educational authorities are assisted in their work by cultural bodies which organize conferences, debates or symposia on current questions. There are also private associations which give material assistance to deserving pupils who need it. Since Tunisia gained its independence, an awakening of civic spirit has been observed among the inhabitants of some of the inland towns, which are pooling their resources to build a secondary school in their district. They are receiving assistance and encouragement in every possible way from the State Secretariat for National Education, which assumes responsibility for the technical aspect of the project (choice of site and drawing up of plans) and in general for construction work and the provision of equipment.

The structure of the Tunisian school system is seen in the diagram on page 1087.

THE DEVELOPMENT OF SECONDARY EDUCATION

Modern secondary education. Access to modern secondary education was not easy for Tunisian pupils in the days of the French Protectorate. At that time the courses and curricula were identical with those in France, except for the courses called 'Sadikian' or 'Tunisian', which included the study of Arabic language and literature.

Since independence, freedom of access to secondary education has become the rule, but the old curricula have been provisionally retained, with a few changes, pending more thorough-going reforms.

Tunisian diplomas have been introduced—the elementary secondary school certificate (*brevet élémentaire de l'enseignement secondaire*—BEES) and the secondary school leaving certificate (*baccalauréat de l'enseignement secondaire*, in 2 parts), which are awarded to pupils on completion of the first cycle and the complete course of secondary education respectively. The Tunisian *baccalauréat* is recognized as the equivalent of that of the French and admits the holder to French universities as well as to the Tunis Institute of Higher Studies. The Tunisian authorities have decided, however, to abolish the Sadiki secondary school diploma (*diplôme de fin d'études secondaires du collège de Sadiki*); this used to be recognized by the authorities of the Protectorate as the administrative equivalent of the *baccalauréat*, but as the examination was at the same level as the first part of the *baccalauréat*, many pupils who obtained the diploma did not go on with the second part of the latter and were therefore not eligible for admission to institutions of higher education.

On 1 October 1958, a far-reaching structural reform of education came into force in Tunisia. The main changes affecting secondary education are:

The length of the secondary school course has been reduced from 7 years to 6, but without prejudicing the quality of the standard of teaching.

The first year of secondary school, which is common to all types of course, has been made a direction-finding year. At the end of this year the pupils' records are carefully examined by the Vocational Guidance Council, and they are directed to one of the three branches of secondary education—general, commercial, technical.

Training in manual work (wood and metals), hitherto non-existent, has been introduced into secondary school curricula.

Training in the sciences, practical work and modern languages has been greatly improved.

A greater degree of specialization has been introduced in the second cycle.

Lastly, the *brevet élémentaire de l'enseignement secondaire* (BEES) will be abolished when the reforms are applied to the whole of the first cycle. At the end of this cycle, which has been reduced from 4 to 3 years, the only certificate awarded will be a *certificat de scolarité* (school certificate). It will be issued by the director of the school the pupil has attended, and will show the pupil's school record.

Secondary education at the Zeituna Great Mosque. As well as modern secondary education in *lycées* and *collèges*, the Protectorate authorities maintained the traditional courses given at the Zeituna Great Mosque at Tunis and in the schools attached to it. The curriculum did not include either modern science or modern languages; the only instruction given was in the traditional Muslim subjects—theology, incantation of the Koran, and exegesis of texts.

Towards the end of the Protectorate, however, an attempt was made, though only on a small scale, to modernize the curricula of 'Zeitunian' education. In particular, the decree promulgated by the Bey on 11 November 1950 set up a commission to study ways of modernizing the teaching given at the Great Mosque.

Since independence, a more thorough reorganization has taken place under the Decree of 26 April 1956, which stipulated, amongst other reforms, that the Zeituna University and the colleges attached to it (which were formerly part of the Great Mosque) should be under the jurisdiction of the Ministry of National Education.

Under recent reform measures, Zeitunian teaching is to be progressively and rapidly abolished. The first year of the Zeituna course has already been discontinued, as from October 1958, and replaced by the first year of the secondary school course, section A, the curricula for which are

identical with those of the other sections, but instruction in all subjects is given in Arabic (French is the first compulsory foreign language).

Technical secondary education. Until 1943, technical education in Tunisia was rudimentary. There were only two technical secondary schools, the Collège Emile Loubet for boys, established in 1898, and the Collège Paul Cambon for girls, established in 1914.

Vocational training was given in workshops attached to primary schools, particularly Muslim girls' primary schools, where the traditional crafts were taught (carpet-weaving, embroidery). There were three industrial schools for boys.

Between 1943 and 1945, vocational training centres were opened (13 for boys and about 10 for girls). In 1945 an independent Technical Education Department was established, as well as technical *collèges* at Sfax, Susa and Bizerta. Since the coming of independence, the vocational training centres have been reorganized, and more have been opened (there were 50 in 1958).

Legal basis

The recent changes in school organization were carried out in execution of Law No. 58–118 of 4 November 1958. Under this law, both general and technical education were reformed and a new type of lower secondary education, called 'intermediate education' (*enseignement moyen*), was established. Intermediate education is gradually to replace vocational training as given at present in vocational training centres, which will accordingly become intermediate schools (*collèges moyens*).

Administration

The Chief of the Secondary Education Department of the State Secretariat for National Education is responsible for the organization of general secondary education. New curricula are drawn up by technical commissions, appointed by the State Secretary, which work in close collaboration with the Secondary Education Department. Similar arrangements have been made for the preparation of new school textbooks to replace those still in provisional use.

A commission has been appointed to study curricula for the new intermediate courses. The syllabus for each subject, in each of the three years, is prepared by a sub-committee of teachers. The State Secretariat publishes school textbooks prepared by groups of teachers; books for Arabic, French, drawing and handicrafts were published in 1958/59.

Control. The heads of general secondary schools are directly responsible to the Chief of the Secondary Education Department, who convenes a meeting not less than once a year (at the beginning of the school year) and who also communicates to them his directives and instructions by circular.

The directors of technical secondary schools (*collèges techniques*) are directly responsible to the Chief of the Technical Education Department. Vocational training centres are, as a rule, under the jurisdiction of the technical inspectors, but some are under other government Secretariats. Agricultural schools, for example, are attached to the State Secretariat for Agriculture, and the Training Centre for Footwear Production comes under the State Secretariat for Social Affairs.

Regional governors exercise general supervision over schools in their own region, and, through the State Secretariat for the Interior, report to the State Secretariat for National Education on the functioning of the school system, or transmit the people's wishes on some point. Private schools receive assistance and support from the State Secretariat for National Education.

Inspection. Until Tunisian inspectors can be trained, certain provisional arrangements have been made. General and technical secondary schools (*lycées* and *collèges*) are visited every year by inspectors-general of the French Ministry of National Education, and inspection of intermediate and vocational schools is being carried out by officers appointed to inspect general education, agricultural education, technical education and Tunisian arts. It is proposed to introduce a competitive recruitment examination for inspectors of technical education and to hold training courses in France for future candidates.

Private bodies have no real rights of supervision over the educational establishments they administer. They may,

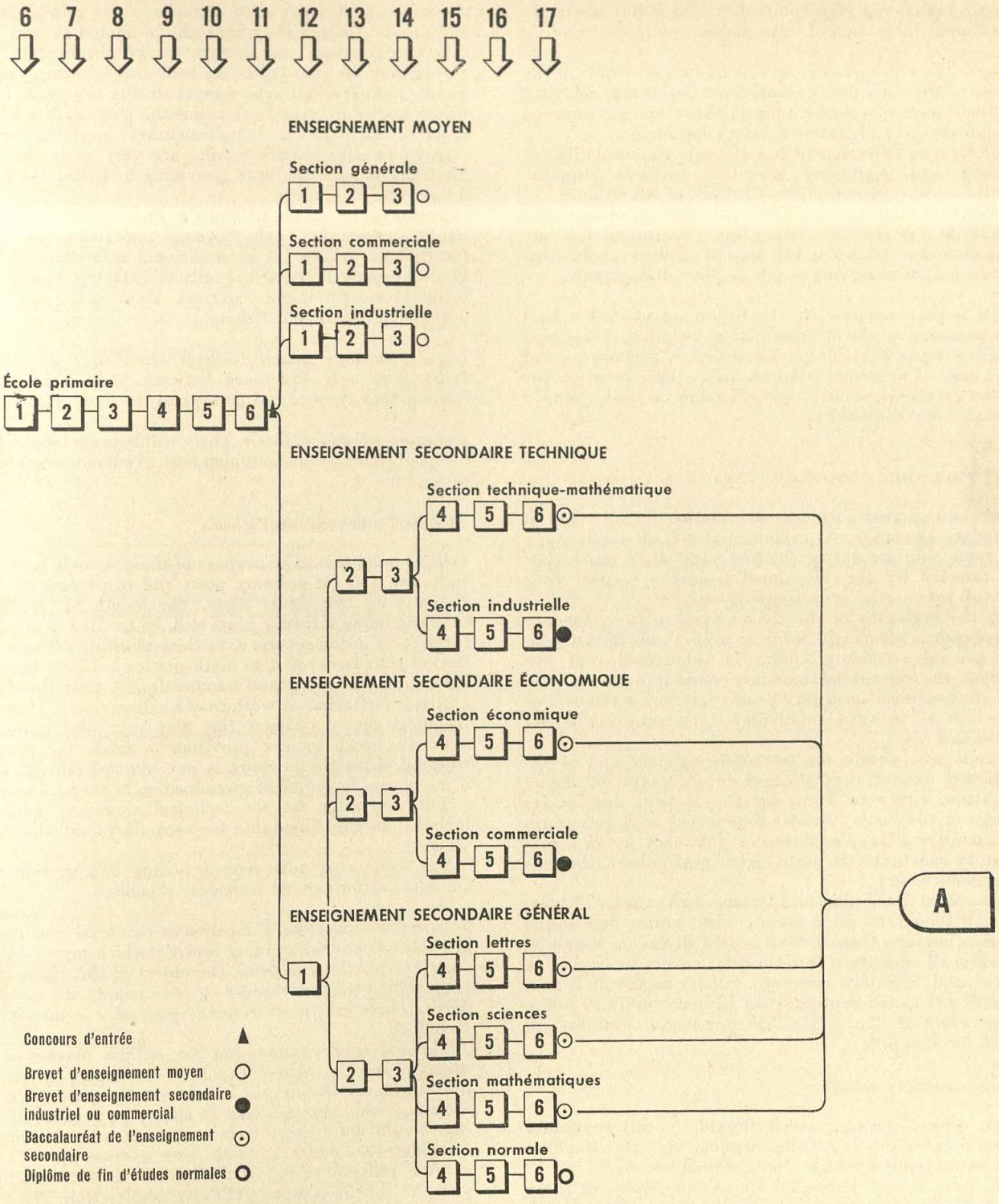
GLOSSARY

école primaire: primary school.
enseignement moyen (intermediate education): terminal secondary education with practical or vocational bias, and offering three types of course—general, commercial and industrial technical.
enseignement secondaire général: general secondary education with differentiation in the upper cycle into four courses emphasizing respectively literary studies (*lettres*), the sciences, mathematics and teacher training (*section normale*).
enseignement secondaire économique: vocational secondary education in commerce with differentiation in the upper cycle into course leading to higher professional education (*section économique*) and course preparing for employment at intermediary level in commerce (*section commerciale*).
enseignement secondaire technique: vocational secondary education with differentiation in upper cycle into course preparing for higher technical education (*section technique-mathématique*) and employment at intermediary level in technical or industrial occupation (*section industrielle*).

A. Higher education.

EXAMINATIONS

concours d'entrée: competitive entrance examination.
baccalauréat de l'enseignement secondaire: secondary leaving and university entrance examination.
brevet d'enseignement moyen: intermediate leaving examination.
brevet d'enseignement secondaire industriel ou commercial: certificate of secondary technical or commercial studies.
diplôme de fin d'études normales: teacher training diploma.


6 7 8 9 10 11 12 13 14 15 16 17
ENSEIGNEMENT MOYEN
Section générale
1 2 3
Section commerciale
1 2 3
Section industrielle
1 2 3
École primaire
1 2 3 4 5 6
ENSEIGNEMENT SECONDAIRE TECHNIQUE
Section technique-mathématique
4 5 6
2 3
Section industrielle
4 5 6
ENSEIGNEMENT SECONDAIRE ÉCONOMIQUE
Section économique
4 5 6
2 3
Section commerciale
4 5 6
ENSEIGNEMENT SECONDAIRE GÉNÉRAL
Section lettres
4 5 6
1
Section sciences
4 5 6
2 3
Section mathématiques
4 5 6
Section normale
4 5 6
A
Concours d'entrée
Brevet d'enseignement moyen
Brevet d'enseignement secondaire industriel ou commercial
Baccalauréat de l'enseignement secondaire
Diplôme de fin d'études normales

however, make suggestions and inform the State Secretariat for National Education of their wishes.

Finance. The only source from which funds are drawn is the Treasury. A few secondary schools have juridical personality and these have a separate budget; the others are financed through the general National Education budget.

The Central Government has the sole responsibility for building and equipping schools (providing supplies, furniture and equipment) for all types of education.

Teachers' salaries are carried on the budget of the State Secretariat for National Education. No tuition fees are charged, and assistance in the form of resident scholarships is provided for deserving pupils in poor circumstances.

School welfare services. At the beginning of each school year a general medical examination including X-ray and sight-testing is held for pupils, teachers, supervisors and office staff. The examination normally takes place on the school premises, some schools having a well-equipped infirmary and dispensary.

TYPES OF SECONDARY EDUCATION

There is a general entrance examination for all types of secondary education. As explained above, all pupils study the same subjects during the first year, after which they are directed by the Vocational Guidance Council to a general, commercial or technical course.

At the beginning of the second cycle of the secondary school course, which will in future begin in the fourth year, the general secondary course is subdivided into five sections, the commercial secondary course into two sections, and the technical secondary course into two sections, one of which is in turn subdivided into sub-sections for specialized work.

Pupils who obtain the *baccalauréat* at the end of the secondary course may proceed to any type of higher education, either in Tunis (at the Institut des Hautes Etudes or the Ecole Normale Supérieure) or in France (in the faculties of law, medicine or pharmacy, or in a preparatory course for the state higher professional schools—the *grandes écoles*).

The school year begins on 1 October and ends on 30 June. It is divided into three terms, with winter and spring holidays between them. School is held all day on Mondays, Tuesdays, Wednesdays and Thursdays every week, and on Friday and Saturday mornings. School begins at 8 a.m. (or 8.30 a.m.), and continues till 12 noon (or 12.30 p.m.), begins again at 2 p.m. (or 2.30 p.m.) and continues till 4 p.m. (or 4.30 p.m.).

General secondary schools

Lycées. These schools, which provide a full secondary course, prepare pupils for the *baccalauréat*, which qualifies them to undertake a higher educational course.

The first table on page 1089 shows the number of hours per week allotted to the various subjects in the Tunisian secondary school curriculum.

In the first year the Vocational Guidance Council and in the subsequent years class councils assess pupils' results and decide whether they are to be promoted or not. They take into account the average marks obtained in tests throughout the year (tests are held once a term), and the pupil's industry and achievement during the year. Pupils whose marks are very little below the pass mark are often required to take a 'supplementary examination' in September. If a pupil's results are very poor, he automatically repeats the year, providing he is not too old to do so.

Teachers are trained in Tunis at the Institut des Hautes Etudes, or at the Ecole Normale Supérieure, or in the faculties in France. As a provisional measure, until the Ecole Normale Supérieure is fully functioning, teachers are being recruited under contract from other countries (especially France and Belgium).

Lower secondary schools (collèges secondaires du premier cycle). The only difference between these schools and *lycées* is that they do not go beyond the first cycle.

Zeitunian secondary schools. These will become *collèges* (first cycle) or *lycées*, as the Zeitunian form of education gradually disappears.

Technical and vocational schools

Collèges techniques. The purpose of these schools is to train technical staff for ordinary posts and to prepare the best students for the higher posts. The length of the course has been reduced from 7 years to 6. In the first year, which is the same in the general as in the technical course, a good deal of time is devoted to mathematics, sciences based on observation, drawing and handicrafts, so that the pupil's aptitude for technical work may be discovered. The lower technical course includes this first year and two other years in which greater provision is made for practical training although the work is not yet specialized. There is an increasing degree of specialization in the second cycle.

The time-table for the technical secondary course is included in the time-table for secondary education as a whole.

The system of achievement testing and promotion is the same as for general secondary schools.

Intermediate education. Education at this level is at present given in vocational training centres, which are to be converted into *collèges moyens.* The object of the courses is to train skilled workers rapidly so as to supply the country's needs. There are three sections—general, commercial and technical.

The entrance examination for *collèges moyens* is the same as for the other schools at secondary level. The pupils who are encouraged to take the intermediate course are those who, through lack of ability or because of their age, would not benefit from a full secondary education. Candidates are admitted to all three sections up to the age of 16. Permission to exceed this limit by a maximum of one year may be given only in the technical section. The tables below show the number of hours per week allotted to the various subjects of the curriculum in lower secondary schools.

TIME-TABLE OF SECONDARY EDUCATION

(General, Teacher training, Commercial, Technical[1]) (in periods per week)

Subject	Year																	
	1st	2nd and 3rd			4th and 5th							6th						
					General secondary							General secondary						
		General	Commercial	Technical	Modern literature	Classical literature	Science	Mathematics	Teacher training	Commercial	Technical	Modern literature	Classical literature	Science	Mathematics	Teacher training	Commercial	Technical
Arabic language and literature	8	6	6	6	5	5	4	4	5	4	4	3	3	–	–	2	2	–
French language and literature	6	5	5	5 (4)	5	4	4	4	5	4	4	1	1	–	–	2	–	–
Second foreign language		4	4	2	5	4	4	4	3	4	2	3	3	2	2	2	3	2
History and geography	2	2	2	2	3	3	2	2	2	3	2	3	3	3	3	3	4	2
Civic and religious instruction	1	1	1	–	1	2	1	1	1½	1 ([4]2)	–	–	–	–	–	–	[6]2	–
Mathematics	3	3	3	4	3	3	4	6	3	4	6	2	2	7	11	2½	4	9
Sciences (including practical work)	3	2	2	3 (2)	4	4	7	5	4	3	5 (6)	5	5	11	9	4	3	7
Physical education	2	2	2	2	2	2	2	2	2½	2	2	2	2	2	2	2½	2	2
Handwork and practical work	3	2	[2]5	9 (12)	1	1	1	1	3	[3]4 ([5]3)	8 (6)	–	–	–	–	2	[5]3	6
Drawing	2	1	1	4	1	1	1	1	1	1	4	–	–	–	–	1	–	4
Technology	–	–	–	(2)	–	–	–	–	–	–	3	–	–	–	–	–	–	3
Philosophy	–	–	–	–	–	–	–	–	–	–	–	7	7	4	4	5	5	3
Study of Muslim thought	–	–	–	–	–	–	–	–	–	–	–	2	3	–	–	2	–	–
Political economy	–	–	–	–	–	–	–	–	–	(2)	–	–	–	–	–	–	2	–
Handwriting	–	–	–	–	–	–	–	–	½	–	–	–	–	–	–	–	–	–
Music	–	1	–	–	–	–	–	–	1½ (2)	–	–	–	–	–	–	2	–	–
Total	30	29	31	37 (40)	30	29	30	30	32	30 (32)	40 (39)	28	29	29	31	30	30	38

Note. Figures in parentheses are for the 3rd and 5th year as appropriate.

1. For the 4th, 5th and 6th years of technical secondary education the table shows the course leading to *baccalauréat* in technical mathematics.
2. Including 2 hours' commercial tuition and accountancy, 2 hours' typewriting and 1 hour's shorthand.
3. Including 2 hours' commercial tuition and accountancy, and 2 hours' typewriting.
4. Including 1 hour's commercial law.
5. Including 2 hours' accountancy and commercial tuition and 1 hour's business method.
6. Including 1 hour's commercial law and 1 hour's labour legislation.

TIME-TABLE FOR INTERMEDIATE SCHOOLS[1]

(in hours per week)

Subject	First year			Second year			Third year		
	General	Commercial	Technical	General	Commercial	Technical	General	Commercial	Technical
Arabic	5	5	4	5	5	3	5	5	3
French	5	5	4	5	4	3	5	4	3
English	3	3	–	3	3	–	3	3	–
History and geography	2	2	1	2	2	1½	2	1	
Civics	2	2	1	2	1	½ (1)	2	1	(1)
Mathematics	4	4	4	4	3	4	4	3	4
Sciences	2	2	1½ (1)	2	2	2½ (1½)	2	–	2½ (1)
Drawing	2	2	4	2		4	2	–	4
Handwork	2		17	2		18	2	–	20
Physical education	2	2	1	2	2	1	2	2	(1)
Commercial subjects and accounting	–	–	–	–	3	–	2	5	–
Shorthand	–	–	–	–	3	–	–	3	–
Typewriting	–	2	–	–	2	–	–	3	–
Commercial correspondence	–	–	–	–	1	–	–	2	–
Labour legislation	–	–	–	–	–	–	–	1	1
Technology	–	–	2½ (1)	–	–	2½ (1)	–	–	2½ (1)
Optional study[2]	–	–	–	–	–	–	[2]2	–	–
Home economics	–	–	(1)	–	–	(1)	–	–	–
Hygiene and child care	–	–	(1)	–	–	–	–	–	–
Total	29	29	40 (40)	29	31	40 (39)	31	33	40 (39)

1. Where there is a difference between courses for boys and courses for girls the figures for the latter are given in parentheses.
2. An 'optional study' is the study of a topic related to the general organization of the country or some department of economic and social life. The topic studied should be of definite practical interest to the pupils and enable them to learn more about their country and the world. A list of possible 'optional studies' will be issued by the State Secretariat for National Education. Each school will select its 'optional study' or 'studies' from this list.

Vocational training centres now offer training in the following special subjects: for boys—fitting, automobile mechanics, machine-tool making, lathe work, foundry work, locksmithing, electricity, sheet iron work, plumbing, cabinet making, damascening, leather-work, agriculture, rural crafts, masonry, reinforced concrete work, carving, printing, book-binding; for girls—cutting, sewing, embroidery, chebka-weaving, carpet-weaving, lace-making, lingerie-making, hairdressing.

It is proposed that these subjects should be taught in some of the intermediate schools, depending on the facilities available in the various regions and the needs of the country as a whole.

Teacher training schools

Teachers for primary schools are trained in teacher training schools for men and women. Training schools are residential, and board is provided free of charge. The course is of 4 years' duration—3 years' general education and 1 year of vocational training.

Arabic is exclusively used for the first 2 years of the primary course, and Arabic and French for the following 4 years. Teacher training schools in Tunisia are therefore divided into Section A, in which students are trained in both languages, and Section B, in which syllabuses are entirely in Arabic.

Candidates must have completed 3 years' secondary schooling. They are recruited either by competitive examination or by consideration of their record. In both cases, candidates are required to obtain 50 per cent of the possible total. On entering the teacher training school, pupil-teachers undertake to serve in the Tunisian public education department for 10 years. (If they do not keep their agreement, they have to pay the cost of their training.) Before admission, candidates are also required to produce a medical certificate stating that they are physically suited for teaching.

Both theoretical and practical subjects are taught, including Arabic, French,[1] philosophy, psychology, pedagogy, history, geography, religious instruction, mathematics, physics, chemistry, natural science, music, drawing, handwork (woodwork, book-binding, electricity and agriculture for men; and sewing, drawing and housewifery for women), physical education and sports.

In general, curricula are drawn up in accordance with secondary school curricula in *lycées* and *collèges*, the first year of the teacher training course corresponding to the third year of the secondary school course, the second year of the teacher training course to the fourth year of the secondary school course, and the third year of the teacher training course to the fifth year of the secondary school course.

The fourth year is entirely devoted to theoretical and practical vocational training. Pupil-teachers receive theoretical training in general psychology, child psychology, general pedagogy, methods of teaching each subject, sociology and ethics, and practical training in the form of practice teaching in various classes, so that in the 9 months of the school year they gain a general idea of the 6 years of the primary school course. Theoretical training periods are held alternately with periods of practical work.

At the end of the third year's work, successful candidates obtain the *diplôme d'études générales*, and at the end of the fourth year, the *certificat de fin d'études normales*.

The staff in these schools are secondary school teachers who have obtained a university degree (*licence*) or have passed the competitive examination for the *agrégation*. They receive no special training.

Out-of-class activities

Pupils do not take any direct part in the internal organization of *lycées* and *collèges*. The schools arrange for talks to be given and for cinema and theatrical performances to be held, especially at the end of the school term.

Most secondary schools have a cultural club which, in addition to other activities, sometimes produces a school newspaper.

The School Youth Association, which is open to all pupils and receives the assistance of the teaching staff, arranges exhibitions (for example, of gouache painting), excursions, etc.

Lastly, each school has its own sports teams (football and handball), and sports competitions between the different schools, at which championships are held and cups awarded are organized annually by the Youth and Sports Council.

TRENDS AND PROBLEMS

The major concern of the State Secretariat for National Education and in particular the Secondary Education Department is to organize the development of secondary education so that it will better fulfil the needs of a country which has recently gained its independence, especially by promoting the training of skilled technicians and qualified workers.

[*Text prepared by the State Secretariat for National Education, Tunis, in May 1959.*]

1. For the bilingual sections.

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STATISTICS

Population (mid-year 1958 estimate): 3,852,000.
Area: 48,332 square miles; 125,180 square kilometres.
Population density: 80 per square mile; 31 per square kilometre.

Summary of school statistics, 1953–57. Total enrolment from primary to university level in 1957/58 was about 350,000 pupils, representing 9 per cent of the estimated population. Of the school-going population, over 86 per cent were enrolled in primary schools, about 9 per cent in general secondary schools, under 4 per cent in vocational secondary schools and the remainder, under 1 per cent, in teacher training courses and at university colleges. Girls made up 33 per cent of enrolment in primary schools in 1957/58 against 29 per cent in 1953/54, and in general secondary schools 25 per cent compared with 19 per cent at the beginning of the period under review. However, in secondary teacher training courses the proportion of women enrolled was less than 18 per cent and in the higher teacher training schools only 5 out of 70 students were women. The number of women at university level increased slowly over this period and in 1957/58 women students were nearly 20 per cent of total university enrolment. Data on number of teachers at all levels of education are incomplete. In 1957/59 the average pupil-teacher ratio in public primary schools was about 43.

Compared with 1953/54 enrolment increased by 43 per cent in primary schools, by 2 per cent in general secondary schools and by 61 per cent in teacher training schools. From the figures available, it appears that enrolment declined considerably in vocational schools and slightly at university colleges between 1953/54 and 1957/58. (See Table 2.)

Enrolment trends in secondary education, 1930–57. From the incomplete data available on enrolment in public general secondary schools it appears that the number of pupils doubled in the 20 years from 1930–1949. Despite temporary setbacks, general secondary education has developed very rapidly in recent years and in 1957 enrolment in all general secondary schools was nearly 50 per cent higher than in 1950, although the proportion of girls appears to have declined compared with earlier periods.

The enrolment trend in vocational education has fluctuated, probably owing to changes in the classification of schools since the beginning of the period under review. From 1950 to 1954 enrolment increased steadily by some 36 per cent but this expansion was not maintained in the following 3-year period 1955–57. Students in public teacher training schools, on the other hand, rose by over 93 per cent between 1950 and 1957 but the proportion of women declined sharply from 43 per cent in 1955 to 18 per cent of enrolment in 1957.

The ratio of average total enrolment in public secondary education to the estimated population 15–19 years old moved only from 3 to 5 over the 20 year period 1930 to 1949. Since 1950 data are more complete and the ratio has risen from 12 over the period 1950–54 to 13 in the years 1955–57. (See Table 3.)

Examination results in secondary education, 1953–57. Excluding diplomas from Zeitunian colleges, the number of certificates awarded in all sectors of secondary education increased by nearly 55 per cent over the 5 years 1953–57. In particular, the number of successful candidates for the first part of the *baccalauréat* nearly doubled and for the second part increased by 69 per cent. The number of teaching certificates awarded appears to have declined in recent years but data are incomplete. On the other hand, technical and apprenticeship diplomas granted have increased markedly since 1953/54. (See Table 4.)

Educational finance, 1957/58. Total expenditure on education in 1957/58 (fiscal year beginning April) was 8,980,900 Tunisian dinars, representing approximately 2.4 dinars per inhabitant. Of this sum, about 13 per cent was for capital expenditure. The distribution of the remainder by level and type of education is given in Table 1B.

Sources. Tunisia: Secretariat d'État à l'éducation nationale, reply to Unesco questionnaire; Secretariat d'État à la résidence, *Annuaire statistique de la Tunisie, 1954–57;* International Bureau of Education, *Yearbook 1958.*

1. EDUCATIONAL FINANCE, 1957/58 (in dinars)[1]

A. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**8 980 900**
Recurring expenditure		7 787 000
For central administration	152 710	
For instruction		
Salaries to teachers, etc.	5 351 830	
Other instructional expenditure	1 573 770	
Other recurring expenditure	708 690	
Capital expenditure		1 193 900

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**7 787 000**		**100.0**
Central administration		152 710		2.0
Instruction		6 925 600		88.9
Primary education	4 409 620		56.6	
Secondary education[3]	2 147 440		27.6	
General	1 415 390		18.2	
Vocational	732 050		9.4	
Teacher training	...		...	
Higher education	344 740		4.4	
Adult education	17 800		0.2	
Other education, not specified	6 000		0.1	
Other recurring expenditure		708 690		9.1
Running expenses	408 720		5.2	
Cultural and social activities	299 970		3.9	

1. Official exchange rate: 1 dinar = 2.38 U.S. dollars.
2. Budget estimate.
3. Includes teacher training.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	...	6 195	909	266 288	82 314
	Primary schools of university mission	1957/58	121	801	...	27 596	11 819
	Primary schools, private	1957/58	35	...	...	9 222	6 345
	Total	**1957/58**	**...**	**...**	**...**	**303 106**	**100 478**
	„	1956/57	...	...	...	...	...
	„	1955/56	865	...	...	241 426	72 254
	„	1954/55	871	6 026	1 970	230 472	70 243
	„	1953/54	866	5 393	1 854	211 927	62 243
Secondary							
General	*Lycées* and *collèges*, public	1957/58	11			8 552	1 778
	Zeitunian schools, public	1957/58	28	405	...	10 162	412
	Cours complémentaires, public	1957/58	18			2 105	385
	Lycées, collèges, cours complémentaires, of university mission	1957/58	15	...	...	8 417	4 162
	Lycées and *collèges*, private	1957/58	4	...	...	1 966	1 121
	Total	**1957/58**	**76**	**...**	**...**	**31 202**	**7 858**
	„	1956/57	86	...	...	33 428	...
	„	1955/56	78	...	...	26 750	5 394
	„	1954/55	77	1 511	435	31 309	6 032
	„	1953/54	77	1 420	441	30 679	5 897
Vocational	Vocational training centres, public	1957/58	43	865	304	6 258	3 425
	Industrial and technical schools, public	1957/58	8			4 405	302
	Vocational schools and centres of university mission	1957/58	18	...	...	2 153	997
	Total	**1957/58**	**69**	**...**	**...**	**12 816**	**4 724**
	„	1956/57	59	...	...	10 311	3 771
	„	1955/56	...	...	...	14 932	7 034
	„	1954/55	87	1 125	476	15 027	7 162
	„	1953/54	85	1 042	423	13 677	6 501
Teacher training	Teacher training schools, public						
	Total	**1957/58**	**6**	**...**	**...**	**667**	**117**
	„	1956/57	4	...	...	457	171
	„	1955/56	2	...	...	442	192
	„	1954/55	2	53	19	429	172
	„	1953/54	2	53	19	414	173
Higher							
Teacher training	Teacher Training College						
	Total	**1957/58**	**1**	**...**	**...**	**70**	**5**
	„ [1]	1956/57	...	...	...	...	...
	„ [1]	1955/56	...	...	...	...	...
	„	1954/55	...	...	...	...	...
	„	1953/54	...	...	...	...	...
General and technical	Institute of Higher Studies	1957/58	1	...	...	1 407	355
	College of Law	1957/58	1	...	...	79	1
	Course of Tunisian legislation	1957/58	1	...	...	31	–
	Zeituna University	1957/58	1	...	...	436	10
	Centre of Economic Studies	1957/58	1	...	...	45	–
	School of Fine Arts	1957/58	1	...	...	95	27
	Total	**1957/58**	**6**	**...**	**...**	**2 093**	**393**
	„ [1]	1956/57	7	...	...	2 163	398
	„ [1]	1955/56	7	...	...	2 226	386
	„	1954/55	4	107	3	2 191	381
	„	1953/54	4	103	3	2 122	356

1. Data on higher teacher training included under higher general education.

3. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational[2]		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	4 279	33	1 033	...	...	...	[3]6	222	3
1931	4 377	33	1 298	...	...	...			
1932	4 497	33	1 522	...	...	...			
1933	4 608	33	1 534	...	...	...			
1934	4 670	33	1 545	...	...	...			
1935	5 325	32	1 572	...	...	...	[3]8	237	3
1936	5 850	34	1 683	...	...	...			
1937	6 180	34	1 723	...	...	...			
1938	6 459	33	1 420	39	...	...			
1939	6 270	33	1 849	...	...	...			
1940	6 369	37	1 893	...	...	...	[3]8	268	3
1941	6 120	39	1 973	...	...	...			
1942	5 827	38	149	...	...	...			
1943	5 191	43	1 242	...	...	...			
1944	5 216	39	4 576	48	...	...			
1945	5 333	36	5 390	45	...	...	[3]15	296	5
1946	6 437	36	6 108	44	...	...			
1947	7 533	35	7 707	46	...	...			
1948	8 259	33	9 337	48	...	...			
1949	8 465	33	9 859	48	...	...			
1950	21 230	20	11 057	49	345	43	[4]40	322	12
1951	24 942	18	11 683	48	360	44			
1952	27 752	19	12 373	47	368	42			
1953	30 679	19	13 677	48	414	42			
1954	31 309	19	15 027	48	429	40			
1955	26 750	20	14 932	47	442	43	[4]43	340	13
1956	33 428	...	10 311	37	457	37			
1957	31 202	25	12 816	37	667	18			

1. From 1930 to 1949, data refer to public schools only and include *lycées*, colleges and higher primary or *cours complémentaires*. From 1950–57, all public and private schools are included.
2. Vocational schools have been organized independently only since 1944. In 1942 and 1943, many schools were closed.
3. General and vocational secondary education only.
4. General, vocational and teacher training schools.

4. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Lower secondary certificate	1 082	...	...	...	1 084	...	1 454	557	1 451	417
Baccalauréat										
First part	721	260	...	...	...	...	1 291	392	1 410	363
Second part	504	185	...	...	...	...	852	286	854	230
Diplomas from Zeitunian schools	...	...	...	...	...	...	1 076	26	1 859	50
Commercial and industrial certificates (*brevets*)	569	...	...	...	578	...	552	238	588	229
Vocational proficiency certificate (*CAP*)	76	...	...	...	...	...	355	136	500	145
General secondary studies diploma	...	...	...	...	...	...	56	17	49	11
Primary teacher's certificate	232	...	...	...	...	...	221	–	230	14
Teacher training certificates	58	...	...	...	...	...	87	38	46	14

TURKEY

THE EDUCATIONAL SYSTEM

Education comes entirely under the jurisdiction of the Ministry of Education. In deciding policy matters, the Minister is assisted by the Higher Council of Education, a body comprising senior officials of the Ministry of Education and other Ministries, and representatives of the universities, the inspectorate and the state school system. This council meets every three years. A Council of Instruction and Education functions permanently as an advisory body concerned principally with technical problems. A Council of Inspection also forms part of the Ministry. Its members, termed inspectors-general, visit and supervise schools at the secondary level throughout the country.

The country is divided for administrative purposes into 63 *vilayets* or provinces. Each provincial authority has an educational section.

There are in Turkey private schools of various origins—Turkish, foreign, minority groups. Turkish private schools comply with the regulations and curricula of the state schools. Foreign and minority schools have their regulations and curricula approved by the Ministry of Education. All private schools are subject to the control of the Ministry and may be inspected when necessary.

Primary education is compulsory for all children, of either sex, from 6 to 14 years of age. Only children who have completed the five years of primary schooling before reaching the age of 14 are exempt from this obligation. Compulsory schooling does not extend to secondary education. On the other hand, pupils who reach the age of 14 before completing their primary schooling continue to attend school until the end of the school year during which they reach 16 years.

The structure of the Turkish educational system is shown in the diagram on page 1095.

THE DEVELOPMENT OF SECONDARY EDUCATION

General education and teacher training. The principles set forth in the 1869 'Regulations on Education' divided Turkish schools, for the first time, into three levels—elementary schools, *rüştiye* and *idadi*, and higher schools (*grandes écoles*) (higher educational level).

The elementary schools covered only 3 years. The *rüştiye*, serving as an intermediate stage between the elementary schools and the *idadi*, were regarded as secondary schools. The *idadi*—the term means 'preparatory'—comprised sometimes 5 and sometimes 7 grades (including those of the *rüştiye*). The chief towns of *sanjaks* (districts) had 5-grade schools; the chief towns of *vilayets* 7-grade schools.

In 1912 six *sultani* (imperial schools) were founded, with the object of preparing candidates for the higher schools. They offered a 6-year course following on from the primary school. In 1913–14 the number of grades in secondary schools was increased and secondary education was divided into two cycles, the first covering 4 years and the second 3 years. Following yet another reform, the *sultani* course was divided into two cycles, constituted by 8 grades and 3 grades respectively. Meanwhile the *sultani* for girls, which originally had 10 grades, were brought into line with the *sultani* for boys, with 11 grades.

Throughout this period the principles of Ottoman culture formed the foundation of education at all levels.

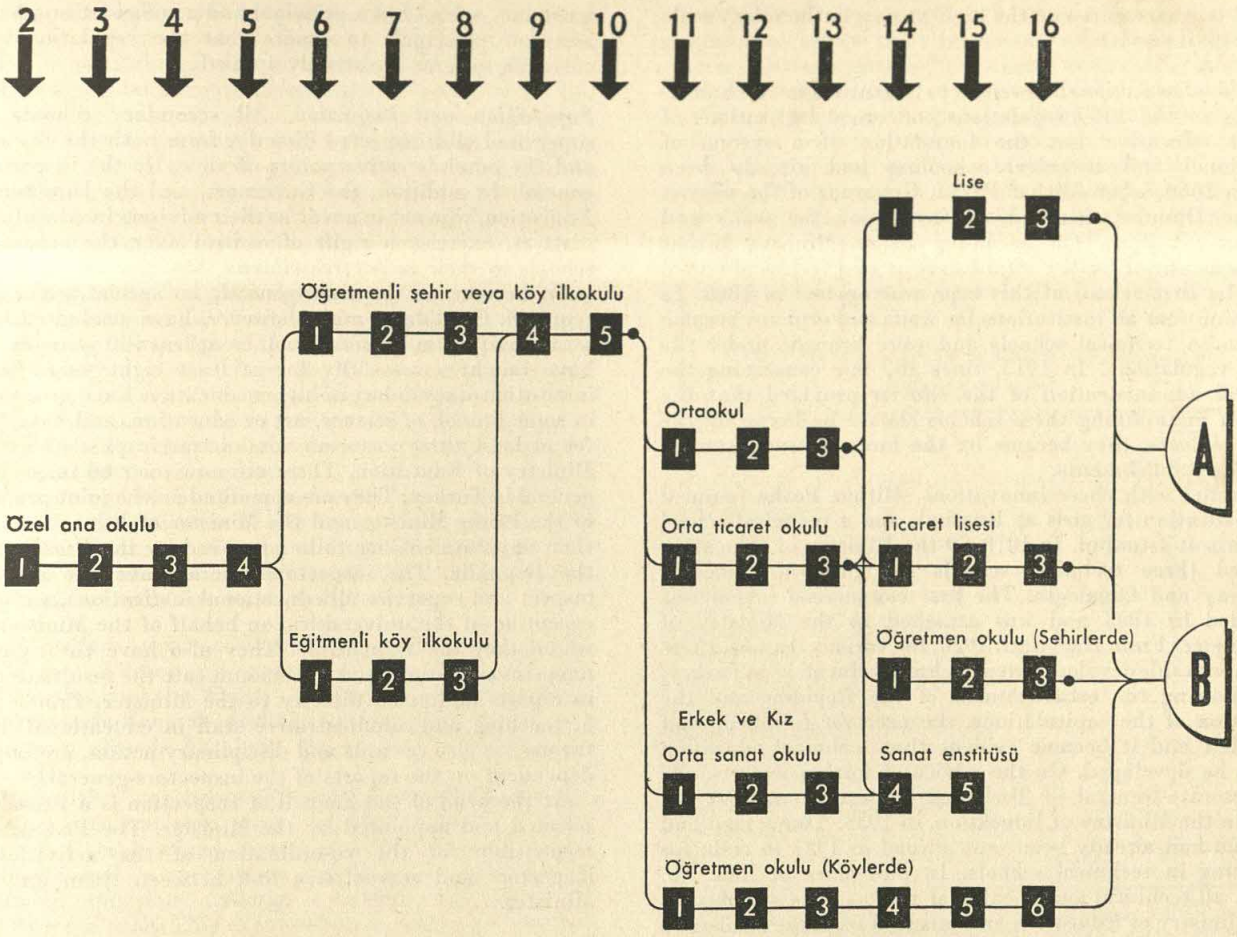
At the time when the Republic was proclaimed, the only establishments providing secondary education were the *sultani*, financed by the State, and the *idadi* and primary teacher training schools, financed by the *vilayets*.

In 1923, the *sultani* were completely re-organized from both the administrative and the educational points of view. The teacher training schools and the *idadi*, which were stagnating in the hands of the local authorities, were brought under the control of the State, and on 1 September 1923, attached to the Ministry of Education. The first scientific commission, which met in 1923, changed the *sultani* into *liseler* (*lycées*).

Under the law unifying education, which came into force in March 1924, all schools and scientific institutions were transferred to the jurisdiction of the Ministry of Education. The second scientific commission, which met in 1924, decided that the *liseler* should have 11 grades (primary and secondary) and that the schools which had only the first-cycle grades should be called intermediate schools. In addition, it brought the standard of girls' *liseler* into line with that of boys' schools, introduced a fifth grade in the teacher training schools, which previously had only four, and included social science in the curriculum of establishments at this level. The 1925 law made secondary school teaching a real profession. Teachers were divided into three categories—for higher, secondary and primary education respectively.

The third scientific commission, which met in 1926, considered the main problems relating to public education in Turkey and took the following decisions: to use to the best advantage the appropriations for public education and to organize the schools in such a way that they could be attended by all children wishing to receive an education; gradually to increase the number of upper secondary schools in certain localities; to concentrate teacher training schools in the big towns and enlarge their staff; to concentrate vocational schools in the big towns and take steps for their development; to make day schools co-educational; to provide professional training for probationer teachers; to draw up laws instituting regular promotion for teachers; to set up, within the Ministry of Education, a higher council to deal with educational and teaching problems.

These decisions led to the promulgation of the law of 22 March 1926 concerning the organization of the Ministry



GLOSSARY

eğitmenli köy ilkokulu: incomplete rural primary school staffed by 'instructors' (partly-trained teachers).
erkek ve kiz; orta sanat okulu: vocational training school offering various technical or trade courses for boys and girls at lower secondary level.
lise: general secondary school. Diagram shows upper cycle only; complete course (6 years) includes lower cycle equivalent to intermediate school (see *ortaokul*).
öğretmenli şehir veya köy ilkokulu: urban or rural primary school staffed by trained teachers.
öğretmen okulu (Köylerde): rural teacher training school.
öğretmen okulu (Şehirlerde): urban teacher training school.
ortaokul (intermediate school): lower general secondary school organized either as the lower cycle of a *lise* or as a separate institution.
orta ticaret okulu: lower vocational secondary school of commerce.
özel ana okulu: pre-primary school.
sanat enstitüsü: upper vocational secondary school with various technical courses.
ticaret lisesi: upper vocational secondary school of commerce.

HIGHER EDUCATION

A. University.
B. Institutions other than university.

of Education. Article 7 of the law distinguished four types of institution at the secondary level: upper secondary schools, intermediate schools, primary teacher training schools and rural primary teacher training schools. Another law promulgated in 1926 (Law No. 822) provided that secondary education would be free of charge in the state schools. This law came into force in the school year 1926–27. In the same year a third law prescribed the procedure to be followed with regard to the admission of scholarship-holders to state secondary schools. During the school year 1927–28, religious instruction was made an optional subject. Lastly, by a law promulgated in 1930, the Government of the Republic, anxious to secure the well-being of the teaching body, made it possible for secondary

school teachers to rise to the highest step in the salary scale of the civil service.

Vocational education. References to 'scientific' or 'technical' schools in the 1869 regulations concerned institutions of higher education but the foundation of a system of vocational and technical schooling had already been laid in 1860, when Mithat Pasha, Governor of the *vilayets* of the Danube, founded an institution for waifs and orphans at Nish. On becoming Prime Minister Mithat Pasha arranged for the establishment of a technical school and the first school of this type was opened in 1868. In the same year all institutions for waifs and orphans became known as technical schools and were brought under the same regulations. In 1913, since the law concerning the general administration of the *vilayets* provided that the cost of maintaining these schools should be borne by the local budgets, they became by the force of circumstances public establishments.

Parallel with these innovations, Mithat Pasha founded an institution for girls at Ruschuk and a technical school for girls at Istanbul. In 1878–79 the Ministry of Education opened three technical schools for girls—at Uskudar, Aksaray and Cagaloglu. The first commercial school was founded in 1883 and was attached to the Ministry of Commerce. From then until 1920, for various reasons, there was no notable development of technical education in Turkey.

Following the establishment of the Republic and the abolition of the capitulations, the need for technical staff was felt and it became evident that technical education must be developed. On the advice of foreign experts, the Directorate-General of Technical Education was set up, within the Ministry of Education, in 1933. Young men and women had already been sent abroad in 1927 to train for teaching in technical schools. In pursuance of Law No. 2765, all technical and vocational schools were attached to the Ministry of Education and financed from the Ministry's budget. Law No. 3007, promulgated in 1936, set forth the qualifications required of teachers in technical schools and the way in which the general salary scale for civil servants was to be applied to them. Technical institutes for boys were set up from 1923, and institutes for girls from 1928–29. There was a marked expansion of vocational schools of commerce.

Technical and vocational education occupy an important place in Turkey and the Government of the Republic has not hesitated to be lavish in this sector.

Administration

All secondary schools, whether public or private, come under the authority of the Ministry of Education through the Under-Secretaries of State, the Directors-General and the Directors of the Ministry. Secondary institutions are now administered by the Under-Secretary of State for Technical Education, the Director-General of Secondary Education proper, the Director-General of Teacher Training Schools, the Director-General of Fine Arts and the Director of Private Schools.

In the *vilayets* the Ministry exercises its authority either through the Governor, who represents the Government, or through the provincial Director of Education. Each secondary school has a principal and a sufficient number of assistant principals to ensure that the regulations and curricula in force are strictly applied.

Supervision and inspection. All secondary schools are supervised and inspected directly, from both the teaching and the administrative points of view, by the inspectors-general. In addition, the Governors, and the Directors of Education, who act in a way as their advisers in educational matters, exercise a right of control over the secondary schools in their respective *vilayets.*

To become an inspector-general, no special training is required. Candidates must, however, have graduated from a university or a higher school, be at least 30 years of age, have taught successfully for at least eight years in an institution of secondary or higher education, have specialized in some branch of science, art or education, and have held for at least three years an administrative post under the Ministry of Education. There are now over 60 inspectors-general in Turkey. They are appointed on the joint proposal of the Prime Minister and the Minister of Education, and their appointment has to be approved by the President of the Republic. The inspectors-general have the right to inspect and supervise all educational institutions, with the exception of the universities, on behalf of the Minister, to whom they are responsible. They also have the right to make investigations and to communicate the results thereof in reports addressed directly to the Minister. Promotions of teaching and administrative staff in educational institutions, as also rewards and disciplinary action, are largely dependent on the reports of the inspectors-general.

At the head of the Council of Inspection is a President, selected and appointed by the Minister. The President is responsible for the co-ordination of the activities of inspectors and serves as a link between them and the Minister.

Finance. Secondary education is not compulsory in Turkey. However, any citizen who has completed the primary course may go on to a secondary school if he expresses the wish to do so. Secondary education is free in all state schools. In private schools the fees are determined by the local government authorities. Boarders in state schools have to pay for their board, but this charge is minimal.

All costs relating to public secondary schools are borne by the State. Private schools are financed entirely by the persons, associations or communities that founded them. In some cases, however, they receive assistance from the State.

Teachers' salaries and allowances, as well as their travel expenses and medical expenses, are paid by the State. So are the costs of construction and upkeep of buildings used for secondary education. School furniture and equipment are supplied by the State.

At primary teacher training schools, which are usually boarding establishments, students are housed and boarded free of charge. In 1958 the budget of the Ministry of Education reached a total of £T551,399,644. Of this amount £T83,452,643 were allocated to general secondary education, £T80,929,492 to technical education, £T7,478,430 to the Directorate-General of Fine Arts, and £T20,621,007 to the Directorate-General of Teacher Training Schools.

Buildings and equipment. In Turkey, the problem of school buildings is as great as the problem of education itself. With the constant growth in the number of pupils, the need for school buildings is increasingly felt and is becoming, in a way, the main concern of the appropriate authorities. The buildings at present in use, some of which belong to the State, others to local governments or to charitable institutions, were constructed at very different periods. In Istanbul, for instance, there is one dating from 1471; although almost 500 years old, this is one of the biggest schools in the country, owing to the care with which it is kept up and the fact that new wings and other supplementary sections are frequently added. New school buildings are all designed to meet modern requirements. Besides erecting new buildings, the Ministry is also gradually purchasing those that belong to other administrations. In this connexion, it is only fair to mention the contribution made by the local population which attaches great importance to educational questions.

The number of buildings set aside for technical and vocational education increases every year, despite the particularly high cost of such buildings. The State owns all buildings of this type, as well as all the teacher training schools and schools for *imams* and preachers.

School welfare services. Hygienic conditions in school buildings in Turkey are supervised by both the Ministry of Education and the Ministry of Health. For this purpose, a Directorate-General dealing solely with health and hygiene in schools has been set up in the Ministry of Education.

The health of teachers and pupils is supervised, and the necessary medical care given, by the doctor or doctors attached to each school. Every pupil must have a health certificate and a vaccination certificate at the time of enrolment and must undergo a medical examination at least twice a year. This examination is carried out by the school doctor, who records his findings on a health card and takes any measures that are necessary. He provides medical care in emergencies and, in case of need, has the patient admitted to hospital immediately. The cost of hospital treatment for pupils and teachers is borne by the State. In every boarding school there is a sick-room and in every day-school a medicine chest.

Pupils and teachers suffering from pulmonary tuberculosis are treated at the Validebagi preventorium or sanatorium, at Istanbul. In the case of needy pupils, no charge is made by these establishments, and even the children of well-to-do families pay very little.

Parents' associations and child welfare societies take a keen interest in health activities. The Red Crescent, in its turn, contributes to the provision of free meals for needy children. The holiday camps opened by the Ministry of Education in the summer give teachers and pupils new health and strength for the coming school year.

TYPES OF SECONDARY EDUCATION

General secondary schools

Intermediate schools. These schools comprise three grades following on from the primary school; at the end of the 3-year course, those pupils who pass the school leaving examination obtain the intermediate school certificate.

Every intermediate school comes under the authority of the Director-General of Secondary Education and is run by a principal, with the help of assistant principals and staff, whose numbers vary according to the size of the school and the number of pupils attending it. If the intermediate school is part of an upper secondary school, it is of course controlled by the principal of the latter. Most intermediate schools are co-educational, separate schools for girls and boys being found only in the large towns. The nature of the courses can be seen from the following table.

TIME-TABLE FOR INTERMEDIATE SCHOOLS
(in hours per week)

Subject	Years		
	1	2	3
Turkish language[1]	6	4	4
History	2	2	2
Geography	2	2	1
Civics	1	1	1
Mathematics	5	4	4
Physics	–	3	3
Chemistry	–	–	2
Natural sciences	3	3	2
Elements of commercial practice	1	1	1
Agricultural work, gardening	1	1	1
Handwork (boys) / Domestic work (girls)	2	2	2
Foreign language	3	3	3
Physical culture	1	1	1
Drawing	1	1	1
Music	1	1	1
Free work[2]	3	3	3
Total	32	32	32

1. In the first year, one hour of the Turkish language periods must be devoted to penmanship. In the second and third years, penmanship is supervised by the language and drawing teachers and taught during the periods set aside for free work.
2. The three hours of free work are devoted to team work, which may be carried out in the classroom, the laboratory, the library, the garden or the workshop, as required.

In the first and second years, marks are given by every teacher twice a year (at the end of each half year). Pupils who absent themselves 30 days in the year without an excuse have automatically to stay in their class another year. For those who have a valid excuse, there is a margin of 60 days. Pupils whose work is unsatisfactory during the school year may sit in September for an examination which gives them a second chance. If they pass this examination, covering all the prescribed subjects, they can move up to the next grade. If a pupil fails in one subject only, he is promoted on condition of passing the tests in that subject at the half-yearly examination in the new grade. If he fails then, he has to do another year in the previous grade. The same applies to the examination for the intermediate school leaving certificate, to pass which candidates must obtain an average of 5 out of 10 in all subjects.

Pupils holding this certificate may continue their studies at an upper secondary school, a teacher training school with a 3-year course, a technical institute (for boys or girls)

or a commercial secondary school; they may enter the National Conservatory at Ankara or the Academy of Fine Arts; or they may take up a career in a private or public establishment. In Turkey the intermediate school leaving certificate is the minimum requirement for entry to the civil service.

Teachers for intermediate schools are recruited on various bases. Candidates must either have completed a course at a university or a higher school or have passed the examination for assistant teachers. Graduates from a university or the Higher Teacher Training School teach the subjects in which they have specialized; those from teacher training schools (secondary level) teach either on the science or the arts side; foreign languages, music, drawing, handwork and physical culture are generally taught by specialist teachers who have graduated from teacher training schools or from the National Conservatory or the Academy of Fine Arts.

Only candidates holding the secondary school leaving certificate or the primary teacher training school certificate may sit for the examination for assistant teachers. Candidates who pass this examination enjoy throughout their career the same rights as teachers who have graduated from a university or a higher school.

However they may be recruited, all teachers begin their career by a probationary period, varying from one to three years according to their ability. Once they become established, they are entitled to promotion every three years. However, teachers who have graduated from a university or from the Higher Teacher Training School are entitled to a promotion after two years, whereas graduates from the teacher training schools (secondary) are only entitled to a promotion after four years.

Probationer teachers begin at grade 12 of the scale of salaries for civil servants, which comprises 14 grades; by the end of their career they may well have reached the highest grade.

Multilateral intermediate schools. There are now two of these. They are designed to prepare pupils on the one hand for upper secondary schools, technical institutes or commercial secondary schools, and on the other for employment, but pupils acquire in these schools much more practical knowledge than they would in an ordinary intermediate school. If the results are satisfactory, the curricula and study plans used in these multilateral schools will be applied in all intermediate schools. The multilateral schools are governed by the same regulations as other intermediate schools.

Upper secondary schools (*liseler*). The *lise*, which comprises three grades, follows on from the intermediate school. Like the latter, the upper secondary school comes under the Directorate-General of Secondary Education and is run by a principal aided by assistant principals, all of whom are appointed by the Ministry. Boarding schools have, in addition to the normal staff, assistant teachers in charge of preparation time. At present Turkey has 114 state *liseler*. Most of these are co-educational. However, for purposes of decentralization, separate establishments for girls and boys have been set up in some of the big towns. The regulations in force are exactly the same as for intermediate schools.

Pupils who pass the examination for the secondary school leaving certificate may continue their studies at a university faculty or a higher school, and are entitled to enter the army as reserve officers. A few faculties—for instance, those of the technical universities and the architecture section of the Academy of Fine Arts—recruit their students on the basis of competitive examinations; others, such as the Faculty of Medicine and the faculty which trains agricultural experts, are obliged to make a selection amongst candidates owing to the shortage of places in the laboratories.

In the second year of upper secondary schooling, pupils choose between the arts section and the science section, according to their bent and their aptitudes. The subjects prescribed for upper secondary schools are given in the following table.

TIME-TABLE FOR UPPER SECONDARY SCHOOLS
(in hours per week)

Subject	Year				
	1	2		3	
		Science	Arts[1]	Science	Arts[1]
Turkish language and literature	5	4	5	3	6
Psychology	–	2	2	–	–
Philosophy, logic and sociology	–	–	–	3	6
History	2	2	2	2	3
History of art	–	–	2	–	1
Geography	2	2	2	1	2
Mathematics	5	6	4	8	3
Natural sciences	3	2	2	1	–
Physics	3	3	2	4	2
Chemistry	3	3	2	3	1
Foreign language[2]	5	4	5	4	5
Physical culture	1	1	1	1	1
Military training	1	1	1	1	1
Optional subjects[3]	2	2	2	1	1
Total	32	32	32	32	32

1. In upper secondary schools in Turkey, a division takes place in the second year, so that the second and third years have two sections, one for arts and the other for science. When a pupil has opted for one or the other, he is obliged to continue and complete his secondary studies in the section of his choice.
2. On entering intermediate school, pupils choose one of the following three foreign languages: English, French or German. This choice once made cannot be changed before the completion of secondary studies.
3. The optional subjects are as follows: second foreign language (English, French or German), drawing and handwork, music or, in two or three *liseler*, Latin. Once the optional subject has been chosen, it becomes assimilated to a compulsory subject.

Teachers for upper secondary schools are generally recruited from among university graduates and, preferably, graduates from the Higher Teacher Training School. If need be, intermediate school teachers may also teach in an upper secondary school, but only as deputies. For appointment and promotion purposes, teachers in upper secondary schools are subject to the same regulations as those serving in intermediate schools.

Collèges. Collèges are secondary establishments recently opened by the State—there are six of them at the present time. They comprise seven grades, of which the lowest is

preparatory. All children holding the primary school leaving certificate are entitled to sit for the competitive entrance examination, which consists of a series of tests. The teaching of a foreign language (English) occupies an important place in the curriculum of *collèges* and, in all the grades, science subjects are taught in that language. The other subjects are taught in Turkish, in accordance with the curriculum in force in intermediate schools.

TIME-TABLE FOR *COLLÈGES*
(preparatory grade and lower cycle only)
(in hours per week)

Subject	Grades			
	Preparatory	I	II	III
Turkish language	[1]4	[1]6	4	4
History	–	2	2	2
Geography	–	2	2	2
Civics	–	1	1	1
Mathematics	–	5	5	5
Physical and natural sciences	–	4	6	6
English	[2]25	8	8	[3]8
Drawing	1	1	1	1
Music	1	1	1	1
Physical culture	1	1	1	[4]1
Handwork	–	1	1	[5]1
Total	32	32	32	32

1. One hour a week is devoted to penmanship, under the supervision of the Turkish language teacher or the drawing teacher.
2. From the second half-year, 4 of the 25 hours of English are set aside for physical and natural sciences and 3 for mathematics. These lessons are given in English, by an English language teacher or a science teacher, according to circumstances. For the English, mathematics and science lessons, a single mark is given. If there are several teachers for these lessons, the average of the marks awarded by them is taken.
3. Two of the 8 hours of English are devoted to conversation.
4. More time is given to sports activities outside school hours.
5. The drawing hour and the handwork hour are combined and the resulting 2-hour period devoted alternately to each subject.

The certificates awarded by the *collèges* are equivalent to those issued by the intermediate schools and upper secondary schools. In regard to administration, appointment of teachers, curricula and examinations, the regulations in force for the *collèges* are the same as those applying in intermediate schools and upper secondary schools.

The Bahçelievler Experimental School (Ankara) and the Atatürk Experimental School (Istanbul). These schools have more or less the same curriculum as the intermediate schools and *liseler* but they apply different methods and follow a different plan of studies. The subjects taught in the second cycle are the same as those of the ordinary *lise*, but a further four hours are devoted weekly to the study of English and, in addition, psychology, philosophy, logic, mathematics and the physical and natural sciences are taught in that language.

If the results achieved in these experimental schools prove to be better than those achieved in the ordinary *liseler*, their methods and study plans will be generally applied in secondary establishments.

At the experimental school in Istanbul, the course extends over 6 years and is divided into two cycles of 3 years each. A characteristic of the curriculum is the distinction made between compulsory and optional subjects. Throughout the 3 years of the first cycle the same number of hours per week (4) is devoted to each of the five compulsory subjects (Turkish language, social studies, physical and natural sciences, mathematics, hygiene and physical culture). The optional subjects are as follows: foreign language (4 or 6 hours weekly), music, drawing and handwork, dressmaking and cutting, cooking, domestic economy, infant and child welfare, first aid and office work (2 hours for each of these subjects). The number of hours devoted to optional subjects must not exceed 8 per week. In addition, pupils have another 6 hours' work under supervision in library, laboratory, workshop, etc., and an hour for social activities. The weekly time-table for each class therefore covers 34 hours. In the second cycle optional subjects take up 4, 8 and 16 hours per week in the first, second and third years respectively. There is a wider range of subjects to choose from. The pupils' choice is conditioned by the career they intend to take up.

At the experimental school in Ankara, the course is also divided into two cycles of 3 years each and the system of optional subjects is likewise applied. The upper cycle comprises five branches: arts and social sciences, natural sciences, mathematics, commerce, domestic economy. The syllabus for each branch includes a certain number of compulsory subjects; these are supplemented by optional subjects, chosen by pupils from a list common to all grades and sections. Both schools are still at the experimental stage. The Ankara school (Bahçelievler Lisesi) is co-educational; the Istanbul school (Atatürk Lisesi) is for girls only. The regulations governing examinations are modelled on those of the American Comprehensive School.

Schools for imams *and preachers.* These schools come under the authority of the Directorate-General of Secondary Education and their purpose is to train men to serve the Muslim religion. They accept holders of the primary school leaving certificate. The course is divided into two cycles, the first lasting 4 years and the second 3. The teaching, though partly religious, is approximately of the same level as that given in the upper secondary schools. The certificate awarded at the end of the first cycle is equivalent to the intermediate school leaving certificate and that awarded at the end of the second cycle is equivalent to the upper secondary school leaving certificate. However, these certificates do not entitle their holders to enter universities or higher schools. The regulations governing schools for *imams* and preachers are the same as those applying to intermediate schools and upper secondary schools. The teaching staff is the same as that of upper secondary schools, except for the theologians, whose competence is recognized by the Ministry and who are responsible for the teaching of religious subjects. Turkey now has 19 schools for *imams* and preachers.

The Galatasaray School. This school (of upper secondary level), comes under the Directorate-General of Secondary Education and resembles the ordinary *liseler*, but it is worthy of separate mention on account of two peculiar features. It is the oldest of all the Turkish *liseler* (the first Imperial school), which gives it the dual privilege of

providing both primary education (5-year course) and secondary education (7-year course) and of teaching in two languages (Turkish and French). Pupils are admitted to the first grade after taking a series of tests and usually obtain their school leaving certificate at the end of the twelfth year. Boys who have received their primary education at a school other than that attached to Galatasaray may also sit for an entrance examination; if they pass, they spend a year in a preparatory class, after which they take the secondary course and finish their studies at the end of 7 years. The pupils learn French either in the primary course or in the preparatory class; they then take the science and mathematics lessons in the secondary course in French. In the last two grades, psychology and philosophy are likewise taught in French. The school is governed by the same regulations as the ordinary *liseler*. Owing to the way in which this school is organized, the teaching staff includes both Turkish and French teachers. The Turkish teachers must have the same qualifications as their colleagues in other establishments. The French teachers are engaged by contract, on the proposal of the French Government and with the approval of the Turkish Government, which accepts responsibility for them. The duration of the contracts may be extended with the consent of both parties.

At the Galatasaray School, the first cycle (intermediate school) covers 3 years and the second cycle covers 4 years; there is also a commercial section with a 4-year course.

Istanbul Lisesi. This establishment closely resembles the Galatasaray School, but it offers no primary course and it uses German instead of French.

Vocational and technical schools

Technical institutes for girls. Turkey now has 85 of these institutes, which offer a 5-year course following on from the primary school. They come under the direct authority of the Under-Secretariat of State for Vocational and Technical Education. All of them are day schools and no fees are charged. In the three grades of the first cycle, the curriculum is much the same as that applied in intermediate schools, with emphasis on preparation for their future role as housewives. In the last two grades, which form the second cycle, more time is given to vocational and technical training and to practical work. For pupils who have already completed their intermediate studies, there are special classes in place of the two grades of the second cycle; in these classes the whole time is devoted to vocational and technical training. The certificate awarded, following the leaving examinations, are the same for both categories of pupil.

The main purpose of these institutes is to train women to become capable and conscientious housewives and enlightened mothers able to bring up their children in accordance with modern methods. It is also possible for pupils to continue their education at the higher level, for instance, by entering the technical teacher training school for women. In that case candidates are nominated by the school at which they completed their secondary studies and take an entrance examination; successful candidates study for a further 4 years at the school and then become probationer teachers. They start at the second grade of the scale of salaries for civil servants and are entitled to a promotion after 4 years. They thus form the teaching staff in the technical and vocational branches of the institutes for girls. The general subjects are taught by intermediate and upper secondary school teachers.

Holders of leaving certificates from these institutes may also, if they express the wish to do so, go on to an upper secondary school or to a primary teacher training school, or enter the civil service.

In so far as administration, appointment of teachers and examinations are concerned, the institutes for girls are governed by the same regulations as secondary schools.

Technical night schools for women and girls. Any literate person between the ages of 12 and 45 may take the courses provided by these establishments, most of which are incorporated in the technical institutes for girls. There is no set curriculum; various courses are arranged, according to the wishes of the local population. The instruction is given by teachers from the institutes.

Technical institutes for boys. There are 80 of these institutes, which comprise five grades, following on from the primary school. As in the institutes for girls, the course is divided into two cycles. The first cycle—or intermediate technical school for boys—is formed by the first three grades; its purpose is to train specialized workmen while providing general education. The second cycle, which extends over 2 years, trains skilled workmen and foremen for the various branches of modern industry.

The technical institutes come under the authority of the Under-Secretariat of State for Vocational and Technical Education. They are day schools and no fee is charged. The second cycle includes special classes reserved for pupils who have gone through an intermediate school. The certificates awarded to these pupils give them the same rights as are enjoyed by pupils who have taken the whole course at the technical institute.

These institutes are governed by the same regulations as the *liseler*. The teaching staff is recruited from among former students of the technical teacher training school for men; the non-technical subjects are taught by intermediate and upper secondary school teachers; in addition, specialized foremen with industrial experience are engaged for the supervision of practical work.

The second cycle of the course now includes training in 16 different branches of industry. Three subjects—forging, laminating and joinery—are compulsory at all technical institutes. Other subjects are selected according to local needs. On completing the course, pupils may open workshops or take up employment as specialized workmen or foremen. They may also go on to a technical teacher training school, a school of engineering or a technicum, subject to passing a competitive entrance examination. If they enter a factory or workshop, their wages are determined by law. Those who wish to continue their studies at a *lise* are placed on the same footing as pupils who have gone through an intermediate school.

Building trades institutes. These establishments, which come under the Under-Secretariat of State for Vocational and Technical Education, train skilled workmen and

TIME-TABLE FOR BOYS' TECHNICAL INSTITUTES
(in hours per week)

Subject	Year		
	1	2	3
First cycle			
Turkish language	6	4	4
History	2	2	2
Geography	2	2	1
Civics	1	1	1
Mathematics	5	4	5
Physics	–	3	3
Chemistry	–	–	2
Natural sciences	3	3	2
Foreign language	3	3	[1]3
Physical culture	1	1	1
Drawing	1	1	1
Music	1	1	1
Religious instruction	1	1	–
Practical work	10	10	10
Total	36	36	36

Subject (the same for all sections)	Year			
	4	5	4[2]	5[2]
Second cycle				
Turkish language	2	2	1	1
Geography	–	1	–	–
Arithmetic and algebra	2	1	2	1
Geometry	2	1	2	1
Book-keeping and costing	–	1	–	1
Physics	1	–	–	–
Chemistry	2	–	–	–
Engineering and strength of materials	3	–	3	–
Elements of law	–	1	–	1
Hygiene	–	–	–	–
Military training	1	1	1	1
Vocational subjects and practical work[3]	31	36	35	38
Total	44	44	44	44

1. German, English.
2. Special classes reserved for holders of the intermediate school certificate, who spend more time on practical work.
3. Varying according to the section (metallurgy, mines, electricity, textiles).

foremen for the building trades. The 5-year course, which follows on from the primary school, is divided into two cycles. Pupils who leave at the end of the first cycle (3 years) may take up employment as skilled workmen; those who finish the course are qualified to work as foremen.

The institutes of the building trade, of which there are six, take both day pupils and boarders; they make no charge for instruction. Pupils are recruited by means of a competitive entrance examination open to holders of the primary school leaving certificate. Those who complete the first cycle at an institute (intermediate school of the building trade) are automatically admitted to the second cycle. Where the workshop situation allows, special classes are organized for holders of the intermediate school leaving certificate.

The curriculum for the first cycle of the institutes of the building trade is the same as that for the first cycle of the technical institutes. On the practical side, there are sections for carpentry, masonry and plumbing, whilst, in the last two grades, sections for plaster-work, marble-work and central heating are also included.

Graduates from the institutes of the building trade may continue their studies at an engineering school, a technical teacher training school or a technicum, subject to passing the competitive entrance examination. If they receive a government grant, they are expected to work for the State for a certain time.

Institutes for training in chemistry. These establishments, which offer a 5-year course following on from the primary school, train laboratory assistants and chemical engineers' assistants. The curriculum for the first year is the same as that for the first year of the technical institutes. Pupils who obtain a credit or distinction at the end of their first year at a technical institute are therefore accepted, if they so wish, for the second year in the chemistry institutes, with a government grant. They receive approximately the same training as in the technical institutes, but in addition do specialized courses in workshop and laboratory and learn to repair the apparatus they use in this work. Fourth-year and fifth-year pupils have to work in a factory or laboratory in the months of June and September.

Printing school. This school, which is at Istanbul, offers a 3-year course. It recruits its pupils from among holders of the intermediate school leaving certificate or the certificate of the first cycle of the technical institutes. It trains specialists in the various branches of the printing trade. It is governed by the same regulations as those applying to the technical institutes.

Institutes for automobile mechanics. There are two such establishments, one at Izmir and the other at Ankara. They offer a 2-year course and recruit their pupils from among holders of the intermediate school leaving certificate or the certificate of the first cycle of the technical institutes. The weekly time-table, which is similar to that of the technical institutes, includes in addition, for the first year, practical work on car bodies and chassis and, for the second year, practical work on motors and electricity.

Commercial schools. The purpose of these schools is to train staff for the various branches of the country's economic and commercial life. The course, which is co-educational and free, comprises two cycles, each of 3 years. The first cycle is open to pupils who have completed their primary education, the second to holders of the intermediate school leaving certificate or the certificate of the first cycle of the commercial secondary school. Until recently, pupils coming from an intermediate school had to spend a year in a special class; that class has now been abolished, but these entrants have to attend extra lessons until the end of the second year to fill in the gaps in their knowledge. In both cycles, teaching is given in the morning. In the afternoon pupils do work relating to the occupation they have chosen.

On passing the final examinations, pupils may enter the School of Higher Commercial Studies. In order to enter a university they must pass the leaving examination of a

general upper secondary school. Those who complete the course at the School of Higher Commercial Studies have the same rights as university graduates.

The teaching staff is recruited in the same way as for general upper secondary schools, except that the teachers of special subjects are graduates of the Higher Commercial Teacher Training School or the School of Higher Commercial Studies.

Commercial night schools. These schools have been set up for young people who have completed their intermediate studies and who have to work in the daytime. Some are independent whilst others are incorporated in day schools. A 36-week course is given on each of the subjects included in the curriculum of the commercial secondary schools. The syllabus covers 3 years, with 24 hours of lessons per week.

Courses are organized only when there is sufficient demand for them. The school year is divided into two terms. Attendance at lessons is compulsory. The examinations at the end of the first term are held by the teacher in charge of the course; those at the end of the second term by a jury composed of three teachers. A passmark is required, and a certificate is issued for each subject in which the candidate passes. Candidates who pass in all subjects obtain the commercial secondary school leaving certificate.

Academy of Fine Arts. This establishment, at Istanbul, comes under the Directorate-General of Fine Arts of the Ministry of Education. It has four sections, each divided into two cycles—an intermediate and a higher one. The intermediate cycle extends over 3 years for the three main sections (painting, sculpture and decorative arts) and 4 years for the section of Turkish decorative arts. Pupils are recruited by means of an entrance examination open to holders of the intermediate school leaving certificate or the certificate of the technical institutes.

Those who pass the examination at the end of the third year obtain the Academy of Fine Arts intermediate certificate and, for salary purposes, are placed in the same grade as holders of the general upper secondary school leaving certificate. They are not qualified to enter a university, but they can be admitted to the higher cycle of the Academy of Fine Arts. On the other hand, pupils coming from a general upper secondary school must sit for an examination before being admitted to the higher cycle of the academy.

The teaching staff is recruited from among university graduates and former pupils of the academy or from among specialized foreign teachers. Each teacher has a studio at his disposal.

The Academy of Fine Arts also has a section for architecture, but this comes within the category of higher education, and only holders of the general upper secondary school leaving certificate are admitted to it.

National Conservatory at Ankara and the National Conservatory at Izmir. The National Conservatory at Ankara, which was founded in 1936, also comes under the Directorate-General of Fine Arts. It has several sections—piano and harp, stringed instruments, wind instruments, singing, drama, etc. The length of the courses in these different sections varies from 5 to 9 years, divided into several cycles. Pupils are recruited by means of a competitive entrance examination; the conditions of admission vary according to the section.

Both the Ankara Conservatory and the Izmir Conservatory are co-educational. They accept day students and boarders. For salary purposes, graduates from a national conservatoire enjoy the same rights as holders of the general upper secondary school leaving certificate, but they are not qualified to enter a university.

The regulations in force are exactly the same as those applied in other secondary establishments.

The teaching staff is recruited partly from among teachers in general intermediate and upper secondary schools, but chiefly from among the best musicians and other artists in Turkey and elsewhere.

Teacher training schools

Turkey now has 52 establishments for the training of teachers to serve in primary schools. They come under the Directorate-General of Teacher Training. In 21 of them the course lasts for 6 years and in the other 31 it lasts for 3 years. At the former, students are recruited from among holders of the primary school leaving certificate, and at the latter from among holders of the intermediate school leaving certificate; in either case candidates must take a competitive entrance examination. Two of the schools with a 6-year course and 14 of those with a 3-year course are for girls only; the others are for boys. With the exception of two, which were opened quite recently, all primary teacher training schools have boarding arrangements. No charge is made for board and lodging. As far as possible, day pupils are also accepted, provided they have passed the entrance examination. On completion of their training, boarders are obliged to teach for a certain number of years, which may be twice the length of the course. Newly qualified teachers begin their service by a probationary period of from 1 to 3 years, except for those whose ability has been recognized by their superiors and who become established forthwith; they begin at the same grade in the salary scale as the students graduating from a *lise.*

In the first 3 years of teacher training schools with a 6-year course, students receive the same general education as pupils in intermediate schools. In the last 3 years, however, while broadening their general culture they receive the professional training required for the career they have chosen. In the course of their studies they also have many opportunites of visiting primary schools and thus becoming acquainted with the establishments in which they will serve and the children with whom they will have to deal. Sometimes they are even given classes to teach, but under the supervision of qualified teachers. In their final year, the students do a month's practical work in a rural school. The marks they receive for this period are taken into account in the final examinations.

The regulations governing primary teacher training schools are exactly the same as those for intermediate schools and upper secondary schools. The teaching staff is also recruited in the same way. It is now proposed to appoint the best teachers to primary teacher training schools.

Men and women primary teachers are entitled to sit for the competitive entrance examination for intermediate teacher training schools so as to become secondary school teachers. From the school year 1959/60, the best among them will be accepted in higher teacher training schools; they will thus have the right to pursue university studies—a right which they have not hitherto enjoyed.

TRENDS AND PROBLEMS

As will be seen from the foregoing, the efforts made in regard to secondary education since the proclamation of the Republic have produced abundant results. Since 1923 the number of secondary schools of teachers and of pupils has continually increased. Intermediate and upper secondary schools, and even technical and vocational schools, are now being opened in the remotest villages of Anatolia. Nevertheless, much obviously remains to be done if secondary education is to be made universal in a country as big as Turkey where even primary education was long neglected. To fulfil this aim, it is proposed, among other measures: to establish new secondary schools in both large and small towns; to bring the various types of secondary school into harmony with the needs of the population and local conditions (multilateral intermediate schools, unification of the curricula of all intermediate schools); to put up many new school buildings in towns and villages (this is necessary not only in places where there are as yet no secondary schools, but also in those where the schools are overcrowded) and to restore a certain number of old buildings; to train increased numbers of new teachers, on the one hand to fill the gaps caused by deaths and retirements and, on the other, to teach in the new schools and help reduce the size of overcrowded classes; lastly, to increase the number of inspectors, in keeping with the increase in the number of schools, teachers and pupils, and to strengthen the administrative staff.

To provide for the expansion of the teaching staff a second higher teacher training school is being opened in Ankara for the school year 1959/60, while at the same time the intermediate teacher training schools at Izmir and Diyarbakir will be receiving students to train as teachers for secondary schools. (These are in addition to the intermediate teacher training schools already functioning at Ankara, Istanbul, Balikesir and Bursa.)

As the implementation of all these projects will require much larger funds than are now available, further resources must be found. This problem is the most difficult of all.

The Minister of Education has set up a commission, consisting of representatives of all the departments of the Ministry and representatives of the universities, to visit foreign countries and make a detailed study of their educational systems, with the object of preparing a report to serve as a basis for the recasting of the Turkish educational system. This report will be submitted for consideration to the Council of Instruction and Education, as the sole authority empowered to make decisions relating to education. The council's proposals will then be submitted to the Minister for approval. The implementation of the council's decisions will be a matter for the various departments concerned.

There is no doubt that the present educational system in Turkey is out of date; even the countries which Turkey took as models have now completely changed their systems. Turkey, too, has made some changes, but in competent quarters the view is held that a complete recasting of the system has become a necessity.

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STATISTICS

Population (mid-year 1958 estimate): 25,932,000.
Area: 299,993 square miles; 776,980 square kilometres.
Population density: 8 per square mile; 33 per square kilometre.

Summary of school statistics, 1953–57. In the school year 1957/58 there were more than 2,600,000 students enrolled in schools at all levels, representing over 10 per cent of the population. There were, in addition, some 59,000 adults attending educational courses of whom 57 per cent were women. Of the school-going population (excluding adults), over 86 per cent were pupils in primary schools, 9 per cent in general secondary and teacher training courses, 3 per cent in vocational schools and under 2 per cent were students at higher educational institutions. Girls made up 38 per cent of the enrolment in primary schools, 26 per cent in general secondary schools, 23 per cent in vocational education and 16 per cent at higher educational institutions.

The teaching staff numbered over 68,000 in 1957/58. One quarter of the teachers were women in primary schools, 40 per cent in general secondary schools and 18 per cent at universities. The pupil-teacher ratio in primary schools was 48 in 1957/58 compared with 46 at the beginning of the period under review and 21 in general secondary schools against only 16 in 1953/54. Compared with 1953/54, enrolment had increased by 29 per cent in primary schools, by 88 per cent in general secondary schools, by 47 per cent in vocational education and by 81 per cent at university level. (See Table 2.)

Trends in secondary education, 1930–57. Average enrolment in all secondary schools was five times higher in the three years 1955–57 than in the years 1930–34. Over the same periods the ratio of secondary enrolment to the estimated school age population 15–19 years old increased from 5 to 12. The proportion of girls enrolled in general and vocational secondary education was around 25 per cent throughout the period under review. In teacher training schools, however, the proportion of women students declined from about half in the years 1930–39 to under 12 per cent of the total in the period 1950–54. (See Table 1.)

Examination results in secondary education, 1953–57. In 1957/58, the diploma of general secondary school studies (*Mezuniyet* or *Baccalauréat*) was passed by 54,938 students of whom 13.576 or one-quarter were girls, compared with 32,299 passes in 1953/54. The number of successful candidates thus increased by 70 per cent over the five years under review, but the proportion of girls to total candidates did not rise appreciably.

Educational finance 1958/59. In 1958/59 the budget of the Ministry of Education amounted to 738,792,847 liras of which 327,589,707 liras were allocated for primary education. (Official exchange rate: 1 lira = 0.36 U.S. dollar (approx.). Expenditure on education made by provincial authorities is not known.

Sources. Turkey: Central Statistical Office, reply to Unesco questionnaire; Ministry of Education, *Education in Turkey*, Geneva, 1959.

1. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education				Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General and vocational		Teacher training				
	Total	Per cent female	Total	Per cent female			
1930	36 752	25	5 336	46			
1931	42 252	25	5 031	45			
1932	48 769	27	2 162	48	53	1 002	*5*
1933	57 004	26	2 588	50			
1934	61 250	25	2 574	51			
1935	72 488	26	2 749	52			
1936	87 438	27	3 094	56			
1937	103 423	27	2 734	57	105	1 094	*10*
1938	117 099	27	3 259	52			
1939	128 753	27	4 120	47			
1940	132 029	27	8 427	29			
1941	136 593	27	10 907	26			
1942	129 526	27	12 699	21	142	1 912	*7*
1943	125 305	27	15 891	19			
1944	125 710	26	17 093	18			
1945	128 429	25	17 150	17			
1946	132 272	25	15 891	16			
1947	128 588	25	13 655	11	143	2 238	*6*
1948	125 726	25	13 149	10			
1949	126 333	25	15 797	9			
1950	127 339	26	16 306	9			
1951	133 379	26	15 812	9			
1952	148 000	26	14 471	12	169	2 132	*8*
1953	166 265	25	15 184	13			
1954	197 420	25	14 509	16			
1955	[1]236 692	25	[1] ...	...			
1956	[1]281 275	25	[1] ...	...	279	2 406	*12*
1957	[1]319 321	25	[1] ...	...			

1. Teacher training is included with general and vocational education.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools, private						
	Total	**1957/58**	**68**	**177**	**172**	**4 540**	**2 120**
	„	1956/57	63	159	156	4 311	1 960
	„	1955/56	58	139	135	4 259	1 881
	„	1954/55	55	129	126	4 645	2 157
	„	1953/54	52	146	146	4 204	1 885
Primary	Urban primary schools, public	1957/58	1 876	46 239	11 403	814 662	342 857
	Rural primary schools, public	1957/58	17 271			1 437 175	509 982
	Primary schools, private	1957/58	133	1 113	868	18 269	8 372
	Total	**1957/58**	**19 280**	**47 352**	**12 271**	**2 270 106**	**861 211**
	„	1956/57	19 390	44 674	11 549	2 133 766	802 142
	„	1955/56	18 723	42 202	11 180	1 981 805	744 455
	„	1954/55	18 397	38 848	10 803	1 865 692	701 076
	„	1953/54	17 951	37 968	10 401	1 763 021	658 053
Secondary							
General[1]	Secondary schools, public	1957/58	694	9 584	3 637	216 437	52 970
	Secondary schools, private	1957/58	89	1 463	812	18 042	7 901
	Total	**1957/58**	**783**	**11 047**	**4 449**	**234 479**	**60 871**
	„	1956/57	731	9 776	4 028	202 740	52 546
	„	1955/56	698	8 703	3 841	165 195	42 902
	„	1954/55	655	8 312	3 751	147 260	37 675
	„	1953/54	608	7 558	3 449	124 629	31 122
Vocational	Technical schools, public	1957/58	346	5 153	1 715	71 968	16 589
	Commercial schools, public	1957/58	49	485	180	8 323	1 053
	Agricultural schools, public	1957/58	12	191	28	2 091	391
	Health schools, public	1957/58	23	394	235	1 545	1 108
	Technical schools, private	1957/58	3	59	6	353	–
	Commercial schools, private	1957/58	8	51	6	562	86
	Total	**1957/58**	**441**	**6 333**	**2 170**	**84 842**	**19 227**
	„	1956/57	423	5 831	1 973	78 535	17 220
	„	1955/56	*401	5 258	1 836	71 497	15 500
	„	1954/55	386	4 994	1 794	64 672	14 166
	„	1953/54	369	4 584	1 653	57 768	12 912
Higher							
General and technical[2]	Universities, public	1957/58	24	2 070	367	30 113	4 890
	High schools, public	1957/58	22	889	153	11 998	1 806
	Total	**1957/58**	**46**	**2 959**	**520**	**42 111**	**6 696**
	„	1956/57	44	2 884	495	39 845	6 594
	„	1955/56	40	2 548	429	37 192	6 290
	„	1954/55	36	2 280	398	28 069	4 849
	„	1953/54	34	2 126	353	23 309	4 219
Special	Schools for the deaf, dumb and blind						
	Total[3]	**1956/57**	**6**	**283**	...	**4 334**	...
Adult	Night schools	1957/58	148	444	374	32 214	31 741
	Trade schools or courses	1957/58	(21)	...	...	92	–
	Other adult education courses	1957/58	(1 832)	1 260	84	27 065	2 164
	Total	**1957/58**	**[4]148**	**[5]1 704**	**[5]458**	**59 371**	**33 905**
	„	1956/57	[4]140	[5]1 677	[5]447	66 564	40 999
	„	1955/56	[4]138	[5]2 115	[5]511	76 106	41 570
	„	1954/55	[4]135	[5]1 719	[5]347	67 369	38 689
	„	1953/54	[4]130	[5]1 830	[5]327	68 285	36 825

1. Probably including teacher training at secondary level. In the school year 1958/59 there were 21,260 students in teacher training schools.
2. Probably including higher teacher training. In 1958/59 there were 1,008 students in higher teacher training colleges.
3. There were in addition 41 schools for backward children and orphans. No information on enrolment or teachers is available.
4. Number of schools only.
5. Not including teachers of trade schools or courses.

THE EDUCATIONAL SYSTEM

Prior to the Great October Socialist Revolution there were only 577 secondary schools in the Ukraine, and the teaching was given exclusively in Russian; not one school provided instruction in the Ukrainian language. The children of the workers could not attend these schools, which were only for the children of the well-to-do. A considerable proportion of them were private institutions, which charged much higher fees than the government schools. There were separate schools for the children of the nobles and the clergy, etc. Thus secondary education in the Ukraine, as in the whole of pre-revolutionary Tsarist Russia, clearly reflected class distinctions.

The October Revolution brought with it radical changes in the system of public education. On 16 October 1918 the Government Declaration and Regulations establishing one school system for the workers was promulgated. On 28 February 1919 fees were abolished in all schools without exception, and in April of the same year it was decided that private schools should be closed and the whole educational system brought under state control. The Church was to be separate from the State, and the school from the Church. As a result of the establishment of a single unified system of public education, from the kindergarten to the university, all children enter the same type of school and begin their education on an equal footing, and they all have the right to go on to the highest stages in the school system.

The decisions taken by the Communist Party and the Soviet Government in the early 1930s were of great importance in the development of public education. By the resolution 'On the structure of primary and secondary education in the U.S.S.R.', which was promulgated on 15 May 1934, the Central Committee of the All-Union Communist Party (Bolsheviks) and the Council of People's Commissars of the U.S.S.R. established the basic types of schools for general education (primary, 7-year, and 10-year secondary schools), which were to be uniform throughout the Soviet Union. The establishment of general secondary schools was a new stage in the development of public education, although even before 1934, work had started on converting 7-year schools to secondary schools.

Just before the second world war, education in the Ukraine had reached a high standard. In the school year 1940/41, there were about 31,000 schools in the Republic, including 4,435 secondary schools and 10,957 7-year schools. The number of pupils was 2.6 times greater than in 1914/15, and the number of teachers was 3.5 times greater. There were nearly 8 times as many secondary schools, particularly in the country districts, where the number has increased more than a hundredfold. The transition to universal 7-year education had begun, and in the cities universal 10-year education was being introduced.

In the post-war years, the network of schools was re-established, and 7-year and secondary education developed rapidly. At the beginning of the 1958/59 school year, there were 8,446 general secondary schools in the Ukrainian S.S.R., with 1,028,200 pupils in the higher classes, including 261,200 young workers, studying either at 'evening schools' which also provide day classes for shift workers, or by correspondence.

The Soviet school has played an active part in bringing about a cultural revolution in the country, in developing the people's talents and in educating the young people in a progressive spirit. Nevertheless, the general secondary schools, the vocational and technical schools and the special secondary schools of the Ukrainian S.S.R. do not satisfy the requirements of society at a time when Communism is being extensively built up. The principal weakness in the work done by the schools—as was noted by the Twenty-first Congress of the Communist Party—is a tendency for the instruction to be divorced from life, so that pupils leaving school are not sufficiently prepared for practical life. This situation led to the suggestion that the system of public education should be reorganized. In April 1959, the Supreme Soviet of the Ukrainian S.S.R. enacted a law 'On the strengthening of the links between school and practical life, and on the subsequent development of the public education system in the Ukrainian S.S.R.'.

Under the Law of 1959 all children between the ages of 7 and 15 or 16 must complete 8 years of schooling. At the 8-year school, pupils acquire a sound basic knowledge of general and polytechnical subjects, are brought up to like work and to be ready to devote themselves to socially useful activity, and are given moral, physical and aesthetic training. The 8-year school is concerned with general education; it does not seek to train specialists for any particular profession.

Senior secondary education, which begins at the age of 15 or 16, is based on a combination of instruction and work in industry.

When they have completed the 8-year school, young people may choose for themselves which path they will follow to obtain a complete secondary education. For those who do not wish to interrupt their productive work, there are the evening (shift) schools. In these schools, persons who are employed in one of the branches of the national economy can obtain a secondary education and improve their professional qualifications; the courses are of 3 years' duration. (Since, for various reasons, some workers have not completed their compulsory schooling, these schools at present also provide courses beginning from the third grade.)

Pupils who have completed the 8-year course may also enter the 'secondary labour polytechnical school providing a general education together with production training' (hereinafter referred to as the senior secondary polytechnical school). The course is of 3 years' duration, and comprises general secondary education and vocational training for work in one of the branches of the national economy or

culture. Senior secondary polytechnical schools are sometimes run in conjunction with the 8-year schools and sometimes separately, taking pupils in grades 9 to 11.

A further possibility, for those who have completed the 8-year school, is to enrol at a technicum or other specialized secondary educational establishment.

Besides these schools, there are secondary schools in which the instruction in certain subjects is given in foreign languages, and others which are for children with special aptitudes for music, choreography and the fine arts.

There is also a wide network of boarding schools in the Republic, organized as 8-year or senior secondary polytechnical schools. These boarding schools, which were first instituted in 1956, are well equipped and staffed with experienced teachers, and provide particularly favourable conditions for the instruction and education of the pupils. The network of boarding schools is growing rapidly. In 1958, pupils at these schools numbered 24,000, but it is expected that enrolment will reach 420,000 by 1965.

In the Ukrainian S.S.R., therefore, everything possible is done to ensure that young people who have completed the course at an 8-year school may obtain a complete secondary education (general or specialized) either by interrupting their industrial work or by combining their secondary school studies with work in industrial undertakings, institutions, agriculture, building, transport and other branches of the national economy of the Republic.

The reorganization of the public education system, in accordance with the schools law, was begun in 1959, and will be completed within the next four or five years. It will promote a considerable expansion of secondary education in the Ukrainian S.S.R. in the future. The number of general secondary schools will increase by more than 400 in seven years, and the number of pupils in the senior classes will increase by nearly 700,000.

The Constitution of the Ukrainian Soviet Socialist Republic lays down that all citizens have the right to education. This right is secured by a number of measures—the provision of compulsory general 8-year education, a well-developed system of general secondary polytechnical education, vocational and technical education, specialized secondary and higher education, the development of various types of evening schools and correspondence courses; the provision of all types of education without payment; the system of state scholarships; the use of the pupils' native language in the schools; and the organization of free industrial, technical and agricultural instruction for workers in the factories, state farms and collective farms.

Administration

All secondary schools and other educational establishments which provide a secondary education are fully guaranteed by the State; they are financed through the state budget, and are under the control of the Ministry of Public Education of the Ukrainian S.S.R. (for general secondary schools), the Ministry of Culture of the Ukrainian S.S.R. (for schools of music and fine arts) and the Ministry of Specialized Higher and Secondary Education of the Ukrainian S.S.R. (for technicums and other specialized secondary education establishments).

The Ministries referred to work out and approve the educational plans and curricula for secondary schools, publish school textbooks, and provide the schools with visual aids for use in the classroom.

The planning of the general secondary school network is done by the Ministry of Public Education and its local organs, which arrange for new secondary schools to be opened where justified by the number of pupils, or for 8-year schools to be reorganized to provide full secondary education, or for any other changes to be made in the school network. New secondary schools are opened (and in some cases closed) only with the consent of the Ministry of Public Education and subsequent confirmation by the Council of Ministers of the Ukrainian S.S.R.

Supervision and inspection. The work done by the general secondary schools is supervised by the Ministry of Public Education, and by the regional and district departments of public education.

In some of the local Soviets of workers' deputies (regional, city, settlement and village Soviets), permanent commissions are formed from among the deputies, to deal with questions of public education. They assist the Soviets, their executive committees and the public education departments in organizing the educational work of the schools on a sound basis, make suggestions regarding the development of the school network, encourage young people working on collective farms or in industry to attend the evening schools, and arrange for improvements in school facilities and equipment.

All schools, including secondary schools, are supervised by school inspectors, who are attached to the public education departments and the Ministry of Education. They are selected and appointed from among the most experienced teachers and administrative staff of the schools, who have very high educational qualifications and the necessary length of service as teachers. In the case of an inspector working for a district (or municipal) public education department, this is a minimum of 5 years; in the case of an inspector working for a regional public education department, a minimum of 7 years; and in the case of a Ministry of Education inspector of school administration, a minimum of 10 years.

A school inspector attached to a district or municipal public education department exercises state control over the standard of the teaching and general education in the schools assigned to him, ensures that the teaching embodies the results of the best educational experience and keeps the teachers informed of advances in educational science, and checks whether proper use is being made of school equipment.

Besides supervising schools, the regional inspector also supervises the activities of the district (or municipal) public education departments, while the Ministry of Education inspector supervises the work of the regional public education departments.

Finance. Secondary education in the Ukrainian S.S.R. is free. The full cost of maintaining secondary schools is financed from the state budget, which is established annually in accordance with the local requirements of each region of the Republic. Under the state budget provision is made for the payment of the salaries of the teaching staff, the

maintenance of school premises, capital repairs to school buildings, equipment, school supplies and other expenses, and also for making available free living quarters and public utilities to teachers in country districts and for the maintenance of school boarding premises.

Funds for all these purposes are allocated to the regions and districts of the Republic according to the number of schools and pupils they have.

Buildings and equipment. Schools are always built to standard designs prepared in accordance with established norms. School buildings for 320, 400, 520 and 960 pupils are planned to occupy one, two, three or four floors respectively. An average of about 700 cubic feet is allowed for each pupil, and a total area of about 50 square feet. Besides the classrooms, each of which is over 500 square feet in area, secondary school buildings include chemistry and physics laboratories, mathematics rooms and drawing rooms, rooms for literature and foreign languages, history and geography, a library, a methods room, teachers' rooms, gymnasia and assembly halls, a canteen and other rooms.

All schools are centrally heated. The buildings are equipped with electric light, running water and sewerage. In places where there is neither running water nor sewerage, artesian bores or wells are sunk, and sanitary facilities are provided, with special purifying installations (an underground sewage-farm or a complete biological purification system).

TYPES OF SECONDARY EDUCATION

As mentioned above, all young people who have completed 8 years' schooling (7 years' schooling up to 1959) may enter various types of secondary schools—schools for young workers in town and country, evening schools for shift workers, senior secondary polytechnical schools and technicums and other specialized secondary schools.

General secondary schools for young workers

By attending the schools for young workers in town and country for 3 years (grades 9, 10 and 11), young people obtain a general education comparable with that of pupils at secondary schools which provide industrial training.

In schools for urban workers, the year begins on 1 September and ends on 29 May—that is, it lasts for 9 months. The school week comprises 22 hours' instruction, which includes 2 hours' tutorial work. The curriculum provides for the study of the Ukrainian and Russian languages and literature, algebra, geometry, trigonometry, natural science, history, geography, physics, astronomy, chemistry, a foreign language and drawing. Some time is also devoted to improving the pupils' vocational qualifications.

In the schools for young people in the villages, the year runs from 1 October to 12 May, that is, for seven and a half months, as the pupils are engaged in agricultural work in the summer and autumn. The school week comprises 22 hours, and the instruction covers the same subjects as in the schools for young urban workers. As well as general subjects, the pupils study the rudiments of agricultural production.

Besides the evening schools for young urban and rural workers, there are secondary correspondence schools in the Ukrainian S.S.R., which give young workers a general secondary education. The courses are planned to occupy 9 months (from 1 September to 24 May). Pupils study the subject-matter in the curriculum by themselves, and the school helps them by regular group or individual tutorials.

For both the evening schools for young urban and rural workers and for correspondence schools, the Ministry of Public Education draws up special curricula and textbooks, which maintain a proper standard of general education, with due regard for the age of the students, and their experience of life and productive work.

The senior secondary polytechnical school

In the senior secondary polytechnical schools pupils take a 3-year course of instruction (grades 9, 10 and 11) which provides a general secondary education and vocational training for work in one of the branches of the national economy or cultural life. The school year begins on 1 September and ends on 29 May, thus lasting 9 months, and the school week comprises 37 hours. The subjects studied are Ukrainian and Russian literature, algebra, geometry, trigonometry, physics, astronomy, chemistry, natural science, geography, history, a foreign language, drawing, music, singing and physical education. In addition, industrial training is provided (at present, the time allotted to this is 5–6 hours a week, but in future it is to be 12 hours a week), in the course of which the pupils acquire theoretical and practical knowledge of the particular type of work they have chosen to do in industry, agriculture, transport, communications or general services. Industrial training, together with the acquisition of practical knowledge of a particular branch of work, helps the pupil to a better grasp of the basic principles of the sciences.

Some idea of the content of the general subjects taught is given below:

Ukrainian and Russian literature. Pupils study the principles of the history of literature (mainly the nineteenth and twentieth centuries), together with the rudiments of the literary history of the peoples of the U.S.S.R. and the history of foreign literature.

A foreign language. The subject is taught with a practical end in view, namely to develop the ability to converse in the foreign language, on the basis of the knowledge acquired in the 8-year school, and to teach the pupils to read correctly, understand, and, with the help of dictionaries and grammar books, translate into their own language fiction, social and political texts, and popular science works and technical literature.

History. Pupils pursue a systematic course of study in the history of the U.S.S.R., and in the modern and contemporary history of foreign countries.

Geography. Covers the economic geography of foreign countries and of the U.S.S.R.

Mathematics. Pupils complete their study of elementary mathematics, and acquire the knowledge, skills and practice required for vocational training and practical work in modern industrial conditions and for further study at university level.

Physics. The course covers mechanics, molecular physics,

heat and energy, electricity and magnetism, optics and atomic structure.

Astronomy. The nature, movement and development of the heavenly bodies, the place of the earth among them and the structure of the universe, and the practical application of astronomy.

Chemistry. Pupils acquire sound, systematic knowledge of the elements of general and organic chemistry.

Natural science. The course covers the basic principles of Darwinism, bringing together the pupils' knowledge of botany, zoology, anatomy and human physiology. The pupils learn about the origin and historical development of life on the Earth, the evolution of the organic world, and the principles of the control of vegetable and animal organisms, their development and formation.

Drawing. The course is designed to equip pupils with the knowledge and skills required for preparing and understanding technical drawings, and to develop their notions of spatial relations.

Physical education. Includes gymnastic exercises appropriate to the pupils' physical development, field and track athletics, swimming, instruction in skiing, and games.

In the senior secondary polytechnical schools, as also in the schools for young industrial and agricultural workers, emphasis is laid on various types of independent work performed by the pupils, observation of nature and production processes, excursions, practical and laboratory work, including elementary research, etc. The object of the whole educational process in the secondary school is to equip pupils for life and socially useful work, to give them sound general and polytechnical knowledge, and to produce educated people, active builders of communist society, with a good knowledge of the elements of science and a profound respect for work as the source of all the material and cultural values of society and the primary necessity of man's life, and inspired by the principles of internationalism and humanism.

Methods of encouraging secondary school pupils to engage in productive work, such as pupils' brigades in the collective farms and state farms and pupils' construction brigades, are widely used throughout the Republic.

In order to bring pupils up to be industrious, and to train them in habits of regular work, schoolchildren in the Ukrainian S.S.R. are encouraged to practise self-help. The pupils have a roster for keeping the school premises and farmstead in order and looking after the plants; they help to prepare visual aids and keep them in good order, repair books, and perform various other tasks.

Secondary school pupils are promoted to the senior classes on the basis of promotion examinations and their performance during the year. At the conclusion of the secondary school course, pupils sit for school-leaving examinations, and successful candidates receive a secondary education certificate, which qualifies them for admission to higher educational establishments. Those leaving the senior secondary polytechnical schools also receive a certificate of their qualifications in the particular branch of industrial work in which they have been trained.

Gold and silver medals are awarded to boys and girls who have been outstanding in their secondary school work, who have excelled in practical industrial work (carrying out their full work quota in their industrial training), and who have set an example of good behaviour and taken an active part in social work.

Secondary school staffs are recruited from among people who have received an advanced training in education (i.e., graduates of one of the pedagogical institutes or of a university). Appointments to teaching posts in secondary schools, and transfers, are made by the regional public education departments.

Specialized secondary schools

In these institutions, special subjects are studied, as well as general educational and general technical subjects. Specialized training is open to all citizens of the U.S.S.R., regardless of sex, nationality or religious belief. The languages of instruction are Ukrainian and Russian.

All specialized secondary educational establishments come directly under the Ministries, Departments and Councils of National Economy of the economic administrative districts. General supervision and methodological direction is in the hands of the Ministry of Higher and Specialized Secondary Education of the Ukrainian S.S.R., as well as of the divisional offices and boards of the educational institutions controlled by the various Ministries, Departments and Councils of National Economy.

The training courses for skilled workers in specialized secondary educational institutions follow on from the 8-year school course and last 4 or 5 years, although certain specialists have to complete the full secondary course and then undergo three or three and a half years' training.

Attention is paid to the need for bringing vocational and technical education into line with industry, and to the need for workers for the national economy and the cultural life of the Republic.

Specialized secondary education in the Ukraine began early in the nineteenth century. At first, specialists were trained chiefly to work in education and agriculture, and it was not till the end of the century that provision began to be made for technical secondary education. Whereas in 1914 there were only 88 specialized secondary educational institutions in the Ukraine, with a total enrolment of 12,500 pupils, by the beginning of the year 1958/59, there were 588 such schools, with a total enrolment of 351,128.

The Gosplan (State Planning Committee) of the Ukrainian S.S.R. draws up overall plans for the training of skilled workers. For intermediate level technicians the State lays down standard syllabuses for training for industry, building, transport and agriculture in the technicums; and for public health, education and culture in the colleges.

Young people are admitted to the day courses in technicums and colleges up to the age of 30, but there is no age-limit for admission to the evening and correspondence courses for people engaged in industrial work.

Students are enrolled annually in the technicums and colleges of the Ukrainian S.S.R., in accordance with the rules of admission and the plans approved by the Ministries, Departments and Councils of National Economy. Three months before the end of the course, students in their final year at specialized secondary educational institutions are appointed to posts in the branch of the national economy corresponding to their special qualifications.

In industrial technicums with a 4½-year course, the curriculum provides for the following allocation of instruction time: general education, 1,500 hours; general technical education, 780; specialized work, 1,430; physical training, 230; practical vocational instruction, 1,090; practical instruction in special subjects (technological and pre-diploma practice), 340; industrial work in special subjects, 1,930.

In the case of students in specialized educational institutions who are admitted to the 3-year or 3½-year course after completing the full secondary school course, the curriculum does not include general education subjects.

The courses at specialized secondary schools give students, in addition to general knowledge of secondary school standard, the necessary theoretical and practical training for the special fields of work they have chosen; in specialized technical and agricultural secondary schools students also obtain a qualification, with the award of a grade, in one of the trades covered.

Teacher training schools

The total number of specialized secondary schools includes 37 teacher training schools which are under the authority of the Ministry of Education. Most of these have departments which train teachers for grades 1–4 in the 8-year schools; in other teacher training schools there are departments which train kindergarten teachers, teachers of handwork for grades 5–8 in the 8-year school, music teachers for kindergartens, singing teachers for grades 5–10 in secondary schools, and physical education teachers for grades 5–8 in the general 8-year schools.

The courses last 2 years, except those for singing, handwork and music teachers, which last 2 years and 10 months.

For admission to any section of a teacher training school, students must have completed the general secondary school course. Admission is competitive, depending on the marks gained in the entrance examinations. Where marks are equal, preference is given to students who have done a period of industrial work.

The curricula are approved by the Ministry of Higher and Specialized Secondary Education of the Ukrainian S.S.R. and provide for not more than 36 hours' work a week in any of the sections. On the basis of these curricula, a permanent time-table is drawn up for each semester, allowing for a uniform work-load for students each day of the week. In this time-table, the first periods are devoted to the more difficult subjects, calling for intellectual effort (languages, mathematics, psychology, education, etc.), and the later periods to the easier subjects, or those which require more physical work (drawing, singing, handwork, work in the school experimental plot, elocution, etc.).

Annual winter and spring examination sessions are held, when the students take examinations covering the whole syllabus in two, three or four subjects (the number of examinations varies in the different sections). When the whole curriculum has been completed, state examinations are held in two, three or four of the special subjects.

Students who complete the course and pass the state examinations are guaranteed work in their special field of teaching.

Correspondence and evening schools

For those citizens of the Republic who are employed in industry, agriculture, administration and various forms of cultural work, there is a whole system of correspondence and evening courses which they can take while continuing their employment. This type of education is available to all citizens of the Ukrainian S.S.R. who have reached the required educational standard (the 8-year general school course or the full secondary school course).

To provide favourable conditions for the education of workers engaged in industry, the Government of the Ukrainian S.S.R. has instituted a number of privileges, such as additional leave with pay (contributed by the factory): (a) for the period when laboratory work is being carried out, or the examination period for first and second year students in specialized secondary evening schools—10 calendar days, and for correspondence course students—30 calendar days; (b) for students in the third and later years at specialized secondary evening schools—20 calendar days; and for correspondence course students—40 calendar days; (c) for the period of the state examinations for specialized evening and correspondence schools—30 calendar days; (d) for the period when students at specialized evening and correspondence schools are preparing and defending their diploma projects—2 months.

It is laid down that, for a period of 10 academic months before the beginning of the diploma project or before the state examinations, students at specialized evening and correspondence schools shall have one day a week free from their work for preparation; they are then paid 50 per cent of their normal wage.

Students at specialized secondary correspondence schools receive 50 per cent of the cost of their return journey to the school to carry out laboratory work, to sit for tests and examinations once a year, and also to prepare and defend their diploma project or to sit for the state examinations; the money is contributed by the factories or institutions where they work.

On the recommendation of the educational institutions concerned, the directors of the factories and institutions where students work may grant students in the final years of courses at specialized evening or correspondence schools a further month's leave of absence to enable them to gain direct industrial experience of work in the special field they have chosen, and to prepare suitable material for their diploma projects. During the period of leave referred to, students are paid on the usual basis.

In places where there are large numbers of students, tutorial centres are set up, and branches of specialized secondary educational institutions are opened, where tutorials are held and laboratory and practical work performed.

Instruction for shift workers is organized so that those who are on the second shift can attend 'evening school' courses in the morning. Students in the correspondence evening (shift) and day school sections may transfer at will to any other of these types of instruction, as the curricula and programmes are the same for all three types of courses. The correspondence course and the courses in evening (shift) schools are both one year longer than the day course.

Out-of-class activities

In order to develop independence and initiative, general secondary school pupils are encouraged to take part in the management of the school's corporate life. In every school, a pupils' committee is elected from among the pupils, which, together with the Young Communist League organizations, helps the school authorities and the teachers to inculcate in the pupils a conscientious attitude toward their responsibilities, to improve school discipline, to develop the pupils' social initiative and independence, to inculcate good social habits and to unite all the pupils in a comradely group with a sense of duty and a feeling for the honour of their school.

The pupils' committee assists the teachers in carrying out measures designed to improve the quality of the pupils' knowledge and progress, plays a leading part in the pupils' self-government in the classroom, co-operates with the Young Communist League in producing the schools' wall newspaper, helps in carrying out social and political work and in arranging cultural, physical culture and sports activities for the people, and encourages the pupils to undertake socially useful work.

A considerable amount of out-of-school work is regularly carried on by secondary schools in the Ukrainian S.S.R. The children's interests and desires are taken into account, and the work is designed to inculcate in the pupils a love of knowledge and work and respect for working people, to foster in them a materialist and humanist outlook, and to develop independence in all types of activity—technology, art, nature study, physical culture, sport and tourism. Special attention is paid to the development of technical inventiveness, both in the schools and in other institutions, to the invention by the pupils of new tools, patterns and technical mechanisms, and to the promotion of proficiency in agricultural work.

Every general secondary school in the Ukraine has its physical culture group, to which the majority of the pupils belong. The pupils take part in various branches of sport—field and track athletics, swimming, basketball, volleyball, skiing, etc. The pupils themselves play an active part in organizing the school's leisure-time sporting activities. Apart from the sports activities carried on in the ordinary schools, the pupils' attendance at sports schools also contributes to their physical development and their sporting prowess. There are 114 schools of this type in the Ukrainian S.S.R.

Republic-wide *Spartakiads* (sports contests) for schools are held annually in the Ukraine. Fifteen different branches of sport are represented in the programme. As a preliminary to these contests, district, city and regional competitions for schools are held in the country districts and the towns. In 1958–59 alone, over 3 million pupils attending general schools took part.

All out-of-school work with schoolchildren is conducted under the guidance of the Ministry of Education of the Ukrainian S.S.R. and various bodies under its jurisdiction, e.g., the Republican Centre for Young Naturalists, the Republic Centre for Young Technicians, the Republican Centre for Young Tourists, the Republican Centre for Art Education, numerous regional centres for young naturalists, tourists and technicians, Pioneers' Palaces and clubs, and other out-of-school institutions.

TRENDS AND PROBLEMS

The present system of public education in the Ukrainian S.S.R. is truly democratic, and meets the needs of Soviet society, which has entered on a period of large-scale building-up of Communism; it ensures that the general secondary school plays an active part in all the creative activities of the Soviet people, and that the people receive an all-round education, equipping them with a sound knowledge of the principles of science and at the same time preparing them for systematic physical work and for taking part in the production of those material goods which are needed by society.

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STATISTICS[1]

Population (census 15 January 1959): 41,869,000.
Area: 222,625 square miles; 576,600 square kilometres.
Population density: 188 per square mile; 73 per square kilometre.

1. Educational statistics included with those of the U.S.S.R.

THE EDUCATIONAL SYSTEM

In 1910 the four self-governing colonies of the Cape Province, Natal, the Orange River Colony and the Transvaal, each with its own system of education (the result, in the main, of Dutch, English and Scottish ideas) came together to form the Union of South Africa, the boundaries of the old colonies becoming the boundaries of the new provinces.

Section 59 of the Act of Union states that the Union Parliament has full power to make laws for the peace, order and good government of the whole country and that, in establishing provincial councils, the legislative power of the Central Government is in no way diminished. Whilst certain definite powers and functions are allocated to the provinces, it is none the less possible for the Union Government to abolish provincial government altogether.

Under Section 85 of the Act, the control of education is divided, the Central Government taking over 'higher education' and the provincial governments 'education other than higher', that is, primary and secondary education. Developments in vocational and special education and also in the field of native education have made the dividing line between 'higher education' and 'other than higher' difficult to define. By a succession of parliamentary Acts, the Union Government has gradually assumed control of certain types of education which it considers should be handled on a national basis, both because of the nature of the education to be provided and its expense. Thus, industrial education, agricultural education, special education, vocational and technical education and Bantu education have been declared to fall under 'higher education' and therefore under the control of the Central Government.

'Higher education' was intended to be education at university level, but the anomalous position now obtains that it covers all forms of education from nursery school to post-doctoral study. A further anomaly is that the training of primary and, to a limited extent, secondary teachers at post-secondary level is carried on by the provincial governments.

Factors affecting the provision of education

South Africa is a country of many races, with separate schools for the children of European, Bantu, Asiatic and Coloured parents.

The population figures are: Union, 14.1 million: European 2.96 million, Bantu 9.46 million, Asiatic 0.4 million and Coloured 1.3 million. Ethnic groupings, expressed as percentages, are (1951): European 20.9, Bantu 67.6, Asiatic 2.9 and Coloured 8.7. The Commission for the Socio-Economic Development of the Bantu Areas within the Union of South Africa (1955) stated that the trend was towards a European population of approximately 14.7 per cent of the total, Bantu 68 per cent, Asiatic 4.4 per cent and Coloured 12.5 per cent. From an educational standpoint, therefore, increased numbers and proportions of non-European peoples must be educated. In addition, in the foreseeable future stage of their development the non-European groups will have, as they have at present, a much higher proportion of children of school-age than the Europeans, who are, so to speak, an older population.

The discovery of gold, diamonds and many other minerals has brought about very considerable development in South Africa. It is in the field of secondary industry, however, that the most significant developments are taking place. In 30 years the gross output has been multiplied by 17, and the scope for employment for both Europeans and non-Europeans has expanded greatly.

As a result of these developments, urbanization has gone on apace, as is shown in the following table.

URBAN DISTRIBUTION OF POPULATION (UNION)
(in percentages)

Year	European	Bantu	Asiatic	Coloured
1911	51.6	12.7	unknown	unknown
1936	65.2	17.3	66.3	53.9
1951	78.4	27.2	77.5	64.7

These figures show the pronounced drift to the towns on the part of all sections of the population. Approximately two-thirds of the Bantu (mainly agriculturists) live in reserves or on farms occupied by Europeans. Secondary industry, however, in the urban areas, employed over 300,000 Bantu workers in 1952, almost three-fifths of the total labour force in this sector. The majority is engaged in manual, unskilled work, but steady expansion and mechanization are providing increased opportunities for semi-skilled and even skilled work.

The composition of the labour force in South Africa is changing rapidly. The proportion of Europeans in certain industries like clothing and textiles, furniture, food, and leather has fallen considerably and the proportion of Bantu and Coloured workers has risen. This applies also to Bantu women, large numbers of whom have entered industrial employment in recent years.

The influx of large numbers of Bantu into the towns has resulted in a permanently-established urban population, but a large proportion of the workers are migrant labour. The absence of Bantu males from the reserves for long periods has had a serious effect on the stability of the rural, peasant, patriarchal and tribal social structure. In turn, the nomadic labour force of the cities is seriously affected by the environment in which it lives and by the absence of the tribal and family discipline. Problems of satisfactory

remuneration, housing, education, recreation and general control have to be solved. It is clear that here education has a major role to play.

Language. The European population comprises two main groups, English- and Afrikaans-speaking. Those whose home language is Afrikaans represent about 57.6 per cent of the total European population, English about 40.1 per cent, and others 2.3 per cent.

The Act of Union (1910) laid down that English and Dutch (later to become Afrikaans) are the official languages of the country. In all government schools the second language is compulsory, bilingualism having become one of the aims of education in South Africa.

The principle of mother-tongue instruction has been accepted, with the result that two types of school have developed: single medium schools (the second official language being taught as a subject) and parallel medium (in effect, two single medium schools under one roof and one principal). An idea of the proportion of children being taught in Afrikaans or English may be obtained from the following table.

MEDIUM OF INSTRUCTION OF EUROPEAN PUPILS (1958)

	Only English	Only Afrikaans	Both
Primary . . .	32.9%	65.3%	1.8%
Secondary . . .	34.8%	62.4%	2.8%

The manner of regulating the question of which language is to be regarded as the home-language of the child may vary from one province to another. In the Cape Province, Orange Free State and Transvaal, the home language is defined as that which is 'better known and understood by the pupil'. It is the school principal's function to decide this matter; where there is doubt (i.e. where the child is equally good in both languages) then the parent can choose the medium of instruction. In Natal, the 1942 Education Ordinance establishes that: 'The medium of instruction of every pupil in every government school for Europeans shall . . . be that official language selected by the parents.'

Responsibility for education

Responsibility for education rests with the central government, the four provincial governments and with private agencies.

The Union Government. Certain education functions are discharged by the Union Government through various State Departments, each under a Minister of State, e.g. (a) the Department of Education, Arts and Science; (b) the Department of Social Welfare, which is responsible for child welfare and a number of related institutions; (c) the Department of Agriculture, which is responsible for agricultural colleges and faculties, extension service and forestry schools; (d) the Department of Mines, which is responsible for miners' schools; (e) the Department of Defence, which is responsible for school cadets; (f) the Department of Bantu Administration and Development, which is responsible for Bantu education. Of these, (a) and (f) are the more important departments and will be described more fully.

The Department of Education, Arts and Science is under a Minister of Education and a Secretary for Education. It is responsible for the universities; although these are autonomous institutions, they derive two-thirds of their revenue from government sources. A Committee of University Principals acts in an advisory capacity to the Minister of Education. Admission to the universities is a Matriculation Exemption pass in the examination controlled and conducted by the Joint Matriculation Board, a body consisting of representatives of each university, the provincial, Union, South-West African and Southern Rhodesian Education Departments, and of teachers in public and private secondary schools.

The Union Department also has responsibility for special schools (administered under the terms of the Special Schools Act No. 17 of 1937); 'schools of industries' for children in need of care, and reformatory schools (both administered under the Children's Act No. 17 of 1937); and vocational schools, mainly at the secondary level administered under the Vocational Education Act No. 70 of 1955).

The Union Department of Bantu Administration and Development includes a Division of Bantu Education with a head who is the State Secretary in charge of Bantu Education. Under the Secretary is an Under-Secretary for administration and a Deputy-Director on the professional side. There are six regions (Northern Transvaal, Southern Transvaal, Transkei, Ciskei, Orange Free State and Natal) each under a Regional Director who has inspectors (European) and sub-inspectors (Bantu) to assist him.

Native education, as it was then called, started about 150 years ago, through the enthusiasm and vigour of the churches. Up to 1850 the missions bore the full burden of the cost. During the period 1850–1925 the State began to intervene by making grants to Bantu schools, which were then almost entirely denominational. Gradually, through supervision of curricula, inspection and the training of teachers, the provinces began to exercise greater control. Native communities, too, began to take more interest in the schools. From 1926 onwards the provinces exercised still more control over subsidized schools though the funds came from the Central Government and not from the provincial coffers. There were many difficulties of co-ordination. The number of aided mission schools, however, grew rapidly from some 2,700 in 1926 to nearly 4,400 in 1945. In the latter year there were only 230 government schools.

In 1951 a government Commission on Native Education stated that native education was not an integral part of the life of the Bantu; that it had no organic unity but was split into a bewildering number of different agencies, none of which was planned properly as part of a whole; that it was conducted without the active participation of the Bantu as a people, either locally or on a wider basis; that it was financed in such a way that it achieved a minimum of educational effect on the Bantu community and made planning virtually impossible. The commission's recommendations became the blueprint for the Bantu Education Act (No. 47 of 1953) which transformed the entire pattern

of native education. The main points of the Act were:

1. The education of the Bantu was to be removed from provincial control and transferred to the Union Government as part of a Division of Bantu Affairs, which would integrate a uniform educational policy with the development of the Bantu community as a whole. It should be noted that the education of the Bantu was to be a separate entity from that of the rest of multi-racial South Africa; control was not to be exercised by the state educational organization, the Union Education Department, but by the state department controlling native affairs. There was to be centralized control but decentralized administration in six regions.
2. Local control of schools, under the supervision of the State, was to be entrusted to Bantu organizations, which would learn to render service to their own communities. The mission school was to be replaced by the community school. Churches would have the option of retaining control of their existing schools as private institutions with a subsidy reduced to 25 per cent of the salaries and allowances payable to approved teachers for a limited period, or to relinquish control of these schools to Bantu community organizations. (As a result of this option, some 5,800 mission schools had been transferred to the State by 1958.)

   Under the new arrangements five types of Bantu schools are recognized: private unaided schools, state-aided mission schools, state-aided farm schools, state-aided community schools, and government Bantu schools. Since 31 March 1955 all Bantu schools, other than government Bantu schools, have had to be registered.

   School boards and school committees composed of Bantu, nominated partly by the officials of the Department and (outside urban areas) partly by the chief or headman, have been set up.
3. The Central State Department was to take over all teacher training institutions.
4. The commission recommended that the responsibility for financing Bantu education be shared by the State and the Bantu community, with the latter gradually assuming more of the burden.

The Government, however, pegged the amount to be set aside from general revenue for Bantu education, the rest of the funds to be provided by an allocation from the Native General Tax. Expansion, therefore, means increased taxation for the Bantu community.

Under these provisions, a word may be added on some organizational aspects of Bantu schooling. The prevailing types of institution are lower primary schools (with a 4-year course), higher primary schools (the subsequent 4-year course), combined primary schools (which are the most common type), secondary schools (with courses of 4 and 5 years), combined primary and secondary schools, and industrial schools. The distribution in classes of Bantu children is interesting. In 1955, of the 1,005,774 children attending school, 466,527 were in the first two years, and over 70 per cent of the total were in the first four years. Over 90 per cent of those attending school were in the primary classes, and only 1,000 children were in the last two years of the secondary school. The secondary school figures will improve fairly rapidly, however. The statistics indicate that there are two main problems: to secure the enrolment of more children (over 50 per cent of the school age population is enrolled at present), and to improve the holding power of the school.

The importance of mother-tongue instruction has been recognized, especially in the lower primary school. Bantu schools provide for the use of the four main Bantu language groups. The two official languages of the country are introduced in the first two grades.

Provincial governments. They control primary and academic secondary education for European, Asiatic and Coloured children. Each province has an elected Provincial Council under an Administrator and an Executive Committee. The direction and control of education is vested in the Administrator. Under him there is a Department of Education, the head of which is styled a Superintendent-General in the Cape Province and Director of Education in the other provinces. This official, who is a professional teacher, is supported by a Deputy-Director of Education, a Chief Inspector of Education, and a team of inspectors who act as field officers. The administrative staff are provincial administrative officials—not teachers.

Each province conducts education according to the terms of Education Ordinances passed by the Provincial Council and approved by the Governor-General. The Director of Education in the Transvaal is required under the Education Ordinance of 1953 'to promote education in this Province and the progressive development of institutions devoted to the purpose and through his guidance and control to carry out the provincial educational policy'.

The Cape Province, the Orange Free State and the Transvaal have a system of school boards composed of lay personnel, who are not paid, and a salaried secretary. There are 20 such boards in the Transvaal, the largest having over 150 schools with over 70,000 children and the smallest some 20 schools. Two-thirds of the members of a board are elected by the parents of school-going children in provincial schools, the other third being nominated by the Administrator. In the Cape, there are over 100 school boards composed in much the same way as the Transvaal boards but elected by the registered voters of the districts involved. In the Orange Free State boards are elected from school committees. In general, these boards exercise supervision over provincial institutions, including Coloured and Indian schools. They receive money for the maintenance of school buildings, furniture and so on, enforce compulsory school attendance, and have an important say in the appointment and promotion of teachers. They have no taxing powers, unlike such bodies in a number of other countries, and no responsibility for financing education.

In the Cape Province, Orange Free State and Transvaal, school committees are an important part of the educational system. They are statutory bodies elected by the parents of each state school, their functions being broadly as follows: (a) to exercise general supervision over a school, provided that the scope and manner of such supervision may be defined by the head of the Department of Education; (b) to advise the school board in matters affecting the welfare of the school; (c) to deal with the representations of the parents. In conjunction with the school boards these committees select teachers, subject to the approval of the Department which makes the final appointments.

In these three provinces, therefore, in spite of centralized control by the Department of Education, the rights of parents to participate in the control of education are recognized and put into practice. In Natal, however, there are no local authorities for education. All matters educational are controlled directly by the Department of Education at the provincial capital. However, where such are desired, provision is made for school advisory committees with purely advisory functions. In all four provinces parent-teacher associations, which have no statutory powers, are rapidly becoming important factors in education.

The provinces are responsible for the financing of primary and secondary education from revenue obtained from Union subsidies and provincial taxation. The Financial Relations Consolidation and Amendment Act (No. 38 of 1945) lays down the principles and procedure. Each year an amount is paid from the Consolidated Revenue Fund of the Union to each province equal to 50 per cent of the net expenditure for that year, subject however to certain limitations. In the Cape Province, primary and secondary education for Europeans and non-Europeans, except for a few schools for Europeans, is free in all classes up to and including standard 10 or until the pupil attains the age of 19 years.

In Natal, primary education is free in schools for Europeans, Coloureds and Indians and in Indian government-aided primary schools. Two government primary schools for European boys charge fees. Books and school requisites are provided free for Europeans and Coloureds in government and in certain aided schools. In primary government schools for Indians books are provided free for indigent pupils. Except in a few European schools, no fees are payable in government secondary schools for Europeans, Coloureds and Indians. In the Transvaal all provincial education, even above the upper limit of compulsory education, is free and all school equipment is provided by the Administration—much of it, however, on a pound for pound basis. In the Orange Free State all provincial education up to and including standard 10 is free but certain approved schools are allowed to charge tuition fees.

There is no Union legislation in regard to compulsory education, which is a provincial responsibility and therefore varies. In all four provinces the onus is on parents to see that their children attend a state or registered private school, unless exemption is obtained. The statutory age for starting compulsory schooling is 7, but the general practice is to accept children in the year in which they turn 6, with the result that the majority of South African children go to school when they are 5 years of age. This affects the number of years they spend at school and also the age at which they complete the secondary school course; the latter is lower than it was a decade ago. In most parts of South Africa compulsory education legislation requires school attendance up to a certain minimum age but exempts pupils who are below that age if they have passed a specified class or grade. There is, however, a trend in favour of requiring all children to stay at school until they reach the prescribed leaving age.

The Cape Province permits a pupil whose sixteenth birthday falls in the first half of the year to leave on the attainment of the birthday; if the birthday falls in the second half of the year, then the pupil must attend until the end of the year. However, a pupil who has passed standard 8 (i.e. 10 years of school for a normal child) may leave school.

The Orange Free State requires that the age of 16 must be reached irrespective of scholastic attainment. In Natal, pupils must reach the age of 15 years or pass standard 8. Since the beginning of 1957, Transvaal pupils must remain at school until the end of the year in which they turn 16.

Compulsory school attendance applies only to European children in the Transvaal and the Orange Free State. In Natal, the law applies to European and Coloured children but not to Indians; in the Cape Province, it applies to European children, but the Coloured Education Ordinance, 1945, provides that where sufficient and suitable school accommodation exists the Administrator may order compulsory attendance for Coloured children of 7–14 years of age.

Private agencies. There are two types of school which fall outside the financial system of education: (a) the private school which is financially independent, and (b) the aided school, i.e., a private school which has applied for and obtained financial assistance from the provincial administration.

South African parents support the provincial systems of education, over 94 per cent of children attending such schools. A number, however, mostly English-speaking, prefer the English tradition of the single-sex boarding school, usually denominational. The number of children attending such schools has increased over the years, as the figures in the following table show.

NUMBER OF CHILDREN ATTENDING PRIVATE OR SEMI-PRIVATE SCHOOLS

Year	Aided schools	Independent schools	Total
1946	12,134	36,022	48,156
1955	20,932 (130 schools)	43,823 (261 schools)	64,755

Of the independent schools, 111 were undenominational, 117 Roman Catholic, 15 Anglican, 2 Methodist and 2 Presbyterian; there were no Dutch Reformed Church schools. The figures for aided schools follow much the same pattern. Natal has the highest proportion of such schools, with the Cape Province close behind. In all the provinces private schools must be registered as schools approved by the Director of Education. Conditions vary, but in general there is a measure of control through inspection and approval of the curriculum.

Where aid is granted, it is usually in the form of payment of a proportion of the salaries of qualified staff. Provision is made in the Orange Free State and Natal Ordinances for the payment of a subsidy to private schools. The Transvaal subsidizes only those established before 1953, and the Cape Province does not assist denominational schools apart from a limited number of church primary schools for Europeans and mission schools for Coloured children.

In organization and curriculum private schools do not differ greatly from state schools. As a rule they take the same public examinations.

Under the Bantu Education Act (No. 47 of 1953), all private schools for Bantu must be registered and may be inspected. There has been a great decrease in the number of such schools since 1953.

Structure of the school system

This may be seen in the diagram on page 1117, which reflects a generalized pattern for the Union as a whole. The primary and secondary schools are a provincial responsibility, and administrative aspects have been treated above. Some further remarks on organization in general may usefully be given here. The provision of separate schools for Coloured and Indian children within the provincial framework will also require explanatory notes.

The provincial school pattern is 7–3–2; a 7-year primary course organized as two grades and five standards, a junior secondary stage (standards 6 to 8), and a senior secondary stage (standards 9 and 10); however some 8-year primary schools still exist. As a rule, primary and secondary classes are in separate institutions with a clear-cut division at the end of standard 5. The all-range schools, taking children from the infant grades to standard 10, are a diminishing group.

Co-education is the practice at primary school level. In general, Afrikaans-medium high schools are co-educational and a large proportion of English-medium likewise. Further classification of schools, in terms of the medium of instruction, also occurs.

Coloured education. Nearly 90 per cent of the Coloured population are to be found in the Cape Province. They have no language of their own, using the official language most common in the area where they live; thus in the Cape and the Orange Free State over 90 per cent use Afrikaans, and in Natal over 60 per cent use English.

In the northern provinces, practically all Coloured schools are state schools which are treated as ordinary government schools under provincial control. In the Cape Province, a separate branch of the Departmental Headquarters deals with Coloured education; over 1,000 mission schools, falling under the management of church bodies, are substantially aided by the province, the remaining 20 per cent of the children attending undenominational schools. The Cape policy is not to subsidize secondary schools.

Indian education. Over 80 per cent of the Union's estimated Asian population of 431,000 (1957) is concentrated in Natal where the Indian population now outnumbers the European population.

A rapidly-increasing and youthful population is changing from agricultural labouring class to town-dwellers. The demand for education is increasing every year, and enrolments have risen from 8,500 in 1925 to 80,000 in 1955. The great majority of schools are of the government-aided type, the Indian community and the Natal Provincial Administration each contributing equally towards new school buildings. However, Indian education is becoming a provincial responsibility to a far greater extent than in the past, and all Indian teachers are now employees of the provincial administration.

In spite of the fact that there is as yet no compulsory education for Indian children in the Transvaal or in Natal, the average attendance of those attending school is over 90 per cent. The Provincial Education Committee (1946) recommended that Indian children should be permitted to attend school, if accommodation were available, at the beginning of the year in which they turn 6 and that once they are admitted they should be compelled to attend until they had passed standard 4 or until their 13th birthday. This recommendation was not carried into effect because

GLOSSARY

NOTE. Except for pre-primary schools promotion is by internal examination up to the senior certificate or matriculation examination at end of secondary course. In Natal there is also a public examination at end of third year of secondary school.

agricultural college: vocational training school of agriculture with courses at upper secondary and post-secondary level.

junior secondary school: lower general secondary school providing terminal course for pupils who do not wish to continue studies beyond compulsory school age.

military college: post-secondary vocational school preparing for careers in the armed services.

military gymnasium: vocational school preparing for careers in the armed services with one-year courses at upper secondary and post-secondary level.

nursing college: specialized vocational training school at upper secondary level.

nursing college: specialized vocational training school at upper secondary level.

nursery school: private (sometimes subsidized) pre-primary school.

private business and commercial colleges: vocational secondary schools of commerce.

secondary or high school: general secondary school.

special schools for physically handicapped children: State residential schools providing primary and secondary education of both general and vocational nature for blind, deaf, crippled children, etc.

State schools of industries and reformatories: schools for delinquents, vagrants or destitute children.

teacher training college or training college or college of education: teacher training college with courses at two levels, post-secondary and postgraduate.

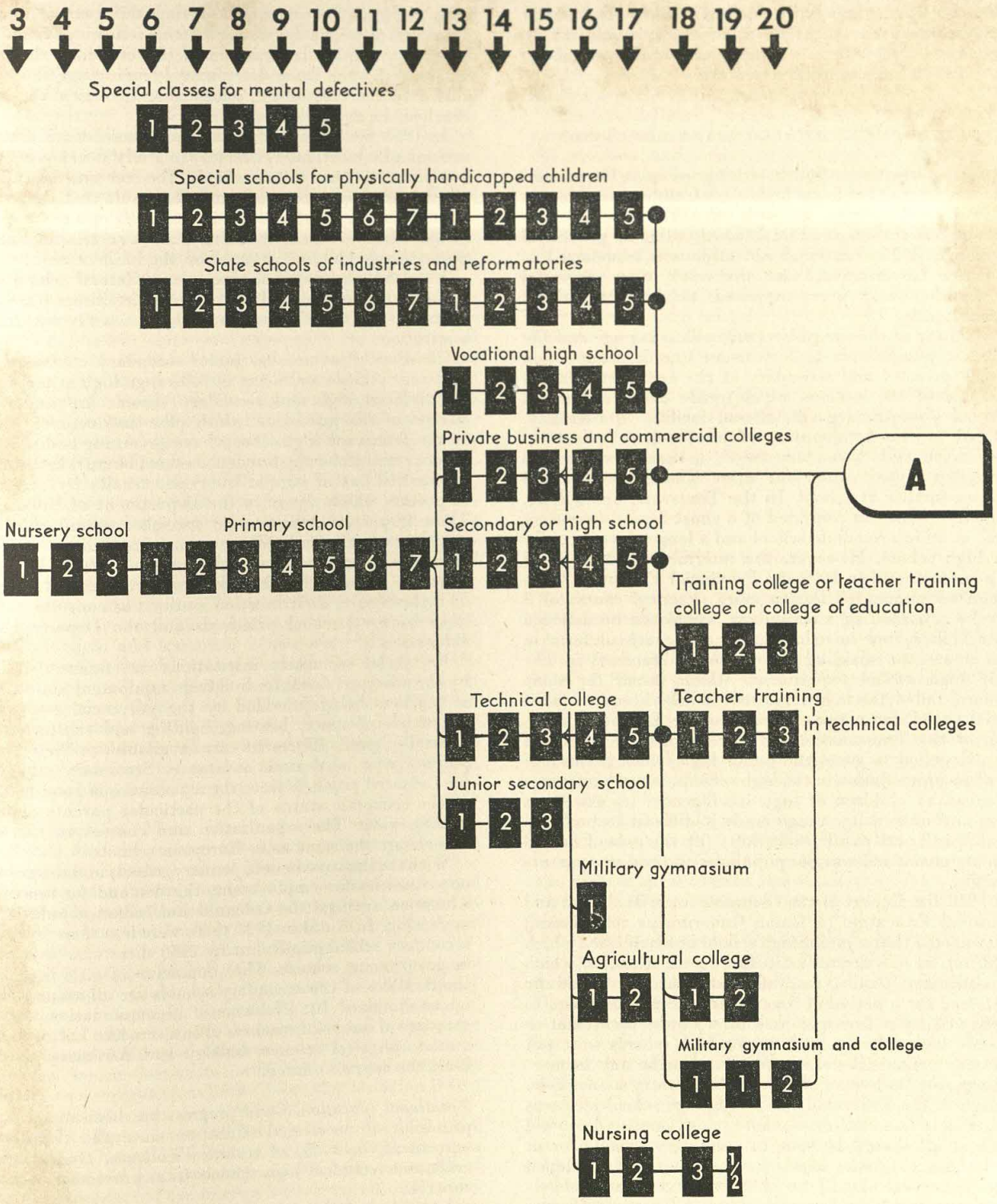
teacher training in technical colleges: teacher courses conducted at the technical colleges, and preparing teachers of vocational subjects, physical education and nursery education.

technical college: multilateral vocational secondary school with day classes and also evening courses for apprentices, sometimes going beyond the secondary level.

vocational high school: vocational secondary school with separate institutions for technical training, home economics and commercial courses.

HIGHER EDUCATION

A. University


3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Special classes for mental defectives
1 2 3 4 5
Special schools for physically handicapped children
1 2 3 4 5 6 7 1 2 3 4 5
State schools of industries and reformatories
1 2 3 4 5 6 7 1 2 3 4 5
Vocational high school
1 2 3 4 5
Private business and commercial colleges
1 2 3 4 5
A
Nursery school
1 2 3
Primary school
1 2 3 4 5 6 7
Secondary or high school
1 2 3 4 5
Training college or teacher training college or college of education
1 2 3
Technical college
1 2 3 4 5
Teacher training in technical colleges
1 2 3
Junior secondary school
1 2 3
Military gymnasium
1
Agricultural college
1 2
1 2
Military gymnasium and college
1 1 2
Nursing college
1 2 3 1/2

of shortage of accommodation and of teachers, but steady improvements are seen in this direction. It should not be long before it will become possible to introduce compulsory education for Indian children in Natal.

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary education in South Africa grew up on the pattern of the traditional academic high school. Differentiation was however being sought as early as 1910 and separate technical institutions were established, all under provincial control. By 1925 vocational education was transferred to the Union Government, with the result that provincial secondary schools were supposed to provide general education only.

The raising of the compulsory school-leaving age and the gradual crystallization of a clear-cut line of demarcation between primary and secondary at the end of standard 5 were two of the reasons which made the provision of increased post-primary educational facilities a necessity. This led to the development of intermediate schools in urban areas and 'secondary tops' in rural areas, which provided a 3-year course for those who did not intend to go on further at school. In the Transvaal, up to 1937, secondary education consisted of a short 3-year secondary course at an intermediate school and a longer 5-year course at a high school. However, the intermediate school was not a success, and in 1939 the Provincial Education Commission recommended that a more practical course of 3 years be provided in a secondary school—to be called a junior high school in urban areas and a school farm in rural areas—the dividing line to be at standard 5. The junior high school experiment, which lasted for some 15 years, failed for many reasons; chiefly because: (a) it created social distinctions foreign to the European population of the Transvaal; (b) duller children in the cities were compelled to go to the junior high school because of lack of accommodation in the high schools, where preference was given to children of high intelligence; (c) the short course and narrow age range made it difficult to build up school spirit and pupil leadership; (d) the school lacked adequate goals, and was not popular with teachers, parents or pupils.

In 1948 the Report of the Commission on Technical and Vocational Education (a Union Government commission) recommended that a junior high school be established which would not be a separate institution but a school to which all ex-primary pupils, i.e., after standard 5, would be transferred for a period of 3 years of general education, to be followed by a 2-year course in separate vocational or academic high schools. Such junior high schools were not to provide organized vocational education in any form.

This report had some effect on the country as a whole, although in the Transvaal the junior high school idea was rejected as it was considered that: (a) all pupils who could benefit at all should be sent to secondary schools for at least 3 years; (b) junior high schools as they had developed in the Transvaal should be abolished, secondary schools making provision for 5-year courses; (c) more than one course should be offered wherever possible; (d) standard 5 should be the highest class in a primary school, and pupils who reached the age of 13 during the year should be transferred at the beginning of the following year to a secondary school, irrespective of the standard they had attained; (e) the compulsory school leaving age should be raised to the end of the school year in which the pupil reached the age of 16.

In 1955 the Transvaal Provincial Administration sent a mission of educationists overseas to study developments in comprehensive secondary schools. The recommendations of the mission were accepted, with the result that since 1958 the Transvaal has been engaged in developing a type of comprehensive school enrolling a cross-section of normal post-primary children grouped on the basis of ability.

Natal has developed a type of multilateral school with a number of courses leading to Junior Certificate (standard 8) and Senior Certificate (standard 10), usually within one institution.

The Cape Province has junior secondary courses, some in 3-year schools and some in full-range high schools.

Provincial high and secondary schools are under the control of the provinces, which plan and control policy. In the Transvaal, high schools have governing bodies which do not come under the provincial school boards. Inspections are carried out at regular intervals, usually by panels of inspectors which report to the Department of Education. These inspectors, who are not specialist secondary school inspectors but inspect all provincial institutions within a circuit or area, are usually graduates who have had considerable experience as teachers and principals of primary or high schools; their function is to act as consultants and links between school principals and the Department of Education.

Provincial secondary institutions are financed wholly by the province, funds for buildings, equipment and salaries of teachers being provided by the provincial exchequer. Standards of space, heating, lighting and sanitation are generally good. Bursaries are available to help those parents who need such assistance. Secondary education for Coloured pupils is free; the attendance is good because of the economic status of the particular parents and the goal in view. The organization and courses in Coloured schools are the same as in European schools.

With the improvement in primary schools and the growing opportunities for employment, the demand for secondary education amongst the Coloured and Indian populations is increasing. In Natal in 1924 there were less than 50 Indian secondary school pupils, but by 1956 there were over 3,500 in government schools. The proportion of girls is, as yet, small. Many of the secondary schools are all-range schools up to standard 10; problems of accommodation and the shortage of qualified teachers of subjects like Latin, mathematics, physical science, biology and Afrikaans tend to limit the courses offered.

Vocational education. Good progress has been made in the provision of vocational education since the transfer by agreement, in 1925, of technical colleges, trades, housecraft and technical high schools from provincial to Union control.

In 1954, the Cabinet re-affirmed that vocational education 'was and would remain a function of the Central Government'. As a result of the passing of the Vocational Edu-

cation Act in 1955 the technical colleges are in process of being taken over completely by the Union Education Department, the re-organization to be completed by 1960. This will make the technical colleges free instead of fee-paying institutions, bringing vocational education of a secondary type into line with provincial secondary education. The main courses of a secondary nature are technical, commercial and domestic science. Part-time study, however, accounts for over 85 per cent of enrolments.

Under the new organization, vocational schools will fall directly under the control of the Union Department of Education, Arts and Science in regard to buildings, salaries, equipment, etc. Inspection is carried out by departmental inspectors. Bursaries are available to help parents.

The Apprenticeship Act (1944) regulated the training and employment of apprentices, apprenticeship committees being established which are responsible for the detailed administration of the Act in local areas. Conditions of apprenticeship are as follows: (a) Minors under the age of 15 may not be employed; the educational qualification is usually a minimum of standard 6; (b) Apprenticeship may last from 3 to 5 years, dependent upon remissions for educational qualifications and pre-apprenticeship training, e.g., in a trades school. (c) Where facilities are available, all apprentices must attend technical classes during the first two years of apprenticeship on one day a week during ordinary working hours, or alternatively must follow correspondence classes. The apprentice courses are offered in technical colleges and technical high schools.

In 1946 the M.L. Sultan Technical College in Durban was declared a place for higher education; since then, progress has been rapid and a number of part-time branches have been opened in the environs of Durban. The college admits Indian, Coloured and Bantu students, over 90 per cent being part-time. Courses are offered in general education, commercial subjects and secretarial work, homecrafts and catering. In addition, the technical high school provides full-time training in motor mechanics, woodworking, cabinet-making, bricklaying and radio.

Bantu education. Much secondary work was originally combined with the primary school; the present policy is to separate the secondary school from the primary, the latter ending at and including standard 6. So far there is a limited number of high schools leading to standard 10, most schools being secondary and leading to the new Junior Certificate course, which is a 3-year course after standard 6.

The first year (or form I) of the course is a preparatory year leading to junior secondary work, which virtually commences in form II, and the Bantu Lower Teachers' Course. This course is under the control of and is examined by the Bantu Education Department. Pupils who wish to take the Senior Certificate (standard 10) must however conform to the regulations of the Joint Matriculation Board if matriculation exemption is desired.

Control of Bantu secondary schools is exercised from the Secretary of Bantu Education through regional directors to inspectors and sub-inspectors and thence to principals of schools. A number of committees have been set up in order to assist the functioning of the Department: the Secondary Examinations Committee, whose duties are to frame syllabuses for the Junior and Senior Certificate examinations, to prescribe books and to control the examinations (eight sub-committees carry out the work of framing and revising syllabuses); Bantu Languages Committees (five in number); a Central Book Committee, which advises the Department in regard to the selection and approval of books.

The School Board, in collaboration with the committees concerned and with the Department, plans and promotes the erection and maintenance of school buildings, the fencing of school premises and the provision of water. It also employs, transfers and dismisses teachers subject to the approval of the Department, collects and controls the spending of voluntary and other contributions as well as all moneys allocated by the Department. The Department prescribes the conditions of appointment and service, including the rights, duties and privileges of teachers in the government Bantu schools; prescribes the code of discipline for teachers and the courses of training or instruction in government Bantu schools and the fees, if any, payable for such courses.

As yet, vocational education amongst the Bantu is very limited. A few schools provide 4-year courses (post-standard 6) in building, plumbing, and carpentry. No effective or adequate agreement has been reached with the European trade unions in the important matter of training Bantu artisans.

TYPES OF SECONDARY EDUCATION

The main types of secondary education in South Africa may be summarized as follows: (a) General secondary education—post-standard 5 in the case of European, Indian and Coloured pupils and post-standard 6 in the case of Bantu pupils. In most cases 3-year and 5-year courses are provided with varying attempts at differentiation. (b) Vocational education—which may be technical, commercial, or domestic science in vocational schools, providing, in the main, post-primary study. Some work, particularly technical, is partly secondary and partly post-secondary.

The technical colleges and vocational schools in general provide courses on a full-time basis but also part-time courses in general education, apprentice classes, technical and technological courses and a variety of short courses for interested adults who wish to improve a skill or learn a new hobby.

For those who leave the secondary school, further study may be done through technical institutions or correspondence colleges, the examinations of the Union Education Department being written as a rule.

All the provinces and the Union Education Department have vocational guidance services under the direction of an inspector of vocational guidance who is assisted by trained teachers who are also guidance workers in the secondary and high schools. They usually have special time set aside on the time-table for this purpose. Cumulative record cards are kept and completed in respect of each child, covering the whole school career. These cards reflect abilities, achievement, interests and so on and are sent on to each school the pupil attends. When a pupil leaves school, his card is submitted to the Department of Labour where it is used for vocational guidance purposes by juvenile employ-

ment officers attached to juvenile affairs boards. There are 15 such boards for Europeans and two for Coloureds functioning at present. Under the terms of the Registration for Employment Act (1945), these boards are responsible for vocational guidance and placement services in respect of juvenile work-seekers. Co-ordination of effort between the principals of schools and the education authorities generally on the one hand and those responsible for placement of juveniles on the other hand is of the utmost importance. An Inter-Departmental Advisory Committee for Vocational Guidance has been established, representative of the Union Department of Education, the Provincial Education Department, the Department of Labour, the Department of Social Welfare and the National Bureaux of Educational and Social Research and of Personnel Research respectively.

South Africa uses a four-term year. The school year is usually 200 school days (40 school weeks) in length, starting in mid-January or a little later and ending during the second week of December. The Christmas vacation is some five to six weeks in length. The school day varies, some schools in Natal favouring the two-session day with a luncheon break of approximately an hour, whilst others, e.g. in parts of the Transvaal, have a one-session day.

General secondary schools

The aim of these schools is to provide a general education. The needs of adolescents and the demand for vocational education have resulted, however, in the provincial secondary schools providing courses in commercial subjects, domestic science and agriculture. The general secondary schools will be described under the headings of the various controlling authorities.

Cape Province. The recommendations of the Commission on Technical and Vocational Education (1948) had considerable influence on the development of secondary education in the Cape. The full course is 5 years. The new junior secondary school course (12–15 years of age) may be described in detail. Its object is the general education of the child and it is intended to be a continuation of the primary school course after standard 5. The duration of the course is 3 years and it includes the following subjects (the subjects above the horizontal dividing line constitute the compulsory course for the 3 respective years, those below the line are optional subjects).

This table was published in 1953 and has since been amended (see below). Internal examinations are conducted at the end of the course with a view to certification. The Department conducts an external examination.

As from 1957, pupils in the third year must take the two official languages and general science as the only compulsory examination subjects, with the result that the candidate has a free choice of three optional subjects.

The Cape also conducts a post-primary vocational course of 3 years for mentally-retarded children. This leads to a vocational Junior Certificate comprising both official languages (one at a more advanced level), general science and social studies. This course is for the training of boys in one of the following: hairdressing, sheet-metal work, painting, plastering, spray-painting, sign-writing, panel-beating or carpentry; and for the training of girls in domestic science or hairdressing. Pupils who do not complete such a course are given a certificate of competence which indicates the standard reached by them.

TIME-TABLE FOR JUNIOR SECONDARY SCHOOLS
(CAPE PROVINCE)
(showing minimum number of hours per week)

Subject	Year		
	1	2	3
Religious instruction	1¼	1¼	1¼
Physical education	1¼	1¼	1¼
Music (class subject)	¾	¾	¾
First language	3¾	3¾	3¾
Second language	3½	3	3½
General science	2	2½	3½
General mathematics (a)	3½	3	3½(a) or
Social studies (b)	2	2½	3½(b)
Art	1¼	1¼	
Handicrafts (at least one form): Woodwork, Agriculture, Art-craft, Needlework, Domestic science	2	1¼	
Total	20¾	20½	16¾
Another form of handicrafts Music (as an examination subject) Typewriting Business methods and book-keeping Third language	4½	4½	[1]6½
Total	25¼	25	23¼

1. Any two subjects, of which either general mathematics or social studies may be one, if not taken as a compulsory subject.

Natal. The final certificate to be obtained largely determines the subjects to be selected. There is a fair measure of differentiation within specific groups of subjects.

1. For Natal Senior Certificate with Matriculation Exemption, there are a number of variations which usually include first and second official languages, arithmetic, physical science or biology, and mathematics. The additional optional subjects are: (a) history and geography, *or* (b) history and Latin or French or German or art, *or* (c) Latin and art, *or* (d) geography and Latin or art or agriculture or German or geometrical drawing or housecrafts or handicrafts, *or* (e) German and housecraft, *or* (f) housecraft and shorthand-typing and book-keeping, *or* (g) geography and shorthand-typing or bookkeeping.

   The courses offered depend upon a number of factors, including the locality in which the school is situated and the teaching staff available for certain specialist subjects.
2. For those who wish to obtain the Natal Senior Certificate (which, without exemption, does not entitle the pupil to enter a university), there are a number of courses all comprising a common core of first and second official languages, arithmetic and physical science or biology. In addition, geography or health education, shorthand and typewriting and book-keeping may be taken, *or* geography, book-keeping and housecraft or handicrafts, *or* history, geography and housecraft or art.

3. For those who wish to or can only manage to obtain a Junior Certificate, there are several courses comprising a common core of first and second official languages, arithmetic, biology and housecraft. In addition, the pupil may choose book-keeping and typing or typing and shorthand or typing and social studies.
4. At the beginning of 1959 a new secondary course suitable for non-academic pupils was introduced. It consists of the following subjects: main language, second language, general mathematics, a science, history and geography (combined subject), an 2 other subjects selected from some 33 subjects offered for the Junior Certificate examination. This course commences in standard 7, the selection being made at the end of standard 6; the promotion requirements for the practical course are a little easier.

If the parent of a pupil who fulfils the requirements for promotion to the practical course only does not wish his child to take the course, the pupil may repeat standard 6 with the hope of qualifying for promotion to an academic course. The examination at the end of standard 8 is the same standard for both practical and academic courses.

Promotion in Natal is by attainment.

Transvaal. Since 1958, high schools are organized so that pupils are grouped according to ability and follow one or other of the streams mentioned below, within the same institution:

1. *A-Stream.* Those pupils who wish to take a post-matriculation course of study at a university or other institution for higher education (the University Entrance course).
2. *B-Stream.* Those pupils who do not wish to proceed to a university but nevertheless require education to the standard 10 stage as a basis for a future career (the standard 10 course).
3. *C-Stream.* Those pupils who do not wish to proceed beyond standard 8 or who will find it difficult to continue their studies beyond standard 8 (the standard 8 course).

The three streams do much the same work for the first six months in standard 6; thereafter differentiation takes place. The curriculum comprises compulsory and optional subjects within a weekly allocation of 25 teaching hours.

In standard 6, the compulsory subjects are religious instruction, home language, second language, arithmetic, history, geography, general science, industrial arts, physical education, hygiene, school music, art, vocational guidance and Bantu studies (approximately 23 hours). Optional are third language, mathematics, club work, agriculture (approximately 2 hours).

In standard 7, compulsory subjects are the same, but hygiene and geography are deleted (approximately 19–20 hours). The optional subjects are third language, mathematics, geography, book-keeping, business knowledge, typing, shorthand, hygiene (for girls only), agriculture, club work or any other approved subject.

In standard 8, subjects are the same as for standard 7, with a slight increase in time devoted to optional subjects. General mathematics is an alternative to arithmetic in standards 6 to 8.

In standards 9 and 10, the compulsory subjects are religious instruction, home language, second language, physical education and vocational guidance (approximately 10 hours a week). The remainder of the course (approximately 15 hours a week) consists of four or five optional subjects chosen from those approved for the Transvaal Secondary School Certificate and subjects such as school music and art.

The teaching of commercial subjects is restricted to one-third of the total number of school subjects and to not more than 8 hours a week.

The grouping of the pupils into the three streams is done mainly on the basis of intelligence quotient, though other factors like achievement, school record, principal's and teacher's opinions and the parents' wishes are also taken into account.

The Orange Free State. The rural nature of the province has resulted in the growth of many combined primary and secondary schools. The increasing development of separate high schools (23 in number, mostly co-educational), however, is a feature of the provision of secondary school facilities. In 1958, there were, in addition, 46 combined schools leading to standard 10 and 9 junior high schools (up to the eighth standard and all co-educational). There are also an agricultural high school and an agricultural and housecraft school; a number of high schools provide courses in agriculture or domestic science.

From 1955, standard 6 was incorporated in the high schools and the new secondary course introduced. This is a 3-year course in the middle school, the aim being to lead the pupils into definite fields of study—academic, technical, commercial and agricultural. Differentiation is gradually introduced, the final choice being left open until standards 9 and 10. Guidance has been introduced in the new course which also includes the official languages, general science, general mathematics, social studies, art, religious instruction, physical education and educational handicraft. A third language, commercial subjects, other handwork and so on are optional.

As the courses have developed, the academic, commercial and technical fields appear to be emerging as clear areas of study. Children are transferred to the secondary school at 13 years of age but the Free State has adopted the policy of promoting both by age and by achievement. The need for adjustment classes has been realized and is being studied. The syllabus provides additional material for those pupils who can benefit. Promotions are made internally, the class-record system having proved a success. Control tests, however, are conducted by the Department in Afrikaans, English, mathematics and general science, the scaled test mark in these subjects and the class-record for the year in the rest of the subjects being used to determine whether promotion is warranted or not.

Division of Bantu education. Some idea of the general junior certificate course may be obtained from the time-table on page 1122. In the clerical and commercial course, variations occur in the subjects of the second and third year.

Vocational and technical schools

The 11 technical colleges (one non-European) are multi-purpose institutions providing a number of different

TIME-TABLE FOR JUNIOR SECONDARY SCHOOLS
(BANTU EDUCATION)
(in hours per week)

Subject	Year	
	1	2 and 3
Religious instruction	1½	1
Physical education	1	1
Music and singing	1	1
Bantu language, Grade A or Grade B	3	4
Official language, Grade B or Grade C	4	4
Official language, Grade A	4½	4½
Arithmetic or general arithmetic, or commercial arithmetic or mathematics	3½	3½
Social studies	2½	2½
General science	3	–
A natural science (general science or physical science or biology)	–	2½
All other subjects	2½	2½
Morning assemblies and registration periods	1	1
Total	27½	27½

courses. Vocational high schools concentrate upon a particular field, e.g., technical high schools, housecraft high schools and commercial high schools. They are to be found mainly in rural areas. The courses are basically the same throughout the Union.

The number of teaching hours in most secondary schools is about 25 hours. Where workshop practice and other practical work is involved, as in many vocational high schools, the total may be 30 hours or more.

Commercial courses. No boy or girl is allowed to enter a commercial department unless standard 7 has been passed. This course does not usually lead to matriculation, but for those who desire it the National Senior Certificate may be taken. The standard 8 course comprises the following subjects as a rule: first and second official languages, book-keeping, commerce, typing and shorthand. When shorthand has been completed in the first official language, it is taken in the second language. Standards 9 and 10 are similar.

Technical courses. Boys enter after primary school. In standard 6, the subjects are first and second official languages, arithmetic, the elements of technical drawing, the elements of science, history and geography. In addition, six hours a week are spent in general workshops, the aim being to assist boys in finding out what trade they prefer—mechanical, electrical or building construction. Standards 7 and 8 comprise courses in the first and second official languages, mathematics, science (mainly physics), engineering drawing, trade theory (the scientific background to trades such as fitting, turning, electro-technics, welding, general motor mechanics, etc.). During these years, up to 12 hours a week are spent in workshops at the routine work of a trade. Most students receive workshop practice in other trades allied to their own.

At the end of standard 7 the boy may leave and enter a trade, and at least 60 per cent do leave by the end of standard 8.

Standards 9 and 10 comprise the matriculation course which consists of the first and second official languages, mathematics and physical science as the basic course, the same as the average high school. In addition, machine drawing, electro-technics and mechanics are taken. Some eight hours a week are spent in specialist workshops. In all years 7 to 10, several periods a week are allocated to history and geography and one period a fortnight to religious instruction.

Housecraft. These courses follow the same line as the commercial courses, first and second official languages, hygiene, physiology, cookery, millinery and dressmaking being offered.

Agriculture. Agricultural education is provided in provincial agricultural high schools where the course is basically general education with an agricultural bias. The Union Department of Agriculture conducts courses at four agricultural colleges, consisting of 2-year diploma courses, to which pupils are admitted on completion of standard 8. The instruction embraces the broader needs of agriculture in South Africa. Much attention is devoted to practical instruction, which absorbs 50 per cent of the student's time. A wide range of courses is taken, including animal and field husbandry, the operation and maintenance of farm machinery and carpentry.

Military training and institutions. The Department of Defence has established separate gymnasia for the army, navy and air force which boys of 16 or more years may enter for a 1-year course which may lead to selection for the permanent forces and, in the case of matriculants, to science degrees with a military bias. The General Botha Nautical Training College is now a state vocational school training boys for the merchant navy.

Under the terms of Act No. 13 of 1912 and Act No. 22 of 1922, all boys between their 12th and 17th years in urban or other populous areas may be required to undergo a prescribed course of cadet training unless their parents or guardians object. There are cadet detachments in all boys' secondary schools.

Nursing. Nursing education is conducted in provincial nursing colleges where the training is partly theoretical and partly practical, based on a 'block' system and spread over three and a half years. The age of admission varies, being as high as 18 years and as low as 16 years (in the Transvaal, where a cadet system operates). At present, the minimum educational qualification is standard 8 but it is likely that this requirement will be raised to standard 10.

Examinations

External examinations have gradually disappeared from provincial schools, except for the Junior Certificate in Natal and the Senior Certificate examinations conducted by each province. These examinations are under the control of the Joint Matriculation Board. The various provincial Education Department certificates are recognized as equivalent to the Matriculation Certificate (i.e., permitting admission to the university) provided that they conform

to certain requirements. There are 31 approved subjects for matriculation, 21 in Group A and 10 in Group B. Group A is divided into four groups, the candidate being obliged to take one subject from each group to include the following, the minimum mark for a pass being 40 per cent: (a) one of the official languages at the higher grade; (b) the second official language or another second language (higher or ordinary grade); (c) a science subject or mathematics; (d) a third language or mathematics (if not already included) or history or geography. In addition the candidate must obtain at least 33⅓ per cent of the marks in a fifth subject which must be either mathematics or a third language, if not already included. A sixth or seventh subject may also be taken.

A fairly representative grouping is first and second official languages, a third language, mathematics, a science and history.

A lower standard and a less rigid grouping of subjects are accepted by the provinces for the Senior or School Leaving Certificate. As examples: (a) Candidates for the Orange Free State School Leaving Certificate take six or seven subjects selected as follows: both official languages (one at the higher grade) and any four or five subjects selected from a wide range of subjects. Candidates from the agricultural high schools take the two official languages, agricultural science, biology, practical agriculture and farm management or mathematics. (b) In the Cape, candidates for the Senior Secondary Certificate must take both official languages (one at the higher grade), mathematics or a science selected from a group, and three further subjects selected from another language (Latin or Greek or Hebrew or French or German or a Native language, i.e., Xhosa, Tswana, Southern Sotho); literature (English or Afrikaans or Netherlands); mathematics; biology; zoology; botany; physical science; physics, chemistry; physiology and hygiene; agricultural science; geography, history; art or art-crafts; one of a group of handwork subjects; music; book-keeping and commercial arithmetic; shorthand; typewriting. Not more than four languages or two commercial subjects may be chosen.

The Union Education Department conducts national examinations for some 22 certificates including general education, commercial, technical and domestic science. Credit is given for every subject passed, contrary to the practice in the provincial education departments.

The Division of Bantu Education conducts its own Junior and Senior Certificate examinations.

Teacher training schools

All European teacher training is post-secondary.

In Indian education, the training of male teachers is rapidly becoming post-secondary, a two- or three-year course following upon the completion of a five-year secondary course. In Natal, Indians are trained at Springfield Training College, a college established in 1952. An increasing number of Indian men are completing a bachelor's degree and the University Education Diploma either at the University College of Fort Hare or the University of Natal. Indian girls take 2-year courses after Junior Certificate, a smaller group completing post-secondary school courses.

As regards Coloured teachers, training schools in the Cape offer 2-year courses after standard 8, a few training colleges conducting two- and three-year post-secondary courses. The Coloured Education Commission (1956) in the Cape Province recommended that Senior Certificate, followed by two years of training, be made the minimum required of new teachers. In 1956, 952 students were taking training courses which may be regarded as being at secondary level.

Except in a few subjects, less than 50 per cent of teachers in secondary schools for Coloured children possess degrees in the subjects they teach. The Commission considered that a university degree and a professional course should be the proper qualifications of secondary teachers, but that in the interim temporary relief should be provided by introducing a third-year course in academic subjects designed to meet the requirements of the junior secondary course, and that arrangements should be made whereby those who have completed a 2-year course at a training college could go on to take a first-year degree course at a university.

As a result of the Bantu Education Act, 1953, Bantu teacher training institutions were taken over by the secular Department of Education. The policy is to separate teacher training from other forms of education, although in many instances secondary schools are attached to the training institution. In 1958 there were 40 government Bantu training schools, all with hostel facilities. A few Roman Catholic training schools continue to function but they train, in effect, for their own private schools, their certificates not being recognized by the authorities.

The courses offered are as follows:

1. Lower Primary Teachers' Course, for which the entrance qualification is standard 6. This is a 3-year course, the first year being the same as the first year of the secondary school course. This course is limited to females who can teach up to standard 2, i.e., in the lower primary school. Some 34 training schools offer this course.
2. Higher Primary Teachers' Course, for which the entrance qualification is Junior Certificate (standard 8). Both men and women are accepted, the course taking 3 years. Of the total of 20,522 Bantu teachers, 1,675 were uncertificated in 1955. The great majority are engaged in teaching up to standard 4.
3. Bantu Teachers' Diploma. This is a post-secondary 1-year course, open to men and women. The training is for all classes of the primary school and also possibly some secondary school work. The training schools at Healdtown (Eastern Cape), Amanzimtoti (Natal) and Bantoe Normaal (Pretoria) conduct these courses. The University College of Fort Hare, the universities of Natal, Witwatersrand and Cape Town train non-European graduates on 1-year post-graduate courses. In the cases of the universities this form of training is likely to cease in the future but no date has as yet been set by the Union Government.

TRENDS AND PROBLEMS

In South Africa there is now a clear line of demarcation between primary and secondary schools at the end of standard 5, instead of standard 6, as was formerly the case.

The re-organization necessary, particularly with regard to the provision of accommodation in the high schools, is not yet complete. Bantu primary schools still include standard 6.

The upward trend of the compulsory school-leaving age for Europeans has resulted in all normal children spending two to three years in a secondary school. The establishing of special classes and schools has had the effect of making the lower secondary school classes more homogeneous. Several provinces transfer 13-year-olds out of the primary school into the secondary school whatever their educational attainments at that stage. The result is a need for special treatment for certain children thus transferred and for other backward adolescents at secondary school level.

Except for a small percentage who attend vocational schools, the great majority of European children attend provincial secondary schools.

There is a trend (well advanced) towards providing general education in junior secondary courses, i.e., 3 years up to and including standard 8 in most cases. The further 2 years to standard 10, however, are a continuation of the middle school. At first there were a number of such intermediate, junior high or junior secondary schools and a smaller number of high schools, but the trend is towards every provincial secondary school becoming a full-range 5-year school.

These schools provide a general education, standard 6 being an exploratory year, and differentiation increasing in standards 7 and 8. As a rule, there is a compulsory core of subjects, varying from province to province and an optional group which increases, whilst the compulsory group decreases, in number.

Vocational subjects are introduced, but here there are many problems. Should the secondary schools specialize along vocational lines or conduct vocational courses which are a part of the child's general education? The general line of development tends towards the second of these alternatives but the general public, and many parents and pupils themselves, want qualifications for work.

The control of vocational schools by one authority and that of the provincial secondary schools by another is having unfortunate results in that the natural development of comprehensive provincial secondary schools providing for all normal children of secondary school age is being adversely affected. In addition, the junior secondary work done in vocational schools tends to be vocational in outlook and practice and wants the introduction of more general education.

Differentiation is provided in provincial and private schools in different ways, usually by means of a choice of subjects which are grouped to suit the needs of different types of pupils. The Transvaal has embarked upon ability grouping, the three ability groups taking much the same compulsory core of subjects. There is, however, differentiation of syllabuses and methods to suit the different groups. The problem of effective selection is a real one but it is possible, so it is said, for pupils to transfer from one group to another.

The question of promotion and certification is occupying the attention of the educational authorities. Should promotion be based on achievement alone, on age alone or on both achievement and age? It would appear that South Africa considers that the achievement of sound standards is essential but that age must be a factor in determining the advisability or otherwise of promotion, especially where pupils who are older than the average in their groups are concerned.

External examinations at junior secondary school level have largely been abolished. There has been growing concern, however, over the maintenance of standards. Several provinces are experimenting with standardized tests in some subjects in order to assist schools and the Department of Education in keeping standards up.

The Senior Certificate (Matriculation Exemption) serves two purposes: (a) a qualification for entrance to the university; (b) a school leaving certificate. The developments in secondary education indicate that these two functions are not in accord. It is stated that there is a large group of pupils who do not proceed to the university but whose education is affected by university requirements. There is a movement afoot to separate the two, or alternatively to revise the examination pattern.

The shortage of secondary school teachers, particularly in certain subjects like mathematics, the sciences, commercial subjects and English seriously affects the developments considered above. There are many teachers, particularly temporary personnel, who are teaching subjects for which they are not qualified.

It is essential, if secondary education is to be successfully provided for all pupils according to their needs, that the general public be educated in this matter. Old ideas are not easy to change but this is what is most needed in the interests of adolescent boys and girls.

[*Text prepared in July 1959 by Professor R. G. Macmillan, University of Natal.*]

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STATISTICS

Population (mid-year 1958 estimate): 14,418,000.
Area: 472,359 square miles; 1,223,409 square kilometres.
Population density: 31 per square mile; 12 per square kilometre.

Summary of school statistics, 1953–55. Total enrolment at all levels of education was about 2.1 million pupils in 1955 representing some 15 per cent of the population. There were, in addition, some 4,000 adults attending continuation classes. Of the total school enrolment 95 per cent were pupils in primary, general secondary and special schools, 3 per cent in vocational institutions, less than 1 per cent in all teacher training courses and just over 1 per cent in university colleges. Over two thirds of the primary and general secondary enrolment was in non-European schools. Girls made up about half the enrolment in primary and general secondary schools and 63 per cent in teacher training schools (secondary level). Teachers in primary and general secondary education numbered 58,644 in 1955 of whom half were women; the average pupil-teacher ratio in this group of schools was 33 in 1955. Information on the teaching staff at other levels of education is incomplete. Compared with 1953, total school enrolment had increased by 11 per cent in 1955. (See Table 2.)

Examination results in secondary education, 1953–55. In general secondary education some 6,477 candidates passed a Senior or Class I secondary certificate and over 20,000 a Junior or Class II certificate in 1955/56. (See Table 1.)

Educational finance, 1957/58. Complete details of expenditure on education are not available. In 1957/58 (fiscal year beginning April) recurring expenditure of the Union and provincial governments was provisionally estimated at 50,732,000 South African pounds, including Union government expenditure of £9,066,000 for Bantu education. Official exchange rate: 1 pound = 2.80 U.S. dollars.

Sources. Union of South Africa: Bureau of Census and Statistics, *Official Yearbook of the Union of South Africa; Monthly Bulletin of Statistics*, and other official publications.

1. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953/54–1955/56

Type of diploma or certificate granted	School year					
	1953/54		1954/55		1955/56	
	Total	Female	Total	Female	Total	Female
Natal and Cape Province senior certificate	...	...	5 128	...	5 454	...
Natal and Cape Province junior certificate	...	...	15 507	...	14 792	...
Transvaal and Orange Free State (Secondary) school certificates[1]						
Class I	833	...	899	...	1 023	...
Class II	3 006	...	3 350	...	3 812	...
Orange Free State Province junior certificate	1 937	...	2 043	...	2 004	...

1. In addition, there were in the Transvaal supplementary passes numbering 225 in 1953, 242 in 1954 and 232 in 1955.

2. SUMMARY OF SCHOOL STATISTICS, 1953–55

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary and secondary	European schools, public and aided private	1955	2 555	23 747	13 878	574 136	277 462
	European schools, unaided private	1955	261	2 232	1 725	43 823	24 658
	Non-European schools, public and aided private	1955	7 416	32 451	13 892	1 338 979	671 043
	Non-European schools, unaided private	1955	49	214	131	7 311	3 594
	Total	**1955**	**[1]10 281**	**[1]58 644**	**[1]29 626**	**[1]1 964 249**	**[1]976 757**
	,,	1954	...	...	...	...	...
	,,	1953	[2]10 841	[2]55 127	[2]27 127	[2]1 789 457	[2]895 167
Secondary							
Vocational	Technical and industrial schools, public	1955	[3]55	[3]434	...	39 180	...
	Commercial schools, public	1955	...	...	...	14 707	...
	Domestic science schools, public	1955	...	...	...	5 127	...
	Other schools, public	1955	...	...	...	12 673	...
	Vocational schools, aided private	1955	14	95	...	1 257	...
	Total	**1955**	**...**	**...**	**...**	**[4]72 944**	**...**
	,,	1954	...	...	...	...	...
	,,	1953	35	...	...	[4]64 796	...
Teacher training	Teacher training schools						
	Total	**1955**	**55**	**545**	**...**	**7 932**	**...**
	,,	1954	...	...	...	...	...
	,,	1953	(54)	(540)	(...)	(8 179)	(...)
Higher							
Teacher training	Teacher training colleges						
	Total	**1955**	**13**	**313**	**142**	**5 238**	**3 276**
	,,	1954	...	...	...	...	...
	,,	1953	(13)	(251)	(124)	(3 889)	(2 531)
General and technical	Universities	1955	9	415	...	[5]26 671	...
	University College of Fort Hare	1955	1	...	...	...	...
	Total	**1955**	**10**	**...**	**...**	**[5]26 671**	**...**
	,,	1954	...	...	...	...	...
	,,	1953	10	...	...	[5]20 402	...
Special	Schools for the physically handicapped children	1955	2	46	...	400	...
	Schools for the deaf, blind and epileptics	1955	10	188	...	1 588	...
	Reformatories	1955	6	95	...	1 679	...
	Total	**1955**	**18**	**329**	**...**	**3 667**	**...**
	,,	1954	...	...	...	...	...
	,,	1953	...	(409)	(...)	(6 264)	(...)
Adult	European continuation classes	1955	28	308	49	3 162	853
	Non-European continuation classes	1955	7	46	10	946	298
	Total	**1955**	**35**	**354**	**59**	**4 108**	**1 151**
	,,	1954	...	...	...	...	...
	,,	1953	49	...	...	12 151	1 813

1. Including data on kindergartens and some vocational secondary education.
2. Including data on special education and teacher training at secondary and higher education levels.
3. Number of schools and teachers in institutions providing pupils with the opportunity to learn a trade or craft whilst continuing scholastic training. These schools had 4,831 pupils in 1955.
4. Including part-time pupils numbering 53,317 in 1955.
5. Including part-time students.

Education in South West Africa is controlled by the provisions of the Education Proclamation, 1926. Schooling is compulsory for all European children between the ages of 7 and 16, or up to completion of standard 8 (tenth school year). The medium of instruction may be Afrikaans or English; since 1951 German was re-introduced as a medium, and is now used as far as the end of the primary school.

All financial and technical matters are controlled by the Administration of the Territory. Local school committees with mainly advisory functions are elected to represent the parents.

European schools. These may be maintained by the Government or by private bodies. In government schools, tuition is free but pupils pay for books and stationery; in boarding establishments maintained or assisted by the Government, fees are charged. In all cases there are remissions for families unable to meet the cost.

Private schools have to be registered and have to submit returns. They may be inspected free of charge and may receive subsidies towards the salaries of teachers.

The school plan comprises seven years of primary school (two grades, standards 1 to 5) followed by five years of secondary education. The primary school syllabus of the Cape Province has been adapted for use in South West Africa. At the secondary level, curricula are determined by the conditions of examining bodies in the Union of South Africa. After three years (end of standard 8) pupils sit for the Junior Certificate of the University of South Africa. Two further years of study bring them to the matriculation and school leaving examinations of the Joint Matriculation Board, which provide access to South African universities.

Coloured and Native schools. For the most part the education of Coloured and Native pupils is under the supervision of the various missions, which supply the buildings within the Police Zone. The Administration pays the salaries of the teachers, and supplies furniture and equipment free of charge. A rebate of 50 per cent is allowed on all books and stationery supplied to the schools for sale to pupils. The Government also maintains certain schools, and provides teacher training.

Since 1945 grants have been paid towards teachers' salaries, and subsidies have been given to certain native educational institutions beyond the Police Zone, i.e., in Ovamboland and the Okavango area.

[*Text prepared by Unesco Secretariat in May 1960 from official sources listed in the bibliography.*]

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STATISTICS

Population (mid-year 1958 estimate): 539,000.
Area: 318,099 square miles; 823,876 square kilometres.
Population density: 1.7 per square mile; 0.7 per square kilometre.

Summary of school statistics, 1951–54. Total enrolment in 1954/55 in primary and secondary schools, including teacher training, was 40,650 pupils, representing under 9 per cent of the estimated population. The proportion of girls enrolled is not known. Approximately 28 per cent of the total enrolment were pupils in schools for European pupils. Compared with 1951/52, enrolment had increased by about 11 per cent. (See Table.)

Educational finance, 1954/55. Total expenditure on education in 1954/55 (fiscal year beginning April) was 971,751 South African pounds, representing about £2 per inhabitant. Available details of this expenditure are as follows: for administration, £13,274 (1.4 per cent); for inspection, £15,784 (1.6 per cent); education for Europeans, £761,550 (78.4 per cent); education for Natives and Coloured people, £181,143 (18.6 per cent). Official exchange rate: 1 pound = 2.80 U.S. dollars.)

Source. Union of South Africa: Bureau of Census and Statistics *Official Yearbook of the Union of South Africa*, 1956/57; *Monthly Bulletin of Statistics*, August 1959.

SUMMARY OF SCHOOL STATISTICS, 1951–54

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary and secondary[1]	European schools, public	1954/55	53	395	...	9 934	...
	European schools, aided private	1954 55	15	74	...	1 448	...
	Schools for Natives within the Police Zone	1954/55	88	...	...	7 413	...
	Schools for Coloured within the Police Zone	1954/55	36	...	...	2 988	...
	Native schools outside Police Zone	1954/55	...	...	...	18 867	...
	Total	**1954/55**	**[2]192**	**[3]469**	**...**	**40 650**	**...**
	„	1953/54	[2]185	[3]445	...	39 435	...
	„	1952/53	[2]183	[3]417	...	39 924	...
	„	1951/52	[2]182	[3]404	...	36 685	...

1. Including data on teacher training.
2. Not including Native schools outside the Police Zone, numbering 162 in 1952/53.
3. Teachers in schools for Europeans only.

UNION OF SOVIET SOCIALIST REPUBLICS

THE EDUCATIONAL SYSTEM

Before the Great October Socialist Revolution of 1917, the broad mass of the people of Russia had no opportunity of obtaining education even at the primary level. According to the census figures, 76 per cent of the population aged 9 years and over were illiterate, with a figure of 88 per cent in the case of women. Among the non-Russian peoples of the central regions of Russia, and particularly of the so-called 'borderlands' (now the Kazak, Uzbek, Tadjik, Turkmen and Kirghiz Republics) it was rare to find a person who could read and write. The Tsarist Government pursued a policy of russification, doing everything possible to prevent the establishment of schools in which children were taught in their mother tongues.

Secondary education was provided in *gymnasia* and *real* schools (general secondary schools) and in technical and commercial schools (specialized i.e. vocational secondary schools). These were intended primarily for the well-to-do, for the sections of the population able to pay substantial fees for the education of their children. There was no general access to secondary education, and the schools had a clearly marked class character. There were also many restrictions based on nationality or religion; and boys and girls were educated separately. The total number of children attending secondary schools in 1914 was about 258,000. Education, as Lenin pointed out, had been turned into a 'fence' obstructing the access of workers' children to knowledge and culture.

The triumph of the October Revolution brought in its train a radical transformation of educational policy in general. The basis of the new policy was defined in the Communist Party's educational programme, the main heads of which were provision of free general and polytechnical education for children of both sexes up to 17, full implementation of the principle of the completely secular unified labour school with the mother tongue as the language of instruction and working along co-educational lines, developing close ties with socially productive labour, and training fully developed members of communist society.

The Soviet Government adopted a series of decrees abolishing educational restrictions based on class, nationality and religion. By the Decree of 21 January 1918, the Church was disestablished and the schools were secularized. Education was freed from religious influence during the very first years of Soviet power, and has since been carried out on a strictly scientific basis.

In addition, the equality of the sexes in education was guaranteed not only *de jure* but also *de facto*. The experience of co-education in Soviet schools shows that the quantum of knowledge imparted is assimilable by and equally necessary for boys and for girls. In the schools which provide general education, girls make up half the number of pupils. In the school year 1955/56, women constituted 54.8 per cent of the students of vocational secondary schools and 52.3 per cent of those at higher educational establishments. The fullest account is taken, under the Soviet system of public education, of ethnic and linguistic factors. More than forty nationalities have acquired a written

language during the years of Soviet power. All the peoples of the Soviet Union receive education in their mother tongue and have full access to the sources of education and culture.

The equal right of all citizens to education is guaranteed by the Constitution of the U.S.S.R. and by a whole system of state measures: compulsory 8-year general education; wide development of secondary education; abolition of fees for all types of education, whether secondary or higher; system of state scholarships at secondary and higher specialized schools, and organization in factories and on state and collective farms of free, industrial, technical and agronomic instruction for the workers.

The initial system of school education was based on the regulations governing the unified labour school (1918), and took the following form: a primary school for children aged 8 to 12, with a 4-year course, a 7-year secondary school i.e., a school with a 3-year course following the primary school course; and a 9-year or 'complete' secondary school with a 2-year course following the 7-year school course or a 5-year course following the primary school course; thus both types of secondary school, the 7-year and the 9-year, included four primary classes.

Starting from 1931, the course at the complete secondary school was extended by one year, so that the 9-year school was transformed into a 10-year school, with three senior classes (8th, 9th and 10th years). The reason for this step was the need for better preparation of general secondary school graduates for higher education.

The secondary school category also included the technicums (*tehnikumy*) and other specialized secondary schools where graduates of 7-year schools received a general and specialized secondary education fitting them for work in various sectors of the national economy or fields of cultural activity. Graduates of specialized secondary schools or 10-year general secondary schools had the right to continue their education at higher educational establishments of whatever kind.

The content and methods of instruction at both primary and secondary schools have undergone a radical transformation as compared with the pre-Revolutionary period. The curricula are based on strictly scientific principles ensuring the development of a scientific-materialist approach and inculcating a spirit of humanism, and respect for human dignity and for the peoples of other countries, combined with a spirit of Soviet patriotism, love for the socialist motherland, devotion to the building of Communism in the U.S.S.R. and an understanding of the need for peaceful co-existence between all States, including those with different social and political systems. To ensure the all-round development of the personality, the study of the natural sciences is judiciously combined with that of the humanities, and time is devoted to the teaching of music, singing, drawing and physical education. Scholastic activities are supplemented by various forms of leisure-time activity both in school and in out-of-school establishments, fuller details of which will be given later. In all these activities the interests of school-children in different grades are borne in mind.

The dogmatic verbal methods of instruction typical of the pre-Revolutionary school have given place to new methods which stimulate the pupils' activity and develop their powers of observation and independent thinking such as practical work in physics, chemistry and biology laboratories, excursions, the solution of practical problems related to real life, work with reference books, literary and historical source material, etc. Ever wider use is being made of the cinema in educational work.

At various stages in the development of Soviet education use had been made of the integrated method of constructing the curriculum, the project method and the team-laboratory method, by way of tribute in one form or another to educational innovations. However, experimentation, research and wide discussion of all these problems have led to the recognition that it would be wiser and more in line with sound pedagogy and psychology to draw up syllabuses for separate subjects, thus giving the pupils a systematic knowledge, and to apply various methods in class which stimulate the pupils' activity rather than try to replace them by any single universal method.

The reorganization of school education meant the extensive development of scientific research and methodological work and an improvement in the material basis of the schools, with special attention being paid to improving the qualifications and status of teachers.

The great merit of the educational system built up in earlier years is that it has produced fully literate people ready for higher education and possessing a solid grounding in science. But at the present stage of development of Soviet society, which is entering the period of large-scale communist construction, the schools in their present form no longer fully meet the needs of a dynamic society which has set itself the task during the next few years of creating the abundance of material and intellectual values essential for building Communism.

It has become necessary to strengthen still further the ties between school and life, that is, with the practical work of communist construction; a further improvement is called for in general and polytechnical education, based on the present level of achievement in science and technique and to some extent on the prospect of their future development.

The changed nature of the work performed by industrial and agricultural workers is already becoming quite evident today. They need to be able to handle highly developed machine-tools and the highest precision measuring and control instruments and devices, and understand intricate technical calculations and blueprints. Future technical and economic development will impose heavy demands on all workers in socialist society, and an all-round education is of vital importance for them. The labour of the present-day worker is not merely a matter of the use of muscle power; it is becoming increasingly filled with intellectual content. The gulf between mental and manual work, between the activity of the manual worker and the engineer or technician is being narrowed, and a process of qualitative alignment is taking place.

However, it would be a profound mistake to assert that with the development of technique and the automation of production manual labour will disappear. The gigantic advances in technique will immeasurably lighten manual labour and many back-breaking trades are disappearing and will continue to do so. But manual work will remain.

Hence the school, if it is to serve society well, cannot

stand aloof from manual work, which must form an organic part of the curriculum of every school and not merely of particular schools which prepare pupils for manual occupations.

The division of schools into two groups, some of which prepare young people for intellectual work and others for manual work, runs counter to the principle of equal educational opportunity and of the democratic organization of public education. In Soviet schools, manual work is compulsory for all pupils regardless of their future occupation and of whether they may ultimately select some sphere of intellectual activity.

No one questions the necessity of giving all children instruction in physics, chemistry, biology, mathematics, geography, history, literature and language, regardless of whether they will be philologists, engineers, historians or agronomists in their adult life, for the view taken is that a study of these traditionally established subjects ensures the all-round development of the personality and produces a young person who is 'educated' in the currently accepted meaning of that word.

A different point of view has prevailed, and still does, when it comes to manual work. It is accepted as a school subject, but only for schools which train young people for manual occupations in industry and agriculture. All other schools and their pupils, especially at the secondary stage, fight shy of manual work. In many cases, they regard it as something degrading which is the lot of the less gifted children.

Yet properly organized manual work adapted to the children's age-group capacities is a powerful means of ensuring the harmonious development of the personality, strengthening the body and increasing vitality. Another aspect of the pedagogical importance of varied manual work is that it brings home to the pupils the practical significance of the basic knowledge acquired at school, particularly of mathematics, drawing, physics, chemistry and biology, thus freeing instruction in these subjects from the abstract approach, which makes a conscious mastery of them so difficult.

The idea of bringing school education into contact with life and preparing pupils for practical work by combining teaching with productive labour was not based solely on the dictates of the technical and economic development of society which must be taken into account in organizing public education: if the school fails to meet the needs of a dynamic society and is divorced from life, it will not satisfy society or, what is more dangerous, give young people a reliable prospect of finding their place in life but will only breed frustration. The interests of society and the individual must be harmoniously united in the organization of school education. This union is effected by combining instruction and productive labour, for young people on leaving school will have been trained for practical participation in the building of Communism and will not find themselves at the crossroads, on the threshold of adult life, grappling with the agonizing problem of how and where to apply their powers and the knowledge they have acquired at school. All this takes on a special meaning and importance against the background of the Soviet Union's proclamation of the principle of the all-round development of secondary education so as to bring it within the reach of every boy and girl.

As already stated, the idea of combining school instruction with life, with reality, is of the most profound educational significance. It is the guiding principle of Marxist-Leninist pedagogy, as followed by school teachers and public education workers in the U.S.S.R.

The practical ways of implementing these principles were described in the theses of the Central Committee of the Communist Party of the Soviet Union and the U.S.S.R. Council of Ministers on strengthening the ties between school and life and further developing the public education system in the U.S.S.R., which were presented in 1958 for nation-wide discussion.

The following figures give an idea of how extensive the discussion was: in the R.S.F.S.R., 199,000 meetings were held attended by over 13 million people, over 800,000 of whom put forward their views. In the Ukrainian S.S.R., there were over 90,000 meetings attended by some 10 million people, of whom over half-a-million spoke. Discussions on the same scale also took place in the other Union Republics, and there were lively debates in even the remotest parts of the country on the best way of reorganizing education.

On 24 December 1958, following this nation-wide discussion, the Supreme Soviet adopted the law on strengthening the ties between school and life and the further development of the public education system in the U.S.S.R. Under the law, the state system of education continues to be the only one in the U.S.S.R., thus making it possible to ensure that education is truly universal and fully available to all, and to apply consistently the principle of the unified nature of the school and the succession of all links in the chain of the public education system.

Radical changes are made in the structure of the school and the content of its work. General compulsory education from 7 to 14 years is replaced by an 8-year course of general compulsory education from 7 to 15–16 years, and the 7-year school is to be transformed accordingly—over a period of three years—into an 8-year school.

The structure of the school system is shown in the diagram on page 1131.

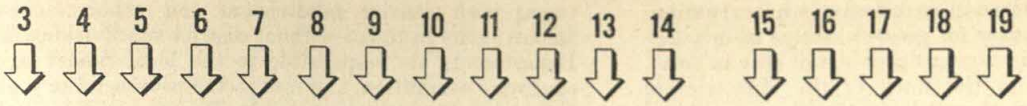
Administration

Full account is taken, in the system of direction and administration of public education, of the economic, ethnic, linguistic and cultural characteristics of the National Republics composing the U.S.S.R.

There is no All-Union Ministry of Education in the U.S.S.R. and education is entirely administered by the Councils of Ministers of the Union Republics through their respective Ministries of Education. Each Ministry is headed by a Minister of Education who is responsible to the Government of the Republic for the work of his Ministry.

The Union Republics include autonomous republics, autonomous regions and national areas. In the R.S.F.S.R., for example, there are 15 autonomous republics, 6 autonomous regions and 10 national areas, with national education being directed by Ministries of Education in the autonomous republics, and by regional and area Education Departments.

The existence of independent Ministries of Education in each Union and autonomous republic allows public



GLOSSARY

detskij sad (kindergarten): pre-primary school.

gorodskie professional'no-tehničeskie učilišča (urban vocational-technical schools): day and evening vocational training schools.

individual'no-brigadnoe učeničestvo na proizvodstve: production training for individuals or groups.

sel'skie professional'no-tehničeskie učilišča (rural vocational-technical schools): vocational training schools.

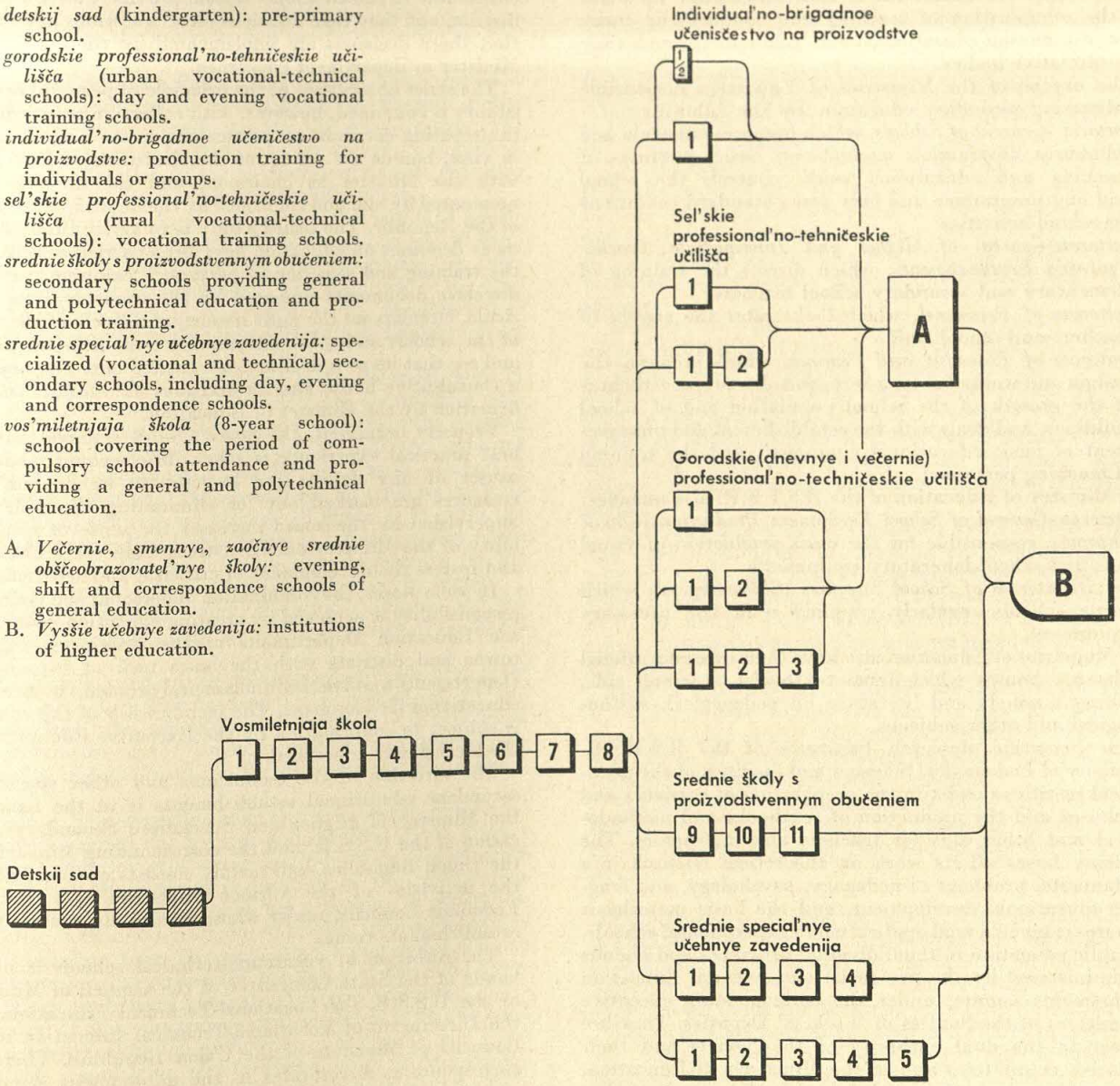
srednie školy s proizvodstvennym obučeniem: secondary schools providing general and polytechnical education and production training.

srednie special'nye učebnye zavedenija: specialized (vocational and technical) secondary schools, including day, evening and correspondence schools.

vos'miletnjaja škola (8-year school): school covering the period of compulsory school attendance and providing a general and polytechnical education.

A. *Večernie, smennye, zaočnye srednie obščeobrazovatel'nye školy:* evening, shift and correspondence schools of general education.

B. *Vyššie učebnye zavedenija:* institutions of higher education.



education to be administered in accordance with local national requirements, and makes for greater success in developing a culture socialist in content and nationalist in form.

The requisite unity in the work of the Ministries of Education is ensured by the all-Union legislation adopted by the Supreme Soviet of the U.S.S.R. and enacted by the Council of Ministers of the U.S.S.R. on the main educational questions.

The respective Ministries of Education draw up plans for the organization of teaching and conduct the entire work of directing educational establishments through their administrative bodies.

The organs of the Ministries of Education responsible for directing secondary education are the following.

Directorate-General of Schools, which prepares curricula and syllabuses, instruction manuals on basic questions of teaching and educational work, controls the school building programme and lays down standard conditions for school activities.

Directorate-General of Higher and Intermediate Teacher Training Establishments, which directs the training of elementary and secondary school teachers.

Directorate of Personnel, which looks after the supply of teachers and school staff.

Directorate of Planning and Finance, which prepares the budget and works out long-term and short-term estimates of the growth of the school population and of school buildings, and deals with the establishment and improvement of basic educational equipment and the training of teaching personnel.

The Ministry of Education of the R.S.F.S.R. also includes:

Directorate-General of School Equipment Production (*Glavuč tehprom*), responsible for the mass production of visual aids and school laboratory equipments.

Chief Directorate of School Supplies (*Glavsnabpros*), which keeps schools regularly supplied with the necessary equipment.

The Ministries of Education also have their own educational publishing houses which issue textbooks, teaching aids, teaching manuals and literature on pedagogical, methodological and other subjects.

The Scientific Research Institutes of the R.S.F.S.R. Academy of Pedagogical Sciences and faculties of the pedagogical institutes assist in the preparation of curricula and syllabuses and the production of textbooks and methodological and other aids for teachers and instructors. The academy bases all its work on theoretical research into fundamental problems of pedagogy, psychology, and long-term educational development, and the basic material it prepares is given a trial application in experimental schools.

Public education in the individual provinces and regions is administered by the provincial and regional Education Departments coming under the corresponding executive committees of the Soviets of Workers' Deputies. They are subject to the dual authority of the Soviets and their executive committees and of the Ministries of Education, thus enabling due weight to be given both to local requirements and to the need for uniformity in the solution of all basic problems.

The immediate administration of schools and other educational establishments is in the hands of district Education Departments in rural districts and in large towns with district subdivisions and urban Education Departments in towns without district subdivisions. These Departments are responsible to the local Soviet and its executive committee, and also to the provincial or regional Education Department or to the Ministry of Education of the autonomous Republic.

The Ministers of Education and heads of Education Departments are personally responsible for the educational curriculum in the Republic, region, province, area, town or district, and they take decisions on all questions and ensure that those decisions are implemented by the staff of the Ministry or department concerned.

The strict observance of the principle of personal responsibility is combined, however, with collective responsibility in preparing decisions on particular points. With that end in view, boards are set up at the Ministries of Education with the Minister as chairman, and the members are nominated by him and confirmed by the Council of Ministers of the Republic. The board's duty is to verify that government decisions on education have been carried out, discuss the training and selection of personnel, examine the basic directive documents prepared by the ministry staff (curricula, circulars on the most important aspects of the work of the schools and other educational establishments, etc.), and see that its own decisions are carried out. The board is a consultative body, and its decisions are subject to confirmation by the Minister of Education.

Properly organized, the board's work ensures that the best practical experience is taken into account, that the causes of any defects are brought to light, and that measures are worked out for eliminating those defects. Supervision by the board increases the sense of responsibility of the Ministry officials, strengthens state discipline and fosters the development of criticism and self-criticism.

In some places, the combination of personal and collective responsibility is achieved by creating education councils in the Education Departments of the provinces, regions, towns and districts with the basic task of helping the Departments to solve the fundamental problems of directing educational development. The membership of the councils is subject to confirmation by the Executive Committee of the local Soviet concerned.

The direction of the technicums and other specialized secondary educational establishments is in the hands of the Ministry of Higher and Specialized Secondary Education of the U.S.S.R. and the corresponding Ministries of the Union Republics, and mainly consists of co-ordinating the activities of the various Ministries and National Economic Councils, under whose immediate control those establishments come.

The direction of vocational-technical schools is in the hands of the State Committee of the Council of Ministers of the U.S.S.R. for Vocational-Technical Education, and the Directorate of Vocational-Technical Education of the Councils of Ministers of the Union Republics. There are corresponding directorates in the autonomous republics, regions and provinces.

The headmaster directs the educational and administrative work of the school. His main tasks, which he carries out in conjunction with the director of studies, are to organize the teaching staff, ensure that all parts of the school machine function smoothly, acquaint himself with

all aspects of the work of the teachers and pupils and keep a constant watch over it, eliminate shortcomings and to single out and publicize useful teaching experience.

He relies in his work on the support of public bodies and the parents. The latter are represented by the Parents' Committee, which assists the school in the general education and polytechnical training of the children, the organization of out-of-school activities, the dissemination of educational propaganda among the parents, the development of school amenities from the domestic and sanitary standpoint, and so on.

Every school has a Pedagogical Council which discusses educational problems. It comprises all the teachers at the school, the senior Pioneer leader, the school doctor, the chief librarian and the chairman of the Parents' Committee, with the headmaster acting as chairman, and its decisions take effect after the headmaster's confirmation.

To organize the educational work of the pupils of grades 5–11, the headmaster appoints individual class leaders from among the experienced teaching staff; in grades 1–4, their own teachers act as class leaders. The main task of the class leaders (whose work is supervised by the headmaster) is to knit the pupils together into a friendly and hard-working team.

For the purpose of conducting methodological work in the school, studying and systematizing outstanding educational experience and helping the teachers in the training and education of the pupils, the headmaster organizes seminars on teaching methods for teachers of grades 1–4 and commissions on teaching methods for separate subjects or groups of subjects for teachers of grades 5–11, with the most experienced and able teachers in charge. The headmaster and the director of studies are responsible for the conduct of methodological work in the school in general.

The senior Pioneer leader, the school librarian and the school doctor come under the direct authority of the headmaster.

The training and advanced training of heads of departments, inspectors and headmasters is carried out by the Central Institutes for In-Service Training of Educational Administrators of the Union Republics, and by the provincial or regional institutes for advanced teacher training.

Inspection. The inspection of all types of general educational schools is carried out by school inspectors of the district or urban and provincial or regional Education Departments and of the Ministries of Education of the autonomous republics. The inspector, with the assistance of experts on teaching methods from advanced teacher training institutes and specialists from factories, state farms and collective farms, personally verifies the execution of the state plans laid down for general compulsory 7-year education, polytechnical training and vocational training, tests the level of knowledge, skill and proficiency of the pupils and looks into the organization of educational work in the school. His task is not merely one of inspection, it is part of his responsibility to help the headmaster and teachers in their work.

The inspectors are appointed from among the best teachers and headmasters who are graduates of higher teacher training establishments and have a record of leadership and educational activity. Inspectors of district or urban Education Departments must have had at least five years' experience, and inspectors of provincial or regional Education Departments and Ministries of Education at least seven years' experience.

The other bodies (such as Parents' Committees) have no authority to supervise the work of the school.

The inspectors of the Ministries of Education inspect the work of the local education authorities.

Finance. The source of funds for the central and local administrative bodies is the U.S.S.R. state budget. All types of educational establishment and the bodies administering them are supported entirely by the State.

The financial support given to the schools is based on the number of pupils and classes in each school.

The construction and equipment of schools are financed from the state budget. Of late years, there has been great increase in school building financed by collective farms, and in this way two forms of property have been created in the Soviet Union—state property and collective farm property—which jointly provide the material basis of the schools.

Teachers are paid in accordance with their level of education and length of service. The rate of pay for teachers of grades 1–4 is based on a 24-hour working week or a 4-hour working day, while teachers of grades 5–11 are paid on the basis of 18 hours' work a week or 3 hours' work a day. In addition teachers receive supplementary pay for correcting the pupils' exercise books (subjects: mother tongue, Russian, foreign languages, literature and mathematics).

Teachers who act as class leaders, or direct subject-rooms and workshops, or are in charge of out-of-school physical training work, also receive supplementary pay for these types of work. Their pay rises by 10 per cent after intervals of 5, 10 and 25 years. In addition, after 25 years they receive a long-service pension amounting to 40 per cent of their pay.

Only a state system of public education exists in the U.S.S.R., and no tuition fees are charged. At specialized secondary and higher educational establishments, there is a system of state scholarships payable to all pupils and students who make satisfactory progress.

The increase in the amount devoted to education in the U.S.S.R. can be seen from the following figures: it was 22,489 million roubles in 1940 and 94,300 million roubles in 1959.

Buildings and equipment. School building in the U.S.S.R. is financed from state and public funds. To facilitate mass production, standard plans are drawn up to educational and hygienic specifications. This work is done by a special State Institute for the Planning of School Buildings.

Classrooms are built to the standard of 1.25 square metres per person. Apart from classrooms, the schools have teaching laboratories and laboratory assistants' rooms, specially equipped workshops for woodwork and metalwork, medical rooms, staff common rooms, etc.

Gymnasia are provided in all schools with over 280 pupils. In schools designed to accommodate 520 pupils or more, there are assembly halls, in some cases combined with a dining room. In schools with 920 places and over, there is

an assembly hall with a stage, and a dining room with separate kitchen facilities.

Assistance in preparing school building plans is given by the various institutes of the Academy of Building and Architecture, by the R.S.F.S.R. Academy of Pedagogical Sciences and by pedagogical scientists and working teachers.

School welfare services. Everyone in the U.S.S.R., including schoolchildren, is entitled to free medical care. In the case of secondary schoolchildren, these services are provided by special school doctors assisted by nurses and trained in pædiatrics and hygiene. They form part of the staff of the polyclinical department of children's hospitals, and are appointed by the local health authorities, under whose guidance and supervision they work. In places where there is no possibility of allocating special doctors to give medical attention in schools, the duties of school doctors devolve upon other doctors (in the country, on divisional doctors or doctors from the local hospital and in districts, on the district children's doctor).

The school doctor's main functions are: to observe the state of health and physical development of the children; to organize and provide the necessary medical and preventive care; to give advice and assistance to teachers in the organization and execution of their educational work—and especially in physical training—in accordance with the children's age and state of health; to make an early diagnosis and prevent the spread of diseases, and particularly infectious diseases in the school; to observe and check the sanitary condition of the school and ensure that the school administration takes the necessary measures of sanitation and hygiene; and to conduct health-education work and propaganda to spread a knowledge of hygiene among the children, parents and staff.

In pursuance of the above tasks, he prepares a concrete plan of work, discusses it with the school administration and submits it for approval to the appropriate health authorities.

As one of the means of ensuring that the system of universal compulsory 8-year education is carried into effect and secondary education developed, school hostels are being established and school transport facilities provided. In mountain districts, in the Far North and in districts of nomadic pastoralism, children living in boarding establishments attached to incomplete and complete secondary schools are maintained entirely by the State.

TYPES OF SECONDARY EDUCATION

The 8-year school is an incomplete secondary school designed to give pupils a firm grounding in general and polytechnical knowledge, to inculcate a love of work and a readiness to carry out socially useful activity, and to provide moral, physical and æsthetic education. As far as possible it must prepare the pupils for various types of work so as to permit them, with the help of teachers and parents, to make a deliberate choice of the course of their further education at schools providing a full secondary education and vocational training. The teaching staff of the 8-year school may advise the pupils and parents concerning the choice of further instruction, but the final decision rests with the latter. There are no special examinations in Soviet schools to determine the capabilities of the children and their level of intellectual development, and a system of 5 marks—5, 4, 3, 2 and 1—is employed by the teachers to show the standards attained in school subjects. The last two marks indicate that the pupils have fallen short of syllabus requirements.

The time-table for the four senior classes of the 8-year school, forming the first link in the chain of secondary education, is divided as follows: 43.2 per cent for the humanities [the native language, literature, history (including the Soviet Constitution), a foreign language, drawing, music and singing], 35.1 per cent for the natural sciences and mathematics (mathematics, physics, chemistry, biology, physical geography, technical drawing), 15.2 per cent for work training of all kinds and 6.5 per cent for physical training.

In grades 5–8, work training is carried out in the workshops for woodwork and metalwork, in the home economics room and on the schools' experimental farm plots. Apart from hand tools, the workshops are equipped with machine tools suited to the pupil's age. The curriculum provides for work not only in, but also out of school—poultry-keeping, nursery gardening, construction and repair of school equipment, rearing of small domestic animals, assistance to collective farms in tending young livestock, etc. Home economics is studied mainly by girls, but in some forms also by boys.

There is no question of training pupils for any particular career. Their work forms an integral part of what is termed polytechnical education, with the teachers of natural sciences and mathematics utilizing the experience acquired by the pupils and bringing them to a scientific interpretation of the various labour processes both in the workshops and on the school experimental farm plots, showing the application of scientific laws in various kinds of technical equipment, methods of plant cultivation, etc. In other words, the school work has an educational character and does not consist simply of inculcating familiarity with the use of tools and the conduct of particular operations.

The above analysis of the time spent on the various groups of subjects in the 8-year school shows that conditions are provided for the all-round development of the pupils, including their æsthetic and physical education.

Class instruction is supplemented by various types of out-of-school activities which take account of the interests and inclinations of the individual pupils. The sports lovers join sports clubs, those interested in art join amateur art groups, those interested in technical subjects choose technical groups, and so on, and adequate funds are provided in the school budgets for the conduct of these groups. There are also special out-of-school establishments where the needs and interests of the individual pupils can be still more fully met, and where their talents can develop and come to full flower. More will be said later concerning these establishments.

On graduation from the compulsory 8-year school, the pupils (and their parents) are free to choose the course of further education. Those wishing to have a full secondary education and acquire at the same time training for a particular practical occupation, enter the 'secondary labour

polytechnical school providing a general education together with production training' (hereinafter referred to as the senior secondary polytechnical school); those wishing to have general and specialized vocational secondary education enter the technicums and other specialized secondary educational establishments (for teacher training, public health, economics, commerce, etc.); those wishing to have a quicker vocational training without full secondary education can enter a vocational-technical school.

These three types of secondary educational establishments following the 8-year compulsory school are defined in the Law of 24 December 1958. The law also provides for a special type of school for young people and adults who are engaged in productive work in various organizations and establishments but who have not completed their secondary education—the so-called evening (shift) general secondary school.

Let us deal briefly with each of these types of general and specialized secondary school.

The senior secondary polytechnical school

In a 3-year course this type of school gives young people who have completed the 8-year school a full secondary education, prepares and qualifies them for entering any higher educational establishment, and provides vocational training for work in some branch of the national economy or cultural life.

Boys and girls not entering a higher educational establishment on leaving this school do not find themselves at a dead end, for they will have mastered a trade and can take up work feeling that they have a place in society.

These secondary schools are established either separately with three grades (9th, 10th and 11th school years) or in combination with the 8-year school, and are gradually replacing the 10-year school. The one-year's extension of the period of education is dictated by the changed pattern of schooling, with general education being supplemented by training in one of the mass occupations and accompanied by an intensification of work training. It would be difficult, without this extension, to find a solution to the new tasks arising, with the law envisaging the necessity for still further raising the level of general and polytechnical education and producing educated people with a good knowledge of the fundamentals of science.

In order to continue the work of all-round development and education initiated by the 8-year school, and to solve certain special problems confronting the full secondary school, the apportionment of time proposed for the various subjects is as follows: 30 per cent for the humanities (literature, history, Soviet Constitution, economic geography, foreign language); 31 per cent for the natural sciences and mathematics (mathematics, physics, chemistry, biology, astronomy, draughtsmanship); 33.3 per cent for production training (theoretical and practical) and productive labour; and 5.5 per cent for physical education. In addition, two hours a week are set aside in all three grades (9–11), for optional subjects. The pupils can devote themselves during that time to whatever particularly interests them, at their own choice—selected questions from a particular science or branches of technology, questions relating to the theory and history of art, various types of sport, and so on. The object of the optional subjects is to ensure that the pupil's individual interests are more fully met and deepened, and his abilities developed to their fullest extent. To promote æsthetic education, meanwhile, the schools have choral groups for which special funds are provided in their budgets.

The new element in the work of these reorganized secondary schools is theoretical and practical production training, to which one-third of the time of each class is devoted. In contrast to the 8-year school, where work training takes place in the school workshops and on the school's experimental farm plot, they conduct their production training directly, in factories and workshops and on construction sites and state or collective farms. Only in certain cases where the necessary production facilities are not available in the neighbourhood of the school does the training take place in the schools themselves or in inter-school educational-production workshops complete with suitable machine-tool equipment.

The term 'production training' is used in a broad sense. In the first place, it refers to the work of pupils in industrial and agricultural production, into which the majority of young people find their way owing to the particular structure of the national economy. But there is also a demand for manpower in trade, catering establishments and public and state services. A certain number of schools give special training to their pupils and arrange for their production training in these fields.

The theoretical side of production training is handled by physics, chemistry and biology teachers who have the necessary experience, or by specialists from industrial and agricultural enterprises—engineers, technicians and agronomists—while the practical instruction is given by skilled workers whose services are specially enlisted for that purpose.

In the schools based on factories or workshops, for production training, the pupils usually do productive work two days a week and study general education subjects in class for the other four. In rural schools, this arrangement is not always possible owing to the seasonal nature of agricultural work. Hence at certain periods of the school year the pupils do productive work for only a few days and then return to their general education. During the season, 54 days are devoted to productive labour in each grade (9–11). The maximum length of the working day both in urban and rural schools is six hours. The pupils receive wages calculated according to their output.

Production training and general education, particularly in the natural sciences and mathematics, are not parallel processes without point of contact. They are intimately linked and interdependent. In their practical work, the pupils use blueprints and make mathematical calculations, i.e., they exploit the knowledge they are acquiring at school. In studying machinery, machine-tools and technical equipment, they observe the practical application of the laws of physics to technology, and in chemical production they see the application of the the laws of chemistry. The study of the technology of many materials is closely bound up with chemistry and biology. An understanding of agricultural practice, for instance, rests on the theoretical basis of the knowledge acquired in studying biology. Theory and practice cross-fertilize each other and awaken an inquiring and creative spirit in the pupil's mind.

The organization of production training in these schools is a complicated matter, but the solution of the difficulties arising is made easier by the fact that in the U.S.S.R. there are only state enterprises or community enterprises (the collective farms). In some cases, these make considerable sacrifices in order to solve the problem so important to the State and nation, of improving the training of young people for life and for active participation in building a communist society.

But man's life in society is not limited to his daily work. He has his leisure, his free time. With the completion of the change-over in the U.S.S.R. to the 7-hour working day (and in some branches of heavy industry to the 6-hour day), the workers are getting more and more free time; and that time can only be well spent if people have varied cultural demands and tastes to be met, and are interested in music, literature, the theatre, the cinema and public affairs, both at home and abroad. The humanities provide a training for these qualities of the human personality and for its moral development.

To solve the complex tasks confronting the schools, the correct balance between the teaching of the natural sciences and the humanities and the correct correlation between general education and practical training have to be found, and the Soviet school curricula have been drawn up with this in mind.

Each secondary school prepares its pupils for from one to three careers. On leaving his 8-year school, the pupil chooses the secondary school he wishes to enter, depending on his interests and inclinations. The staffing of these schools to meet the pupils' interests is extremely difficult: certain vocations may be popular but not of great moment to the national economy, whereas others may not be particularly popular but are vitally necessary to the national economy. This clash of interests can be resolved without serious harm to the community or individual if definite efforts are made to mould the interests of the pupils through the agency of the school itself, the cinema, radio, television, children's literature and other means so as to meet the needs of the national economy for particular trades.

Interest is not something innate; it arises, and is moulded and strengthened, under the various influences of life itself. This process may be spontaneous, in which case it is very unsatisfactory, or it may be controlled. The school and society are equipped with adequate means of explanation, persuasion and demonstration to enable them to bring out the attractive aspects of a particular occupation and captivate young people by its inner romance. This was a difficult matter when heavy labour required the mere use of physical strength but is immeasurably easier now that muscle power is giving way to the power of the machine, when the mechanization and automation of production are developing apace and the worker's main task is machine operation.

Provided the pupils' interests are directed and moulded, the problems involved in completing secondary schooling by production training become considerably less acute not only in the towns, where a whole network of schools exists, but also in rural areas, where a sufficiently wide choice of occupations can also be assured. The state and collective farms are both highly mechanized in the Soviet Union and require the services of large numbers of tractor drivers, combine operators, electricians, radio operators and specialists in machine maintenance (turners, fitters, milling-machine operators, etc.).

The career for which the boys or girls have been trained in the secondary school is not necessarily a lifetime one. They have the opportunity of changing it if they wish, and they can learn another trade in their own enterprise by taking the appropriate courses. In addition, young people who have had a full secondary education have extensive facilities for access to higher educational establishments of all kinds. For example, a turner or milling-machine operator seeking further education does not necessarily have to enter a higher technical establishment but can become a doctor, teacher, lawyer or linguist. It all depends on his personal wishes. Nor does he necessarily have to give up his work in order to enter a higher educational establishment: young people can also follow the courses organized by the correspondence and evening departments of those establishments without giving up their jobs.

Side by side with the reorganization of the content of education, steps are being taken to perfect the organization and methods of instruction. The class lesson is the basic element but is not the sole form of educational activity. Independent work with books, manuals and reference literature is widely encouraged, and the same applies as regards measuring instruments and laboratory equipment, calculation and graph work, systematic nature study, experimental work on school farm-plots, excursions, etc.

Boarding schools form part of the 8-year and 11-year secondary school system. The State, by establishing these schools, gives assistance to families in bringing up children. Admission is subject to the parents' wishes, and holidays and 'days off' are spent at home. Boarding fees are charged based on the parents' earnings, but orphans and children from large families are maintained entirely by the State. By 1965, the number of children at boarding schools will total 2,500,000.

There are special schools for the general education of children gifted in music, dancing and the graphic arts.

For delicate children, there is a network of country sanatorium and convalescent schools situated in suitable surroundings where the classwork and out-of-school activities are carried on in the open if climatic conditions permit. The pupils are under the observation of children's doctors. The general education schools also include special schools for mentally or physically handicapped children.

Technicums and other specialized secondary schools

Technicians, as the immediate organizers of production, and other workers with specialized secondary education play a vital part in industrial and agricultural production and in the work of cultural, educational and public health institutions.

At the technicums and other specialized secondary schools, graduates of 8-year schools receive a general secondary education (entitling them to access to higher educational establishments), a working trade (at technical and agricultural schools) and a specialized secondary education. Children can be admitted to technicums immediately on leaving the 8-year school or after several years of work in production or in an institution. There is

an entrance examination. The training at the specialized secondary schools can be full-time or spare-time (at correspondence and evening departments, in the latter case, with the departments giving preference to persons working in trades related to the specialities chosen).

The technicums and other specialized secondary schools cover a wide range of branches, for they train specialists for all sectors of the national economy, culture, education and public health. The course of instruction lasts 4 years as a rule, but may vary to suit the special training of young people for particular jobs.

Some of these schools are organized on the basis of full secondary education, i.e., they take young people who have completed their secondary schooling, and their courses are somewhat shorter than in those which take young people from 8-year schools.

The training of these middle-level specialists is also conducted on the basis of close links with socially useful productive labour. The interests of modern production, based on the latest achievements of science and technology, require technicum graduates to have a high degree of theoretical training and a sound practical knowledge.

The practical training takes place in enterprises, organizations and institutions corresponding to the trainee's speciality. The industrial technicums have shops and workshops where the students turn out industrial products, and the agricultural technicums have large farms where the students themselves do all the basic work.

Vocational-technical schools

The primary task of this type of school is to provide planned and organized training for skilled workers for industry, building and agriculture, on the basis of active and systematic participation in productive labour in close conjunction with enterprises, construction sites and state and collective farms, and it caters for graduates of 8-year schools who wish to enter production. The course lasts from 1 to 3 years in urban schools and from 1 to 2 years in rural schools.

The main emphasis during the course is on enabling the pupils to master the selected trade both through work in the school workshops and through direct participation in productive work on the job. They also study various specialized and general subjects essential for a better grasp of their speciality.

The vocational-technical school does not offer a full secondary education, and pupils completing the course—provided they have had 8-years' schooling—can enter a technicum and take either a spare-time course (at the evening or correspondence department) or a full-time course if they are able to leave their employment. But the road to higher education is also open to pupils completing courses at vocational-technical schools provided they first complete a spare-time course of secondary education at a general secondary school for adults, about which more will be said later.

Vocational-technical schools are replacing the various types of vocational school which existed prior to the Law of 24 December 1958—trade, railway, mining, building, factory and agricultural mechanization schools—but although the nomenclature has been unified, they continue to specialize in particular branches of production. The reorganization process is to be completed within three to five years. Full maintenance (food and clothing) is provided by the State for orphans and children from large families, the other pupils being paid at apprentices' rates.

Evening (shift) secondary schools

These schools are intended for young and adult workers in industry and institutions who have not had a full secondary education, and they provide instruction on a spare-time basis. The length of the course for those who have had an 8-year education is 3 years. Shift-workers working on the first shift take evening courses and those working on the second shift take day courses. Hence the name. In rural areas, the study arrangements are based not on shifts but on seasonal considerations, depending on the course of agricultural work.

In accordance with the Law of 24 December 1958, these schools are replacing the secondary schools for young workers and peasants, and like the latter they provide a full secondary education and qualify graduates for entrance to higher educational establishments.

They give 20 hours of instruction a week including 15 hours for class-work, 3 hours for tutorials and 2 hours for optional subjects for improving the students' trade rating. The total teaching time is divided up among the various subject-groups as follows: humanities 32.5 per cent (literature, history, Soviet Constitution, economic geography, foreign language); natural sciences 42.5 per cent (mathematics, physics, astronomy, chemistry, biology, draftsmanship); optional subjects for improving trade rating 10 per cent; and tutorials 15 per cent. No special time is allotted for physical training, as the pupils get this during their working hours.

There are some young and adult workers who did not receive a full 7-year education before entering employment and the evening (shift) schools are therefore running classes for the third to eighth school year as a temporary measure.

About two million people are at present studying in these schools, and a further increase in the number of schools and pupils is planned in the near future, for the number of people wishing to complete their education by spare-time study is growing steadily, especially among members of communist labour brigades, who have set themselves the task not only of increasing productivity in order to fulfil the seven-year plan ahead of time but also of acquiring full secondary education.

There is nothing fortuitous about the young workers' thirst for knowledge: it is the result of the increasingly widespread introduction into industry and agriculture of complicated modern technology, and the development of the mechanization, automation and chemicalization of production, the application of electronics, the use of computers, etc.

Another stimulus to educational development and cultural uplift is the nature of social life in the Soviet Union. The workers take a large part in the activities of the trade unions and public voluntary bodies and in the political life of the country. Millions of young people are grouped together in the Young Communist League. The press, radio, cinema and television daily acquaint tens

of millions of workers with new facts about the development of culture, technology, science and art, many of which—especially in the field of science and technology—can only be understood by people who have at least had secondary education. All this encourages people to go on with their schooling.

Moreover, the evening (shift) schools not only provide general education but also help to improve the students' trade rating, and this is a further incentive to spare-time study.

The State and society are taking steps to meet the personal wishes of the individual members of the public by creating the necessary conditions for providing them with a full secondary education, both in the interests of the technical and economic development of the country and for the sake of raising of general cultural standards. Students doing well in their spare-time studies are released from their jobs for one day a week on half-pay. If they so wish, they can also be released for one or two days more without pay.

The development of secondary schools for young workers is in no way inconsistent with the development of the secondary general educational schools providing production training which pupils enter immediately on finishing their 8-year education. It is a question of equalizing the proportionate coverage by secondary education of the various categories of young people so as to make secondary education essentially universal in the interests of the development of Soviet society on the road to Communism.

The main idea behind the present reform of the public education system is to ensure that the younger generation shall be much better prepared for life, for socially useful work, and for enriching the cultural life of the nation, for Communism requires an abundance of intellectual as well as material values.

Teacher training schools

Teachers for grades 1–4 are trained at teacher training schools which have a 4-year course of study and are open to young people of both sexes who have completed the 7-year school. In view of the introduction of universal compulsory 8-year education, entrants will be required in future to have reached this level. There is also another type of training institution, with a 2-year course, which takes students who have had a full secondary education.

Side by side with general education subjects, the teacher training school curriculum includes manual work, singing, drawing and physical training. Great attention is paid to methods of teaching all subjects of the primary school curriculum, to the science and history of pedagogics and to psychology and school hygiene. A considerable number of hours are devoted to practical work in the workshops and in agriculture, and to teaching practice in grades 1–4.

Entry to teacher training schools is by competitive examination. Preference is given to candidates who have shown a bent for work with children and have experience of public work in the Pioneer organization, at summer kindergartens, in the children's rooms of house committees, etc. On completing their training, the students take the state examinations, which qualify them to teach grades 1–4, where all subjects are taught by the same teacher.

Faculties for the advanced training of teachers for grades 1–4 have now been established at pedagogical institutes, and it is intended that the number of these will be progressively increased.

Out-of-class activities

Apart from the various types of school, educational work with children is being carried on at over 10,000 extra-scholastic establishments in the U.S.S.R., while adult education establishments of various kinds are also drawn into out-of-school work among children. All these establishments supplement the schools' work of strengthening and deepening the children's knowledge by developing the creative capacities, interests and tastes of millions of Soviet schoolchildren.

To ensure the systematic direction of the work of extra-scholastic establishments, centres have been set up for young technicians, young naturalists, young tourists, etc.

There are some 2,500 Pioneer and schoolchildren's palaces and homes in the U.S.S.R. which cater for work with children in the field of science, technology, literature, art and sports. The Pioneer palaces and homes are of great help to the schools in developing various out-of-class activities, and they also organize and stage general events such as Bird Day, Forest Day, Garden Week, flower festivals and Pioneer rallies and bonfire nights.

As has already been stated, classwork in schools is supplemented by out-of-class activities which develop the creative powers and capacities of the pupils. Teachers organize this work, and draw on the initiative of the children themselves and their capacity for independent action in getting them to solve various questions of school life. The heart and soul of all out-of-class and out-of-school activities are the Pioneer, Young Communist, and teachers' organizations, which arrange gatherings, debates, competititons for various types of art activity, sports festivals and exhibitions of the pupils' work, arrange exchanges of correspondence with schoolchildren abroad, and so on.

Out-of-class and out-of-school work is being brought into even closer relation with life and with practical socialist construction. Particularly noteworthy in this connexion is the work of the Young Naturalists' centres, which encourage interest in agricultural work, publicize Michurin's teachings, familiarize schoolchildren with the achievements of biological science, encourage them to participate to the best of their ability in protecting nature and planting trees in villages and towns, and inculcate sound practices in tillage, horticulture, animal husbandry and market gardening. These centres have their own study-workshops, model farm plots for experimental and teaching purposes, hot-houses, 'nature corners', meteorological stations and laboratories of various kinds. Their work is co-ordinated by the Central Organization of Young Naturalists, which was founded in 1918.

The Young Naturalists have become a mass movement, and over 400,000 Pioneers and schoolchildren belong to Young Naturalist groups in the R.S.F.S.R. alone. Meanwhile, practically all village schools, and many urban schools, have their school gardens and fields on which they raise cereals, fodder-crops and industrial crops, plant nurseries of seedling trees, shrubs, fruiting plants and

flowers, and grow valuable new kinds of plants for their districts.

The special Young Naturalists' pavilion at the All-Union Exhibition of the Achievements of the National Economy in Moscow, gives an idea of the outstanding achievements of the Young Naturalists and displays interesting examples of their work. Annual meetings of Young Naturalists are held on both the Union and Republic level at which they can exchange experiences.

Young Technicians' Centres also occupy an important place in out-of-school activities. In 1926, the Shvernik National Young Technicians' Centre was established in Moscow and has became the hub of the organization of out-of-school technical activities. The curricula for the various technical groups are worked out at the National Centre on the basis of experimental work with children and literature is published on methods of work. Provincial, town and district Young Technicians' Centres carry out practical activities, hold seminars with the leaders of school groups, arrange courses, sum up and disseminate the results of most successful experience of work in the technical fields, arrange exhibitions, run competitions, etc.

Thousands of examples of schoolchildren's work on display at the All-Union Exhibition of Children's Technical Work testify to the great achievements of children in the design and manufacture of working models of various machines and of physical, chemical, mathematical and other equipment. Model aircraft making and radiotechnical work are particularly popular.

The regular slogans for the competitions, contests, exhibitions and other nation-wide activities staged are 'Think it out, work it out, try it out', and 'If you've learned—teach your friends', and the result is to arouse interest and attract millions of schoolchildren to technical work.

Extra-scholastic establishments are also very active in promoting the artistic education of children. Choirs and dance groups have been formed in many of the Pioneer homes and palaces, and there are thousands of groups, orchestras and studios for developing child talent in music, ballet, dramatics, the graphic arts and declamation. Lectures and talks on art and meetings with leading artists are also arranged. Every year there are schoolchildren's amateur dramatic contests, festivals and olympiads.

To develop the perceptive faculties of children and organize leisure-time cultural activities in Pioneer homes and palaces, 'games libraries' have been established which supply children free of charge with games for temporary use at home, issue schools and children's homes with a selection of games for Pioneer units and detachments, organize branch libraries on main thoroughfares and in childrens' parks, and stage nation-wide games contests by correspondence.

Every school has its physical culture groups to which the great bulk of the children belong. The number of children's sports groups organized at schools and within the sports clubs of the trades unions and voluntary sports associations is increasing year by year.

There are over a thousand special children's sports schools in the U.S.S.R.

It has become traditional to hold athletic and sports contests, football matches and cycle races for young people on a district, province, town and republic basis. Every year, there are All-Union schoolchildren's *Spartakiads* for athletics, gymnastics, swimming, basket-ball, volley-ball and other types of sport. Millions of schoolchildren take part in these contests and *Spartakiads*, and they have at their disposal their own stadiums, children's sections of adults' stadiums, and numerous sports fields, swimming pools and skiing grounds. Leading Soviet sportsmen are recruited for work with children and there are many children's sections for various types of sport, working under experienced trainers.

The State and the trade unions devote considerable sums to the support of various recreational facilities. In 1958 alone, over 6 million children and adolescents spent holidays at camp or at children's sanatoria or excursion centres.

For those who remain in town during the summer there are the recreation grounds attached to schools, and parks run by the house committees.

Children's libraries and children's departments of adult libraries organize readers' conferences, meetings with writers and literary discussions, set up book-lovers' groups and collect and analyse readers' opinions on books. The schoolchildren take an enthusiastic part in repairing books, preparing book exhibitions and producing handwritten literary magazines.

The publication of literature for children and young people progresses in quantity and quality year by year. The State Publishing House for Children's Literature (Detgiz), which was established in 1936, has so far issued a total of over 500 million books.

The services of outstanding teachers and foremost writers, artists, scientists and travellers are enlisted for producing children's books.

A total of 137 newspapers and 37 magazines for children and young people are published in the U.S.S.R.

Since 1944, a Children's Book Week has been regularly held during the spring holidays as a national event, with many meetings arranged between writers and poets and their young readers, literary evenings, lectures and book fairs.

In 1950, the Children's Book House was established by the R.S.F.S.R. Ministry of Education for scientific and practical work in connexion with children's literature and the systematic organization of children's reading. It has a unique collection of children's books, does mass work among children and studies the interests and needs of young readers in close liaison with the authors catering for them.

The Houses of Culture in the large enterprises have children's rest-rooms, reading rooms, games libraries, homework rooms and lecture rooms.

Engineers and technicians at factories run children's technical construction groups and young technicians' clubs.

The children's railways installed by the Ministry of Communications are extremely popular.

TRENDS AND PROBLEMS

The law on strengthening the ties between school and life, and further developing the public education system in the U.S.S.R., laid down a work programme covering several

years for the education authorities and all types of general educational and specialized schools.

A period of three to five years will be required for transforming existing schools into the new types specified by the law.

The basic problems are those of a purely educational nature—the improvement of curricula to meet the new tasks confronting each type of school and the special needs of the various age-groups, the preparation and publication of new types of textbook, the planning and production of new types of visual aid, machine-shop and laboratory equipment, and a review of current handbooks on teaching methods.

No less important is the strengthening of the 'infrastructure' of education—enlargement of premises, construction of many new buildings, planning of buildings in the light of the tasks to be carried out by the various types of school and of school hygiene requirements, and planning and production of better types of school furniture.

Much work lies ahead in raising the qualifications of teachers, especially of teachers of subjects connected with polytechnical education and the practical training of children for life.

Once labour becomes an organic part of the pupils' work and production training in the senior grades is conducted outside the school confines—in factories and workshops, on collective and state farms—the problems of organizing the children's life and rearing them in the spirit of Communism, Soviet patriotism and internationalism will assume a different aspect.

It will be the task of the Ministries of Education of the Union Republics to solve this set of problems during the next few years in close collaboration with teachers and industrial and agricultural specialists and with the help of pedagogical scientists, psychologists, health experts and specialists in the various fields of natural science and the humanities.

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STATISTICS

Population (Census 15 January 1959): 208,826,000.
Area: 8,649,821 square miles; 22,403,000 square kilometres.
Population density: 24 per square mile; 9 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58 enrolment in educational institutions from pre-primary to university level (including evening schools and correspondence courses) was 34.8 million pupils, representing about 17 per cent of the total population. There were in addition some 1,900,000 students enrolled in adult education courses and 900,000 more taking part in various vocational post-school courses. Of total enrolment, 6 per cent were pupils in kindergartens, about 49 per cent in primary schools or in the first four grades of the 7, 10 and 11 year schools. Another 33 per cent of enrolment was in general secondary schools, 5 per cent in vocational and secondary teacher training schools and over 2 per cent in higher teacher training. Students attending university and technical colleges represented 4 per cent of total enrolment. Children in special schools for the handicapped were 0.3 per cent. No specific figures are available on the number of girls enrolled at any level of education. The teaching staff in all pre-primary, primary and secondary schools numbered 1,945,400 in 1957/58 and the average pupil-teacher ratio at all primary and secondary schools was about 17. Enrolment at the primary level (first 4 grades) increased by 40 per cent between 1953 and 1957, but at the secondary level (grades 5–11) there was a progressive diminution in enrolment amounting to a loss of 36 per cent over the same period. This is explained by the lower birth rate during the war years. However, in higher teacher training colleges and university colleges there has been a steady increase in enrolment since 1953. Secondary teacher training enrolment has declined since the beginning of the period under review, probably due to increasing emphasis on post-secondary teacher training. (See Table 2.)

Enrolment trends in secondary education, 1950–57. Table 3 shows the enrolment trends in the upper grades (8–11) of the general secondary schools, and in vocational and teacher training schools, including pupils in evening schools and correspondence courses. A decline in general secondary education after 1955 is due mainly to the population effects of the last war. The average total enrolment at the upper secondary level for the period 1955–57 represented some 36 per cent of the estimated population 15–19 years old.

Examination results in secondary education, 1954/57. Over a million students were awarded diplomas in general, vocational and teacher training schools at secondary level during 1957/58 compared with 662,600 diplomas granted by the same schools in 1954/55. Most professional schools awarded a higher number of diplomas in 1957/58, but not secondary teacher training schools, whose enrolment has steadily declined since 1950. (See Table 4.)

Educational finance, 1957. Total expenditure on education during the year 1957 was 93,700 million roubles representing approximately 468 roubles per inhabitant. The state budget contributed 86 per cent of receipts, and, apart from a small sum contributed by the social security budget, the remaining 14 per cent were derived from state enterprises and co-operatives. (See Table 1.)

Source. U.S.S.R.: National Commission for Unesco, reply to Unesco questionnaire; Central Statistical Office, Statistical Yearbook, 1958.

1. EDUCATIONAL FINANCE, 1957 (in million roubles)[1]

Expenditure by source of funds	Total
Total expenditure	**93 700**
State budget	80 700
Social security budget	200
State enterprises and organizations, co-operatives, and collective farms (*Kolkhozes*)	12 800

1. Official exchange rate: 1 rouble = 0.25 U.S. dollar.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens						
	Total *	**1957/58**	**34 400**	**171 500**	...	**2 095 100**	...
	„ *	1956/57	33 800	155 900	...	1 882 000	...
	„	1955/56	31 596	143 834	...	1 730 941	...
	„	1954/55	29 896	130 985	...	1 577 398	...
	„	1953/54	28 258	118 111	...	1 438 307	...
Primary	Primary schools (4-year schools)	1957/58	[1] *111 900	[2] *1 773 900	...	[3] *16 998 600	...
	Seven-year schools	1957/58	[1] *55 900				
	Ten- and 11-year schools	1957/58	[1] *29 800				
	Total	**1957/58**	[1] ***197 600**	[2] ***1 773 900**	...	[3] ***16 998 600**	...
	„	1956/57	[1] *195 700	[2] *1 727 600	...	[3] *15 588 400	...
	„	1955/56	[1] 194 358	[2] *1 655 200	...	[3] *13 579 200	...
	„	1954/55	[1] 196 800	[2] 1 607 847	...	[3] 12 663 288	...
	„	1953/54	[1] 196 207	[2] 1 564 453	...	[3] *12 106 000	...
Secondary							
Generat	Seven-, 10- and 11-year schools	1957/58	[4] ...	[4] ...	...	[5] *7 238 600	...
		1957/58				[6] *4 349 100	...
	Total	**1957/58**	[4] ...	[4] ...	...	[7] ***11 587 700**	...
	„	1956/57	[4] ...	[4] ...	...	[7] *12 475 400	...
	„	1955/56	[4] ...	[4] ...	...	[7] *14 520 800	...
	„	1954/55	[4] ...	[4] ...	...	[7] 16 760 238	...
	„	1953/54	[4] ...	[4] ...	...	[7] *17 972 800	...
Vocational	Schools of industry and construction	1957/58	[8] 1 154	...	...	[8] *899 500	...
	Schools of transport and communication	1957/58	[8] 189	...	...	[8] *168 500	...
	Schools of economy and law	1957/58	[8] 216	...	...	[8] *163 100	...
	Schools of agriculture	1957/58	[8] 720	...	...	[8] *344 100	...
	Schools of public health and physical culture	1957/58	[8] 577	...	...	[8] *178 300	...
	Schools of fine arts and cinema	1957/58	[8] 195	...	...	[8] *39 500	...
	Total[9]	**1957/58**	[8] **3 051**	...	...	[8] ***1 793 000**	...
	„ [9]	1956/57	[8] 3 132	...	...	[8] *1 818 900	...
	„ [9]	1955/56	[8] 3 128	...	...	[8] *1 713 200	...
	„	1954/55	[8] 3 071	[10] 108 975	...	[8] 1 604 695	...
	„	1953/54	[8] 2 977	[10] 102 770	...	[8] 1 394 445	...
Teacher training	Teacher training schools						
	Total[11]	**1957/58**	[8] **447**	...	...	[8] ***148 100**	...
	„ [11]	1956/57	[8] 510	...	...	[8] *193 300	...
	„ [11]	1955/56	[8] 625	...	...	[8] *247 200	...
	„	1954/55	[8] [11] 724	...	...	[8] 234 362	...
	„	1953/54	[8] [11] 749	...	...	[8] 251 810	...
Higher							
Teacher training	Teacher training colleges						
	Total[12]	**1957/58**	[8] **256**	...	...	[8] ***748 700**	...
	„ [12]	1956/57	[8] 261	...	...	[8] *749 000	...
	„ [12]	1955/56	[8] 285	...	...	[8] *741 600	...
	„	1954/55	[8] 284	...	...	[8] 554 408	...
	„	1953/54	[8] 299	...	...	[8] 528 756	...

1. Including secondary schools.
2. Including auxiliary teachers, teachers in secondary grades, and teachers in special schools.
3. Enrolment in grades 1–4. In the previous edition of the *World Survey of Education: II—Primary Education*, data on primary education related to grades 1–7.
4. Included under primary education.
5. Enrolment in grades 5–7 of the 7-year schools and of the 10- and 11-year schools. In the previous edition of the *World Survey of Education: II—Primary Education*, data on secondary education included grades 8–10, 11 only.
6. Enrolment in grades 8–10, 11.
7. Enrolment in grades 5–10, 11. In the previous edition of the *World Survey of Education: II—Primary Education*, data on secondary education included grades 8–10, 11 only.
8. Including data on evening schools and correspondence courses. (In 1957/58, there were 281,000 students enrolled in evening schools and 401,000 students in correspondence courses of secondary vocational education including teacher training; and 127,000 students in evening and 779 students in correspondence courses of higher education including higher teacher training).
9. Not including data on technicums for librarians and schools of cultural education.
10. Including teachers in teacher training schools.
11. Including data on technicums for librarians and schools of cultural education.
12. Including data on universities and library institutes (enrolment in 1954/55—165,300).

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Higher [cont.]							
General and technical	Colleges of industry and construction	1957/58	[8]160	...	...	[8]*654 800	...
	Colleges of transport and communication	1957/58	[8]39	...	...	[8]*127 600	...
	Colleges of economy and law	1957/58	[8]65	...	...	[8]*147 400	...
	Colleges of agriculture	1957/58	[8]99	...	...	[8]*229 100	...
	Colleges of medicine and physical culture	1957/58	[8]97	...	...	[8]*175 500	...
	Colleges of fine arts and cinema	1957/58	[8]47	...	...	[8]*16 000	...
	Total[13]	**1957/58**	**[8]507**	**...**	**...**	**[8]*1 350 400**	**...**
	„ [13]	1956/57	[8]506	...	...	[8]*1 252 000	...
	„ [13]	1955/56	[8]480	...	...	[8]*1 125 400	...
	„	1954/55	[8]514	...	...	[8]1 176 047	...
	„	1953/54	[8]519	...	...	[8]1 033 261	...
Special	Schools for handicapped children						
	Total	**1957/58**	***900**	[4] ...	...	***105 700**	...
	„	1956/57	*900	[4] ...	...	*121 700	...
	„	1955/56	913	[4] ...	...	116 553	...
	„	1954/55	864	[4] ...	...	129 461	...
	„	1953/54	804	[4] ...	...	128 651	...
Adult	Primary schools for working youth	1957/58	*7 100	*104 400	...	[3]*33 800	...
	Secondary schools for working youth	1957/58				[5]*1 474 200	...
	Primary schools for rural youth	1957/58	*8 300	*57 700	...	[3]*17 500	...
	Secondary schools for rural youth	1957/58				[5]*278 300	...
	Primary schools for adults	1957/58	*195	*9 300	...	[3]*100	...
	Secondary schools for adults	1957/58				[5]*126 800	...
	Total	**1957/58**	***15 595**	***171 400**	**...**	***1 930 700**	**...**
	„	1956/57	*16 789	*175 400	...	*1 941 200	...
	„	1955/56	17 752	*167 700	...	*1 853 000	...
	„	1954/55	19 096	172 444	...	1 933 002	...
	„	1953/54	20 617	169 302	...	1 949 151	...
Vocational post-primary education	Technical centres	1957/58	432	...	...	*137 900	...
	Schools for artisanal railway and mining labourers	1957/58	995	...	...	*265 800	...
	Schools for factory, construction and mining labourers	1957/58	804	...	...	*169 300	...
	Schools for agricultural mechanics	1957/58	881	...	...	*202 200	...
	Vocational technical 12-year schools	1957/58	29	...	...	*4 300	...
	Apprentice courses in factories (FZU)	1957/58	.	...	...	*105 000	...
	Total	**1957/58**	**3 141**	**...**	**...**	***884 500**	**...**
	„	1956/57	3 153	...	...	*895 500	...
	„	1955/56	3 145	...	...	*877 300	...
	„	1954/55	3 123	...	...	871 963	...
	„	1953/54	2 873	...	...	847 276	...

13. Not including data on universities and library institutes.

3. TRENDS IN SECONDARY EDUCATION, 1950–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated child population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1950	[1]1 495 981	...	[2]980 107	...	[2]317 539	...			
1951	[1]2 347 873	...	[2]1 079 545	...	[2]289 367	...			
1952	[1]3 346 237	...	[2]1 210 862	...	[2]266 482	...	4 892	18 283	*27*
1953	[1]4 496 464	...	[2]1 394 445	...	[2]251 810	...			
1954	[1]5 144 710	...	[2]1 604 695	...	[2]234 362	...			
1955	[1]5 253 070	...	[2] *1 713 200	...	*[2 3]247 200	...			
1956	[1] *5 042 300	...	[2] *1 818 900	...	*[2 3]193 300	...	6 853	19 232	*36*
1957	[1] *4 349 100	...	[2] *1 793 000	...	*[2 3]148 100	...			

1. Enrolment in grades 8–10, 11 (secondary level).
2. Including data on evening schools and correspondence courses.
3. Including data on schools for librarians and 'cultural workers'.

4. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1954–57

Type of diploma or certificate granted	School year							
	1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female
Diplomas granted by schools of:								
industry	18 600	...	23 900	...	31 500	...	29 200	...
engineering	426 300	...	507 500	...	668 500	...	652 400	...
transport	9 800	...	12 600	...	17 700	...	20 100	...
law and economics	37 200	...	42 900	...	56 600	...	59 100	...
agriculture	48 300	...	50 400	...	69 100	...	69 600	...
fine arts	3 900	...	4 200	...	4 900	...	5 600	...
health services and physical culture	50 900	...	59 600	...	82 600	...	92 800	...
Diploma of teacher training schools	67 600	...	70 200	...	85 700	...	75 100	...

UNITED ARAB REPUBLIC

The unification of the republics of Egypt and Syria to form the United Arab Republic was proclaimed in February 1958, and the Principles of Unity adopted in a general plebiscite. The Provisional Constitution provides for a President as Head of State, who shall assume the executive authority. Legislative authority is vested in the National Assembly, the seat of which is in Cairo, the capital of the Republic. The President appoints Ministers and each Minister undertakes supervision of the affairs of his Ministry and implements the general policy laid down by the President.

By October 1958, Presidential Decrees had been issued concerning the formation of a Central Government (*Hukūma Markazia*) for the Republic, and an Executive Council (*Majlis Tanfidhi*) for each Region (*Iqlim*): Egypt and Syria. Another decree was issued to regulate and co-ordinate their functions and work. The chief concern of the Central Ministry of Education is to lay down, in collaboration with the two executive (i.e. regional) Ministries of Education, the public educational policy of the Republic at national level. Each Regional Ministry of Education in concerned with the implementation of public policy in its Region.

From the educational and cultural point of view, there have always been strong ties between Syria and Egypt, and thus there were many similarities in the educational systems even before the Cultural Treaty of 1957 or unification in 1958. It was therefore easy and natural to reorganize and unify educational systems and curricula in the two regions.

THE EDUCATIONAL SYSTEM

The separate Egyptian and Syrian Constitutions in effect at the time of unification vested responsibility for education in each of the respective States.

Article 21 of the revised Syrian Constitution adopted in 1953 proclaimed the right of every citizen to education, the defined object being 'the creation of a generation strong in body and mind, believing in God, equipped with knowledge and the higher moral qualities, aware of its Arab heritage and its rights and responsibilities, working in the interests of the public and possessing a spirit of co-operation and brotherhood among all fellow-citizens'. Article 28 stated, *inter alia*, that all institutions of learning in the country were to be under the supervision of the State.

Among other educational provisions the 1956 Egyptian Constitution included the following:

Article 50. 'The State exercises control over public education regulated by law. Throughout the various stages in state schools, education is given free of charge within the limits defined by law.'

Article 51. 'Primary education is compulsory, and free in state schools.'

Legislative provisions operative when the Provisional Constitution of the United Arab Republic came into force remain valid within the territorial limits stipulated at the time of their promulgation; they may be repealed or amended in accordance with the Provisional Constitution. Thus the following laws are still in force: (a) the 1953 Egyptian Law concerning secondary (senior high school) education; (b) the 1957 Egyptian Law concerning preparatory (junior high school) education; (c) the 1956 Egyptian Law concerning primary education; (d) the 1944 Syrian Laws Nos. 121, 202.

In 1958 a Presidential Decree, No. 160, was issued authorizing the Ministries in the two Regions to exercise jurisdiction over public and private education except for those activities assigned to other Ministries.

The Republic is divided into 31 educational zones (22 in the Region of Egypt and 9 in the Region of Syria), which co-operate with the three Ministries in policy-making. The trend is towards complete decentralization into local governments, each of which will be responsible for all public services, including education, in its respective area.

There are some private agencies which run a number of schools at different levels under the supervision of public educational authorities. Adult education is, at present, the responsibility of the Ministry of Culture and National Guidance.

The structure of the school system is shown in the diagram on page 1147.

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary education was introduced in the first half of the nineteenth century, as an intermediate stage in the so-called 'modern educational system'. Its function was to provide higher schools, the students of which were to be a recruitment source for civil or military servants of the Government.

Increasing national consciousness in both Syria and Egypt, accompanied by the social and economic changes that have taken place since the beginning of the twentieth century, led to the expansion and reorganization of secondary education.

In Egypt, the period of study was five years, the course for the last two years being divided into two sections: literary and scientific. In 1935 the period of specialization was reduced to one year but the number of sections was increased to three: literary, scientific and mathematical. Thus general secondary education covered a period of four years.

In 1952 the whole educational system in Egypt was revised and became a 4-4-3 system (primary, lower secondary, and upper secondary). A further change was made in 1956 to a system of 6-3-3 years (primary, preparatory and secondary). The three secondary school years were divided into one year of general studies and two of specialization either in arts or in science.

Technical education began as a parallel system to the last stage of primary education. It was then placed after primary education, and then again parallel to the upper stage of secondary education. At present there are three stages of technical education: preparatory, secondary and higher—corresponding to the three successive stages of general education above primary level.

In Syria under French mandate, the period of secondary education was seven years, preceded by five years of primary education. In 1944, under the Arab Government, the period of secondary education was reduced to six years, the first four being the intermediate stage and the last two the preparatory stage. The intermediate (lower secondary) stage was equivalent to the first four years of general education in the Egyptian secondary school. The Syrian preparatory stage (upper secondary) was divided, like the final year in the Egyptian secondary school, into scientific and literary sections. In 1952 the preparatory stage (upper secondary) was extended to three years, thus bringing the total period of secondary education to seven years.

Before 1944 there were also two types of post-primary complementary course: a general course of four years, without a second foreign language, and vocational courses. Both types led to technical schools, most of which offered courses of three years. The law of 1944 did away with the complementary courses and the Ministry was entitled to add commercial, agricultural and technical classes to any intermediate school if the need arose.

Since the cultural treaty signed in 1957, the two countries have adopted the same educational system of 6-3-3- years—primary, preparatory, and secondary.

For technical education the Region of Syria has adopted a pattern that is practically the same as that used in Egypt.

Legal basis

Secondary Education Law No. 211, 1953 (now being revised to bring it into conformity with the provisions of the Cultural Treaty and unification).

Preparatory Education Law No. 55, 1957 (dividing secondary education into two independent stages: lower and upper, each with its own objectives).

Secondary Education Law No. 566, 1958, for the Region of Syria (repealing the provisions of previous laws).

Technical Education Law No. 22, 1956 (concerning industrial instruction in both lower and upper stages of secondary education).

Technical Education Law No. 262, 1956 (concerning agricultural instruction in both stages).

Technical Education Law No. 261, 1956 (concerning commercial instruction in both stages).

Technical Education Law No. 1010, 1958, for the Region of Syria (organizing the three types of technical education).

Private Education Decree No. 160 (authorizing the ministries in the two regions to exercise jurisdiction over public and private education).

Administration

Organs of the Central Ministry of Education concerned with secondary education are:

The Higher Board of Planning, which is presided over by the Central Minister of Education and on which both Regional Ministries of Education are represented.

The permanent committees for general secondary and for technical secondary education (agricultural, commercial and industrial: one committee for each). There are also permanent committees for each subject.

The Directorate of Secondary Education, which is composed of experts and research workers.

Separate directorates of agricultural, commercial, industrial education.

An Under-Secretary of State responsible for planning, assisted by a Secretary-General and a Documentation Centre for Education.

A technical adviser for all branches and stages of technical instruction.

Both the Regional Ministries of Education are represented on every board and committee by experts and research workers and where appropriate by administrators, inspectors, principals, teachers, businessmen and other persons with special interests in particular educational problems.

Decisions of the Central Ministry concerning educational plans, curricula, programmes, organization, administrative measures are transmitted through the Under-Secretaries of State for the three Ministries to the respective department directors in both regions and to the administrative bodies and schools in the various zones.

There is a body of general inspectors for secondary education in each Regional Ministry, and an inspectorate attached to the Central Ministry of Education which 'follows up' and sees to it that the educational system is working efficiently.

Inspectors of secondary education are chosen from among the most efficient assistant principals and senior masters of secondary schools and principals of preparatory schools. They are required to be highly qualified and to have had at least 10 years' experience.

Every zonal administration has its own body of inspectors. Technical schools have consultative councils that help the principals in technical and administrative matters. Nearly every school has its parent-teacher association.

Finance. General and technical secondary education are free in public schools. In technical schools lunch is provided free of charge.

The Central Government has its own budget and allocates the funds required to finance the Central Ministry of Education. Both Regional Ministries of Education draw upon their own separate budgets to finance education in their respective regions. They provide for school buildings and the payment of teachers' salaries.

Private schools may be subsidized by the Regional Ministry of Education to help them to offer free education (particularly at primary level). Some subsidized schools are even staffed and supplied by Regional Ministries of Education, while others appoint their own staffs.

Buildings and equipment. In both regions there are special authorities responsible for the building of such school premises as educational requirements may demand, in conformity with the approved standards of space, sanitation, heating and lighting.

The school building authority in the Region of Egypt dates back to 1953 when a scheme was introduced with the object of replacing old unserviceable schools by new ones and providing the premises called for by the approved plan, to meet the growing demand for educational facilities.

A similar authority was set up in the Region of Syria and has already begun to discharge its responsibilities effectively.

GLOSSARY

al-ḳism al-thānawi bi ma'āhed al-tarbiya al-mūsiḳiya lil-mu'allimīn wal-mu'allimāt: teacher training schools of music (secondary section).

ḥaḍāna; pre-primary school.

ḥifẓ al-Kur'ān: Koranic schools.

ibtidā'i: primary school.

ibtidā'iyat al-Azhar: primary section of schools providing the al-Azhar course.

i'dādi (preparatory): schools referred to in text as 'preparatory' are categorized here as 'lower secondary'.

i'dādi 'ām: lower general secondary school.

i'dādi 'amali (practical preparatory): lower general secondary school with terminal course.

i'dādi fanni lil-banāt: lower vocational secondary school for girls.

i'dādi kulliyāt al-sharī'a: specialized lower secondary school with training in Islamic law.

i'dādi mushtarak: multilateral lower vocational secondary school.

i'dadi ṣinā'i; lower vocational secondary school for industrial occupations.

i'dādi tijāri: lower vocational secondary school of commerce.

i'dādi zirā'i: lower vocational secondary school of agriculture.

ma'had al-mūsiḳa al-sharḳiya: Institute of Oriental Music.

madāris al-mu'allimīn wal-mu'allimāt al-'amah wal-rīfiya: general and rural teacher training schools.

madāris al-tarbiyah al-riyāḍiyah lil-mu'allimīn wal-mu'allimāt: teacher training schools for physical education.

madrasat al-mumarriḍāt wal-hakīmāt: nursing and midwifery school.

madrasat al-zā'irāt al-ṣiḥḥiyāt al-ijtimā'iyat; vocational training school for social welfare and health officials.

shu'bat al-ādāb: literature section.

shu'bat al-'ulūm; science section.

thānawi 'ām; upper general secondary school with differentiation into literature and science courses.

thānawi kulliyāt al-sharī'a: specialized upper secondary school with training in Islamic law.

thānawi mushtarak: secondary polytechnical school.

thānawi nisawi: upper vocational secondary school for girls.

thānawi ṣinā'i: upper vocational secondary school for industrial occupations.

thānawi tijāri; upper vocational secondary school of commerce.

thānawi zirā'i: upper vocational secondary school of agriculture.

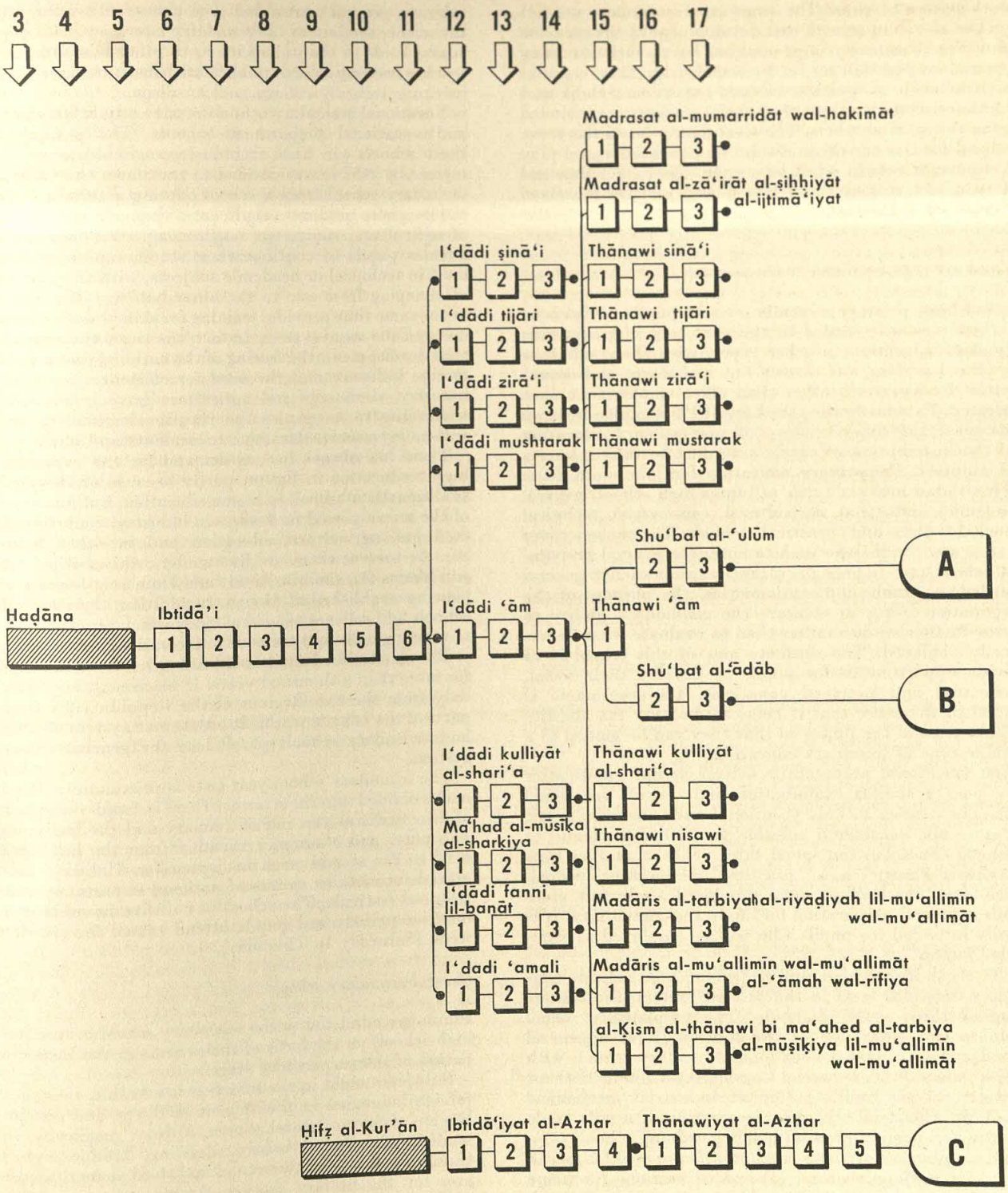
thānawiyat al-Azhar: secondary section of schools providing the al-Azhar course.

HIGHER EDUCATION

A. Higher institutes and faculties requiring entrants to have graduated from science section of upper secondary school.

B. Higher institutes and faculties requiring entrants to have graduated from literature section of upper secondary school.

C. al-Azhar University.


3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Madrasat al-mumarridāt wal-hakīmāt
1 2 3
Madrasat al-zā'irāt al-ṣiḥḥiyāt al-ijtimā'iyat
1 2 3
I'dādi ṣinā'i
1 2 3
Thānawi sinā'i
1 2 3
I'dādi tijāri
1 2 3
Thānawi tijāri
1 2 3
I'dādi zirā'i
1 2 3
Thānawi zirā'i
1 2 3
I'dādi mushtarak
1 2 3
Thānawi mustarak
1 2 3
Shu'bat al-'ulūm
2 3
A
Ḥaḍāna
Ibtidā'i
1 2 3 4 5 6
I'dādi 'ām
1 2 3
Thānawi 'ām
1
Shu'bat al-'ādāb
2 3
B
I'dādi kulliyāt al-shari'a
1 2 3
Thānawi kulliyāt al-shari'a
1 2 3
Ma'had al-mūsīḳa al-sharḳiya
1 2 3
Thānawi nisawi
1 2 3
I'dādi fanni lil-banāt
1 2 3
Madāris al-tarbiya al-riyāḍiyah lil-mu'allimīn wal-mu'allimāt
1 2 3
I'dadi 'amali
1 2 3
Madāris al-mu'allimīn wal-mu'allimāt al-'āmah wal-rīfiya
1 2 3
al-Ḳism al-thānawi bi ma'ahed al-tarbiya al-mūsīḳiya lil-mu'allimīn wal-mu'allimāt
1 2 3
Ḥifẓ al-Kur'ān
Ibtidā'iyat al-Azhar
1 2 3 4
Thānawiyat al-Azhar
1 2 3 4 5
C

School welfare services. The concern of secondary schools with the all-round growth and development of the students and of the community in general has led to their assuming increased responsibilities in the social field. They organize activities such as parties, camps, excursions, clubs and athletic contests, and qualified social workers are included among the staff members. The secondary schools also serve as social centres for the surrounding community and play an important role in adult education. They offer financial aid to needy students and free health services in school hospitals or in the home.

TYPES OF SECONDARY EDUCATION

On finishing primary education, most pupils—influenced by their parents—tended in the past to prefer academic secondary education to other types, with the result that the school system was thrown out of balance and opportunities for vocations other than office employment were neglected. To remedy this, the Law of 1956 emphasized two principles: the differentiation of post-primary education and the distribution of pupils according to their interests and abilities. Preparatory education has, therefore, been differentiated into six types of junior high school: general (academic), industrial, agricultural, commercial, technical schools for girls, and 'practical' schools. The courses cover three years. Pupils who wish to enter the general preparatory school have to pass an entrance examination in general knowledge, Arabic and mathematics, the purpose of the examination being to measure the candidate's ability to pursue further studies rather than to evaluate what he has already achieved. The ultimate aim of this school is to provide opportunities for pupils to develop their social, intellectual and practical capacities. Its programme is general in the sense that it helps to discover the abilities and interests of the pupils so that they can be guided to a suitable type of secondary education.

The vocational preparatory schools accept pupils after they pass a similar examination and certain vocational tests. The courses include vocational and general subjects.

Pupils not considered suitable for either academic or technical education can spend three years in another type of school, known as a 'practical' preparatory school, which does not lead to more advanced study but gives pupils a general preparation for life in the community. It is mainly intended for pupils who will be employed as semi-skilled labour.

The secondary school proper (senior high school) constitutes the third level in the present system, the courses being of three years' duration. The preparatory school graduate can enter one of the following: (a) a general secondary school; (b) a vocational secondary school, with a bias towards commercial, agricultural, industrial or domestic science training; (c) an industrial mechanical school, an industrial school for decoration, a textile trade school; (d) a general or rural teacher training school; (e) a school for physical training teachers; (f) a school for health and social welfare visitors; (g) special sections for home economics and music education; (h) a polytechnical school.

Nearly half of the graduates of preparatory schools enter general secondary schools where they spend the first year taking a general course and then choose either the arts or the science section for the remaining two years. This general course leads to the university or to other institutions, e.g. teacher training college, public health institute, accountancy institute, military college, police college.

Vocational secondary schools receive pupils from general and vocational preparatory schools. The graduates of these schools can work in industry, agriculture and commerce. In 1957 it was decided to transform the vocational secondary school from a school offering a terminal course to one whose graduates could enter the university faculties of agriculture, commerce, engineering, etc. This not only enables pupils to continue their studies up to university level in technical or academic subjects, with the possibility of changing from one to the other half-way through, but at the same time provides training for skilled workers within one and the same system. In fact, the trend towards industrial development, the freeing of the national economy from foreign influence and the need for efficient man-power in industry, commerce and agriculture have influenced the authorities to reorganize the vocational school so that it will be even more attractive to students and parents.

There has always been a demand for the expansion of higher education in Egypt, partly because of the prestige traditionally attached to higher education, but also because of the growing need for leaders in industry, commerce, law, medicine, agriculture, education and in other fields of life. At present there are five modern universities—Cairo, Ain Shams, Alexandria, Assiūt and Damascus—and a sixth is being established at Aleppo. In addition, there are higher schools and colleges of several kinds which absorb hundreds of young people and train them for various professions.

The classical University of al-Azhar has been in existence for more than a thousand years. It receives its students not only from the two Regions of the Republic, but from all parts of the Islamic world. It has its own system of primary and secondary schools parallel to the general education system.

The secondary school year lasts approximately 210 days and is divided into three terms. There is a mid-year vacation of two weeks at the end of January and the beginning of February, and a summer vacation from the last week in May to the second week in September. Holidays are observed for certains events of national importance and for religious festivals. The school day of five hours is divided into six periods and pupils attend school for six days a week (Saturday to Thursday).

General secondary schools

Pupils are admitted to the secondary school proper (senior high school) on the basis of their marks in the final examination of the preparatory stage.

Subjects taught in the first year are Arabic, religion, two foreign languages in the Region of Egypt and one in the Region of Syria, natural science, history, geography, social studies, physics, chemistry, drawing, hobbies, physical training and art. In the second and third years the subjects are, for the literary section, Arabic, religion, sociology, philosophy, history, geography, two foreign languages, physical training, hobbies; and for the scientific section, Arabic, religion, two foreign languages, mathematics,

physics, chemistry, biology, hobbies, physical training. Nearly three-quarters of all secondary students are in the scientific sections.

Tests are held at the end of each term. The average mark obtained in the first two tests counts for 25 per cent of the total marks for the year, the marks in the last term test representing 75 per cent of the total. At the end of the third year a public examination is held.

Teachers in secondary schools are university graduates (in either arts or science, with a diploma in education) or have completed a course at a higher training college. They usually begin teaching in junior high (preparatory) schools before they are promoted to senior high schools (secondary).

Vocational and technical schools

Industrial schools. Pupils completing primary education and intending to enrol at an industrial preparatory school are required to sit for an entrance examination.

The courses of study in the industrial preparatory schools are Arabic, religion, history, geography, one foreign language, civics, natural sciences, mathematics, geometry, technology, workshop practice, geometrical drawing, technical drawing.

In the industrial secondary schools the students take Arabic, civics, social studies, physics, mathematics, book-keeping, geometrical drawing, mechanical drawing, mechanics, estimations, technology, decoration, drawing

In the first year each student is trained in the following fields: fitting, metal-turning, smithing, carpentry and joinery, masonry, weaving and spinning. In the second year he specializes in one of the following sections: general mechanical work, auto mechanics, electricity, masonry, weaving and spinning.

The graduates of industrial secondary schools may work in the factories as foremen and technicians or enter the Higher Teacher Training Institute for technical school teachers.

Agricultural schools. The courses of study in the three-year preparatory school are Arabic, religion, agriculture, horticulture, animal husbandry, agricultural industries, rural sociology, bee-keeping and silkworm breeding. Students also receive practical training in dairies and on farms—every preparatory school has a farm of not less than 25 acres. In Syria the agricultural schools have now been replaced by training centres.

In the agricultural secondary schools students are trained so as to be able to run agricultural projects and farms, to initiate their own agricultural enterprises or to work as agricultural advisers, while the best students can go on to agricultural colleges and faculties. Over the period of three years the following subjects are studied: Arabic, religion, agriculture, horticulture, husbandry, biology, physics, chemistry, zoology, food industries, bee-keeping and silkworm breeding, rural surveying, rural economy, social studies, co-operative and farm administration. A farm of about 75 acres is attached to each agricultural secondary school.

Commercial schools. To be admitted to commercial preparatory schools, a student must pass an entrance examination. Courses of study can be grouped thus: (a) Arabic, religion, a foreign language, handwriting, geography, history, and physical training; (b) book-keeping, commercial arithmetic, business training, principles of buying and selling, and typewriting. About 40 per cent of the time is devoted to the second group of subjects. Graduates of this 3-year course are trained to work in small firms.

Commercial secondary schools choose their students from among the graduates of general preparatory schools (70 per cent) and the best students of the commercial preparatory schools. The subjects taught during the three years are Arabic, religion, two foreign languages, economic history, social studies, economic geography, financial and economic mathematics, book-keeping, business training, typewriting, physical education and hygiene. The graduates of these schools can run their own businesses or get office jobs in private firms or in the government service. The best students can go on to more advanced study in colleges or faculties of commerce.

Technical secondary schools for girls. Some girls graduating from the general preparatory schools enter technical secondary schools for girls. The courses of study in the first year are Arabic, religion, a foreign language, history, geography, social studies, natural sciences, hygiene and nursing, needlework, home economics (including horticulture), music and physical training.

In the second and third years each girl specializes in three of the following subjects: home economics (including horticulture), needlework, arts and crafts, music, a second foreign language.

Teacher training schools

General and rural teacher training schools. These schools train primary school teachers for urban and rural schools respectively. Both types accept graduates of general preparatory schools after an interview. They offer a 3-year syllabus of Arabic, religion, English, mathematics, natural science, geography, history, social studies, school hygiene, drawing, handicrafts, physical education, music, needlework (for girls), education and psychology. In the rural schools considerable emphasis is also placed on agriculture. The tendency now is towards extending the course in these schools to 4 years or even 5.

Secondary schools of music. These train teachers of music for primary schools. The students are selected from among the graduates of preparatory schools. Graduates may go into the teaching profession or continue their studies at the Higher Institute of Music.

Secondary schools for physical education. These schools train teachers of physical education for primary schools. Entrants must pass medical examinations, physical ability tests and interviews. The 3-year course covers military training, physical training, games, athletics, swimming, camping and scouting, practical training in teaching, Arabic, religion, principles of education and psychology, social work, hygiene and first aid, anatomy, physiology, physical education (theories and methods), art, music and songs.

Other specialized schools

These include: (a) a polytechnical secondary school with a syllabus that is a well-balanced combination of subjects taught in the three types of technical secondary school (industrial, commercial and agricultural); (b) a secondary school for the gifted with an enriched syllabus; (c) model and experimental schools supervised by the Faculty of Education and the Educational Adviser of the Ministry of Education; (d) secondary schools of nursing, usually attached to big hospitals; (e) midwifery schools.

Out-of-class activities

Social life is considered as an integral part of the educational process in schools. A class council, elected democratically, participates in administering the affairs of each class. In all schools students are grouped into 'houses', each of which also has its elected council. The house councils elect a students' council which takes part in the planning of extra-curricular activities and in the administration of school affairs. With the help of teachers, students organize cultural, technical and social clubs, to satisfy and develop their interests in different disciplines and hobbies. Through these different bodies, students develop a sense of responsibility and a spirit of co-operation which are necessary elements of the new society. Scouting and camping are considered valuable means of contributing to the growth of character and physical development of students.

TRENDS AND PROBLEMS

The development of general and vocational secondary education reflects the democratic, technical and national trends that are shaping modern Arab society, in the sense that secondary education is preparing youth both for life in society and for higher education. More emphasis is being laid upon the practical side in general secondary education, and certain vocational subjects are being introduced, as an experiment, in some of these schools. On the other hand, more emphasis is being placed on academic courses in vocational schools. More practical training is also being given. Technical schools are provided with modern equipment and machines to help students develop the skills required for new industries. Vocational schools have strengthened their relations with factories and production centres. Vocational training centres for boys who are not enrolled at universities have been re-established.

Educational planning in the field of secondary education goes hand in hand with economic planning. Thus technical and vocational education is gaining the respect and the interest of both parents and authorities. An effort is now being made to raise the standard of teaching in vocational schools, and training is provided for teachers in special higher training schools.

Closer attention is being paid to the quality of education by revising curricula, developing new methods of teaching, improving audio-visual aids, establishing higher standards and qualifications for teaching staffs and providing in-service programmes for both teachers and administrators. There is growing interest in vocational guidance and counselling as means of ensuring the all-round development of secondary school students. The examination system is being revised and simplified. New evaluation techniques such as aptitude tests, interest tests, and cumulative records are being developed.

Education for girls is being expanded and diversified. Besides the general secondary schools and the schools in which girls are taught home economics and child care, new vocational schools for girls have been established. Girls are now finding employment in factories and business firms.

In view of the increasing number of international contacts in modern society, more foreign languages are being taught at secondary level.

The relation between secondary school and community is being strengthened. The school feels more responsible for contributing to the improvement of the social, cultural and economic awareness of the community. In return, the resources of the community are used by both teachers and students to infuse vitality into the processes of education.

[*Text prepared by the Central Ministry of Education, Cairo, in October 1959.*]

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STATISTICS: REGION OF EGYPT

Population (mid-year 1958 estimate):[1] 24,781,000.
Area: 386,100 square miles; 1,000,000 square kilometres.
Population density: 64 per square mile; 25 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment (not including al-Azhar University and some 90,000 persons attending adult education courses) reached nearly 2.7 million, being 11 per cent of the total population in the Region of Egypt. Of these pupils, 78 per cent were in primary education, 15 per cent in general secondary education, 2 per cent in vocational education, 1 per cent in teacher training, and 3 per cent in universities and higher institutes (other than al-Azhar). The proportion of girls was 36 per cent in primary schools and sections, 23 per cent in general preparatory (i.e. lower secondary) and secondary schools and sections, 21 per cent in vocational education, and 45 per cent in teacher training schools and sections. In the higher teacher training institutes 38 per cent of the students were girls, and in the other institutions of higher education, 13 per cent. Women teachers represented 33 per cent of the teaching staff in primary schools and sections, and 18 per cent in the preparatory and secondary schools and sections. Average number of pupils per teacher was 38 in primary schools and 16 in all the preparatory and secondary schools and sections combined.

Between 1953 and 1957, enrolment increased by 50 per cent in primary education. At the secondary level, only vocational schools and sections had increased enrolment (nearly threefold), but this sector accounted in 1957 for only 13 per cent of the total secondary enrolment. However, the proportion of girls in general secondary education had increased from 19 per cent in 1953 to nearly 23 per cent in 1957. Higher education enrolment increased by 46 per cent. (See Table 1.)

Enrolment trends in secondary education, 1930–57. From 1930 to 1952 there was a nine-fold increase in general secondary enrolments (the proportion of girls rising from 6 to 16 per cent), and a three-fold increase in vocational education and teacher training. The sudden expansion in general secondary school enrolment between 1952 and 1953 was due to a reorganization of the school system, as a result of which secondary education comprised a 4-year lower secondary and a 3-year upper secondary course. Another change in 1956 reduced the lower secondary stage to a 3-year preparatory course, while increasing the duration of primary schooling from 4 to 6 years. Vocational education has seen a rapid expansion within the last five years. Average total enrolment at the secondary level now takes in about 21 per cent of the estimated population 15–19 years old. (See Table 2.)

Examination results in secondary education, 1953–57. The number of general secondary education certificates more than doubled between 1953 and 1957, while the total number of vocational diplomas awarded increased by 29 per cent. Certificates of teacher training schools showed the highest rate of increase, the total number granted in 1957 being 4.5 times as large as in 1953. The proportion of girls receiving elementary teachers' certificates decreased from 61 per cent in 1953 to 41 per cent in 1957. For the first time in 1957, girls also received certificates as rural school teachers, while boys began to receive advanced primary teachers' certificates. (See Table 3.)

Educational finance, 1958/59. In the fiscal year beginning in July 1958, total expenditure by the Ministry of Education was budgeted at 39,326,000 Egyptian pounds, representing an average expenditure of £1.6 per inhabitant. Of this sum, £23,585,000 was for salaries to teachers and other professional staff, £11,741,000 for other recurring expenditure, and £4,000,000 for 'new projects'. These figures do not include expenditure for education by other Ministries, by provincial and municipal authorities (for primary education) nor expenditure from the university budgets, nor for adult education. Official exchange rate: 1 Egyptian pound = 2.87 U.S. dollars.

Source. United Arab Republic: Central Ministry of Education, reply to Unesco questionnaire.

1. Excludes nomad population (55,073 at 1947 census).

1. REGION OF EGYPT: SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools and sections, public	1957/58	20	79	78	1 047	350
	Nursery schools and sections, unaided private	1957/58	87	171	168	6 178	2 363
	Total	**1957/58**	**107**	**250**	**246**	**7 225**	**2 713**
	„	1956/57	101	229	227	7 429	2 731
	„	1955/56	171	370	358	13 397	5 150
	„	1954/55	143	188	185	9 963	3 859
	„	1953/54	...	...	...	...	...

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools and sections, public	1957/58	5 705	45 118	13 366	1 701 511	648 889
	Advanced primary schools and sections, public	1957/58	26	143	71	1 793	919
	Primary schools and sections, aided private	1957/58	1 020	7 311	3 432	296 893	114 494
	Primary schools and sections, unaided private	1957/58	768	2 337	1 196	88 400	20 578
	Total	**1957/58**	**7 519**	**54 909**	**18 065**	**2 088 597**	**784 880**
	,,	1956/57	7 872	52 037	15 940	1 981 534	745 021
	,,	1955/56	8 654	48 585	15 377	1 869 493	688 491
	,,	1954/55	7 463	50 959	14 774	1 585 965	597 298
	,,	1953/54	6 785	45 869	12 202	1 395 729	526 968
Secondary							
General	General preparatory schools and sections, public	1957/58	538	10 828	2 259	187 985	52 455
	General secondary schools and sections, public	1957/58	203	6 684	1 013	89 999	16 373
	General preparatory schools and sections, aided private	1957/58	220	3 994	537	70 103	13 436
	General secondary schools and sections, aided private	1957/58	45	1 047	74	14 343	1 541
	General preparatory schools and sections, unaided private	1957/58	121	932	164	20 136	3 579
	General secondary schools and sections, unaided private	1957/58	28	250	49	5 053	809
	Total	**1957/58**	**1 155**	**23 735**	**4 096**	**387 619**	**88 193**
	,,	1956/57	1 192	23 894	4 014	427 396	93 972
	,,	1955/56	1 409	24 255	3 776	436 082	90 334
	,,	1954/55	1 530	22 400	3 436	452 471	87 983
	,,	1953/54	1 569	17 181	2 460	440 636	85 365
Vocational	Preparatory and secondary schools and sections, public and private						
	Total	**1957/58**	**197**	**4 465**	**682**	**63 053**	**12 991**
	,,	1956/57	162	3 206	551	42 363	7 322
	,,	1955/56	150	3 321	549	30 691	5 371
	,,	1954/55	133	2 923	546	21 946	4 310
	,,	1953/54	133	...	...	22 098	3 770
Teacher training	Teacher training schools and sections, public						
	Total	**1957/58**	**88**	**2 264**	**754**	**23 648**	**10 579**
	,,	1956/57	96	2 465	...	30 153	12 528
	,,	1955/56	95	2 249	...	28 546	11 940
	,,	1954/55	85	1 879	...	25 035	11 399
	,,	1953/54	84	1 721	...	23 908	11 267
Higher							
Teacher training	Higher teacher training institutes, public						
	Total	**1957/58**	**15**	**603**	**324**	**4 749**	**1 784**
	,,	1956/57	14	476	228	4 651	1 960
	,,	1955/56	14	474	258	4 572	1 888
	,,	1954/55	10	...	...	3 081	1 359
	,,	1953/54	9	...	...	2 619	1 392
General and technical	Universities[1]	1957/58	4	2 699	156	73 144	9 333
	Higher institutes	1957/58	18	238	52	5 000	1 080
	Total	**1957/58**	**22**	**2 937**	**208**	**78 144**	**10 413**
	,,	1956/57	11	2 820	155	66 899	8 292
	,,	1955/56	9	2 792	125	62 037	7 597
	,,	1954/55	8	...	...	59 800	6 379
	,,	1953/54	8	...	...	54 347	4 729
Special	Reformatory schools, public and private						
	Total	**1957/58**	**458**	**807**	**615**	**7 861**	**5 084**
	,,	1956/57	567	925	598	11 176	6 757
	,,	1955/56	520	617	401	9 761	5 685
	,,	1954/55	[2] ...	815	...	10 418	...
	,,	1953/54	[2] ...	828	...	10 450	...
Adult	Institutions of popular culture	1957/58	263	2 468	...	39 791	...
	Literacy campaign centres	1957/58	562	1 578	...	48 796	...
	Total	**1957/58**	**825**	**4 046**	**...**	**88 587**	**...**
	,,	1956/57	741	3 221	...	77 107	...
	,,	1955/56	869	3 389	...	84 502	...
	,,	1954/55	[3] 924	[3] 1 992	...	88 582	...
	,,	1953/54	[3] 289	[3] 2 830	...	133 364	...

1. Not including the al-Azhar University, enrolling pupils at all levels.
2. Including institutions for the deaf.
3. Not including data on the institutions of popular culture.

2. REGION OF EGYPT: TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational[2]		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	15 816	6	7 127	...	6 903	36			
1931	16 505	8	12 484	...	5 167	35			
1932	15 341	9	10 358	...	4 630	29	32	1 284	*2.4*
1933	15 093	9	11 410	...	4 495	31			
1934	14 777	9	11 626	...	4 262	33			
1935	15 985	8	13 501	...	3 462	34			
1936	17 335	8	16 077	...	3 318	35			
1937	18 576	8	16 899	...	2 994	39	37	1 364	*2.7*
1938	20 621	8	16 191	...	2 491	37			
1939	21 348	8	14 629	...	2 771	42			
1940	22 889	11	14 405	...	2 739	40			
1941	23 176	8	13 823	...	2 544	37			
1942	26 015	8	13 094	...	2 581	34	44	1 610	*2.8*
1943	31 737	9	12 469	...	2 936	32			
1944	36 654	9	13 887	...	3 469	34			
1945	38 823	9	13 796	...	4 677	29			
1946	44 810	9	15 860	...	5 378	28			
1947	50 279	11	16 428	...	4 953	39	75	1 912	*3.9*
1948	60 047	11	16 505	...	5 874	33			
1949	70 324	12	18 750	...	7 397	42			
1950	93 767	14	20 125	...	9 217	44			
1951	121 486	15	20 799	...	13 177	46			
1952	146 580	16	23 681	...	19 842	49	156	2 091	7
1953	440 636	19	22 098	17	23 908	47	493	2 222	22
1954	452 471	19	21 946	20	25 035	46			
1955	436 082	21	30 691	18	28 546	42			
1956	427 396	22	42 363	17	30 153	42	489	2 349	*21*
1957	387 619	23	63 053	21	23 648	45			

1. From 1930 to 1952 secondary schools only.

2. From 1930 to 1952 secondary technical schools only.

3. REGION OF EGYPT: EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
General secondary certificate	–	–	–	–	17 179	...	34 437	...	29 631	...
Certificate of girls' colleges (secondary section)	35	35	34	34	36	36	59	59	78	78
Secondary education certificate (special section)	13 502	...	22 747	...	4 924	...	3 821	...	–	–
Diploma of industrial schools	1 881	–	1 689	–	931	–	1 909	–	1 954	–
Diploma of commercial schools	937	...	715	...	730	...	1 023	...	1 613	...
Diploma of agricultural schools	500	–	418	–	610	–	942	–	985	–
Diploma of vocational schools schools for girls	295	295	734	734	979	979	1 133	1 133	1 302	1 302
Certificate of teacher training school	1 398	856	2 661	1 459	348	256	3 689	1 852	8 071	3 308
Certificate of rural teacher training school	28	–	88	–	90	–	242	–	1 077	228
Certificate of advanced primary teacher training school	195	195	230	230	220	220	223	223	704	240
Diploma of special teacher training school	787	...	1 441	...	1 193	...	1 430	397	885	355

STATISTICS: REGION OF SYRIA

Population (mid-year 1958 estimate):[1] 4,280,000.
Area: 71,228 square miles; 184,479 square kilometres.
Population density: 60 per square mile; 23 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment (excluding vocational schools not under the Ministry of Education and students in part-time schools of adult education) was over 456,000, representing 11 per cent of the total population. Of these pupils, 6 per cent were in kindergarten classes, about 79 per cent in primary schools, 13 per cent in secondary education, and nearly 2 per cent in higher education. The proportion of girls was 29 per cent in primary schools, 23 per cent in secondary schools, 26 per cent in vocational and commercial schools, 36 per cent in teacher training schools, and 17 per cent at the University of Syria. Women were 38 per cent of all teachers in primary schools (including kindergarten classes), where the pupil-teacher ratio was 33. In secondary schools, the average number of pupils per teacher was 19.

Between 1953 and 1957 enrolment increased by 21 per cent in primary schools, by 36 per cent in vocational and commercial schools, and more than doubled at the university. However, in the general secondary schools, there was a sudden drop in enrolment between 1956 and 1957, resulting in a figure for 1957 which was barely 1.5 per cent above that for 1953. A similar trend is noted with regard to vocational and commercial schools, where total enrolment increased progressively between 1953 and 1956 but showed a decrease in 1957 over 1956. (See Table 2.)

Enrolment trends in secondary education, 1930–57. Between 1930 and 1943, enrolment in public general secondary schools more than tripled, with the proportion of girls increasing from 10 to 26 per cent. In the next 14 years, between 1944 and 1957, secondary school enrolment in public and private schools together went up almost five times, but the proportion of girls had diminished rather than increased. In spite of an apparent setback in the 1945–49 period, vocational school enrolment (in which private schools play a minor part) had also shown steady increase, particularly on the part of boys. Enrolment in teacher training schools showed a definite trend towards increase between the years 1944 and 1954. From Table 3 it may be seen that the average total enrolment at the secondary level, for the period 1955–57, reached about 17 per cent of the estimated population 15–19 years old.

Examination results in secondary education, 1953–57. The number of general secondary education certificates (*brevets*) granted in 1957 was half as many again as in 1953, while the number of *baccalauréats* nearly tripled over the same period; the proportion of girls among the successful candidates in 1957 was only 21 per cent for the *brevet* and 17 per cent for the *baccalauréat*. Similarly, girls received 31 per cent of the *brevets* in industrial education, but only 21 per cent of the *baccalaureats*. In commercial education, the *brevet*, apparently received only by boys, seems to have disappeared in favour of an increasing number of *baccalauréats* in the same field. In 1957, girls received 37 per cent of teacher training diplomas, whose number had increased by 26 per cent since 1953. (See Table 4.)

Educational finance, 1958/59. For the fiscal year beginning in July 1958, total recurring expenditure for education was budgeted at 65.5 million Syrian pounds, being an average of £15 per inhabitant. (See Table 1.)

Source. United Arab Republic, Region of Syria: Ministry of Education, Department of Statistics, reply to Unesco questionnaire.

1. REGION OF SYRIA: EDUCATIONAL FINANCE, 1958/59
(in thousand Syrian pounds)[1]

Recurring expenditure by level and type of education	Amount		Per cent	
Total recurring expenditure[2]		**65 504**		**100.0**
Central administration		5 811		8.9
Instruction		59 693		91.1
Primary education	33 847		51.67	
Secondary education	17 343		26.48	
General	13 761		21.0	
Vocational	2 102		3.2	
Teacher training	1 480		2.3	
Higher education	8 503		12.98	

1. Official exchange rate: 1 Syrian pound = 0.456 U.S. dollar.
2. Budget estimate.

1. Excludes Palestinian refugees (113,204 on 31 December 1957).

2. REGION OF SYRIA: SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary[1]	Kindergarten classes of primary schools, private	1957/58	...	[2] ...	[2] ...	28 458	12 495
	Kindergarten classes of foreign primary schools, private	1957/58	...	[2] ...	[2] ...	2 678	1 419
	Total	**1957/58**	**...**	[2] **...**	[2] **...**	**31 136**	**13 914**
	,,	1956/57	...	[2] ...	[2] ...	25 432	11 461
	,,	1955/56	...	[2] ...	[2] ...	28 245	12 731
	,,	1954/55	...	[2] ...	[2] ...	25 678	...
	,,	1953/54	...	[2] ...	[2] ...	24 271	...
Primary[1 3]	Primary schools, public	1957/58	2 524	8 240	2 391	295 361	78 953
	Primary schools, private	1957/58	388	[2] 2 832	[2] 1 663	75 728	29 722
	Foreign primary schools, private	1957/58	19	338	[2] 217	8 272	4 479
	Palestine refugee primary schools (UNRWA)	1957/58	58	275	119	10 209	4 131
	Total	**1957/58**	**2 989**	[2] **11 685**	[2] **4 390**	**389 570**	**117 285**
	,,	1956/57	2 808	[2] 10 854	[2] 4 048	326 749	94 072
	,,	1955/56	2 717	[2] 10 364	[2] 3 823	317 122	91 497
	,,	1954/55	2 626	[2] 9 989	[2] 3 714	310 543	...
	,,	1953/54	2 584	[2] 9 660	[2] 3 557	295 167	...
Secondary *General*	Secondary schools, public	1957/58	94	1 511	388	27 954	7 006
	Secondary schools, private	1957/58	166	1 143	180	22 910	3 958
	Foreign secondary schools, private	1957/58	16	193	97	2 369	1 231
	Palestine refugee secondary schools (UNRWA)	1957/58	10	69	18	1 609	387
	Total	**1957/58**	**286**	**2 916**	**683**	**54 842**	**12 582**
	,,	1956/57	279	2 976	708	67 984	15 886
	,,	1955/56	267	3 941	794	63 435	14 934
	,,	1954/55	244	4 044	822	60 606	14 209
	,,	1953/54	212	[4] 3 689	[4] 443	54 040	13 072
Vocational[5]	Vocational schools, public	1957/58	10	221	68	1 860	599
	Commercial schools, public	1957/58	2	37	–	546	–
	Vocational schools, private	1957/58	2	26	4	287	109
	Total	**1957/58**	**14**	**284**	**72**	**2 693**	**708**
	,,	1956/57	17	397	111	3 420	970
	,,	1955/56	19	313	73	2 735	865
	,,	1954/55	19	299	71	2 190	629
	,,	1953/54	19	244	53	1 976	351
Teacher training	Teacher training schools, public						
	Total	**1957/58**	**8**	**147**	**55**	**1 231**	**441**
	,,	1956/57	8	186	65	1 178	475
	,,	1955/56	8	158	59	1 233	530
	,,	1954/55	8	140	47	1 271	599
	,,	1953/54	6	[6] 140	[6] 35	1 226	557
Higher[7] *Teacher training and general*	Syria University, public						
	Total	**1957/58**	**1**	**294**	–	**7 892**	**1 377**
	,,	1956/57	1	...	...	6 535	1 113
	,,	1955/56	1	...	...	5 390	935
	,,	1954/55	1	...	...	5 023	934
	,,	1953/54	1	...	...	2 978	596
Special	School for blind children, private						
	Total	**1957/58**	**1**	**10**	**5**	**41**	**9**
	,,	1956/57	–	–	–	–	–
Adult	Part-time schools, private						
	Total	**1957/58**	**30**	**134**	**15**	**...**	**...**
	,,	1956/57	30	134	15	2 477	157
	,,	1955/56	30	134	15	2 477	157
	,,	1954/55	30	134	15	2 477	157
	,,	1953/54	...	...	...	...	...

1. In the previous edition, enrolment in pre-primary education—except at foreign schools—was counted with enrolment in primary education.
2. Teachers in primary schools also teach in the kindergarten classes attached to these schools.
3. Not including rural public schools.
4. Including teachers of teacher training schools.
5. Only schools under the Ministry of Education.
6. Included in general secondary education.
7. Including teacher training at the university.

3. REGION OF SYRIA: TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General[1]		Vocational[1 2]		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1930	1 477	10	351	36	119	36			
1931	1 572	12	360	36	129	35			
1932	1 770	12	385	36	115	35	2.1	...	...
1933	1 605	11	437	32	74	39			
1934	1 441	12	482	30	32	22			
1935	1 564	13	598	30	45	–			
1936	1 837	12	726	31	66	11			
1937	2 661	14	805	37	77	5	3.3	227	*1.5*
1938	2 942	19	884	39	146	3			
1939	2 945	19	1 143	35	102	–			
1940	3 357	20	1 250	35	104	12			
1941	3 196	24	1 276	32	101	26			
1942	3 628	25	1 318	32	86	23	5.2	249	*2.1*
1943	4 890	26	1 444	29	72	18			
1944	11 592	27	1 679	19	284	42	14	265	*5*
1945	12 661	24	916	14	388	58			
1946	15 754	23	826	13	402	59			
1947	18 914	25	975	14	365	58	21	303	*7*
1948	23 563	25	1 340	15	432	49			
1949	28 505	25	1 605	13	616	28			
1950	34 874	24	1 875	18	955	33			
1951	42 521	24	1 799	12	1 233	36			
1952	47 670	24	1 676	12	1 255	42	51	342	*15*
1953	54 040	24	1 976	18	1 226	45			
1954	61 350	23	2 190	29	1 271	47			
1955	63 445	24	2 735	32	1 233	43			
1956	67 984	23	3 420	28	1 178	40	66	397	*17*
1957	54 842	23	2 693	26	1 231	36			

1. From 1930 to 1943, public schools only.

2. Schools under Ministry of Education only.

4. REGION OF SYRIA: EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Brevet (general education)	5 432	1 337	4 501	938	6 137	1 264	8 390	1 677	8 452	1 762
Baccalauréat (general education)	1 409	284	1 421	167	2 069	321	3 535	616	3 801	636
Brevet (industrial)	192	34	200	38	124	15	123	33	208	65
Brevet (commercial)	34	–	52	–	23	–	5	–	–	–
Baccalauréat (industrial)	42	–	52	13	106	11	116	21	141	29
Baccalauréat (commercial)	3	–	32	–	47	–	49	–	73	–
Teacher training diploma	434	222	423	215	353	149	535	265	548	204

THE EDUCATIONAL SYSTEM

Various influences, some governmental, some non-governmental, combine to produce the pattern of education in England and Wales. The main feature of the pattern is the public system of primary and secondary education. This system is mainly concerned with the children of compulsory school age, that is between 5 and 15 years, but it projects upwards to a considerable extent to include children up to the age of 18 or beyond who are preparing for the various forms of higher education and downwards to include nursery schools for children aged 2 to 5. The universities, which are independent of government control though they receive very substantial financial assistance from the State in various ways, the publicly-maintained technical colleges and colleges for training teachers, and the educational facilities of the armed services also form part of the general pattern. To complete the picture, mention must be made of the private or independent schools and colleges which supplement the state provision. In England and Wales, there are close on 7 million children in some 30,000 schools maintained or assisted out of public funds—a large proportion of these are in schools built since the end of the second world war. Another half million children are in some 4,400 independent schools i.e. unaided private schools, varying from the large and well-known so-called 'public' schools to small local institutions catering for a very small number of children.

The statutory basis of the system is the Education Act of 1944 which gave legal recognition to the principle that it is the responsibility of the State to provide every child with the opportunity to develop his capabilities and aptitudes to the full, spiritually, morally, mentally and physically, regardless of his parents' means or station in life. The system allows no discrimination on grounds of sex, race, colour or creed but it acknowledges the rights of parents regarding denominational religious instruction and the interest of the churches in education, the differing needs of boys and girls and the particular ethnic and linguistic problems of the Principality of Wales.

The Education Act of 1944 provides for the education of the child in three progressive stages—primary education from the age of 5 to 11+, secondary education from the age of 11+ to 15 (minimum school leaving age) or up to 18 or 19 where appropriate, and further education after full-time schooling is done with.

The structure of the school system is shown in the diagram on page 1159.

Central government. With the exception of university education, education in England and Wales is under the control of the Minister of Education. The Minister's duty is 'to promote the education of the people of England and Wales and the progressive development of institutions devoted to that purpose, and to secure the effective execution by local authorities, under his control and direction, of the national policy for providing a varied and comprehensive educational service in every area'. (Section 1(1), Education Act, 1944.)

The Ministry does not conduct any schools itself. Its functions include the following: (a) the determination of major policies; (b) control of the rate, distribution and nature of education building; (c) control of teacher training and supply and determination of the principles governing recognition of teachers as duly qualified for their profession; (d) the settlement of disputes, for example, between a parent and a local education authority, or between a local education authority and the managers or governors of a school; (e) the payment of certain educational grants from central government funds, for example, scholarships, educational research. Two Central Advisory Councils, one for England and the other for Wales, advise the Minister upon any questions referred to them by him.

Local government. Local administration is in the hands of the elected councils of counties and the larger cities (known as county boroughs). These local authorities have many public duties delegated to them by Acts of Parliament. Among these duties is the responsibility for education. The local authorities, in the context of education, are known as local education authorities. As regards primary and secondary education the duty of the local education authorities is laid down in Section 8(1) of the Education Act for 1944 as follows: 'It shall be the duty of every local education authority to secure that there shall be available for their area sufficient schools (a) for providing primary education, that is to say, full-time education suitable to the requirements of junior pupils; and (b) for providing secondary education, that is to say full-time education suitable to the requirements of senior pupils, other than such full-time education as may be provided for senior pupils in pursuance of a scheme made under the provisions of this Act relating to further education; and the schools available for an area shall not be deemed to be sufficient unless they are sufficient in number, character, and equipment to afford for all pupils opportunities for education offering such variety of instruction and training as may be desirable in view of their different ages, abilities, and aptitudes, and of the different periods for which they may be expected to remain at school, including practical instruction and training appropriate to their respective needs.'

Accordingly the local education authorities build schools and colleges, pay teachers, provide materials, equipment, etc.

Private agencies. The churches—the established Church of England, the Roman Catholic Church and the nonconformist Protestant denominations—play a significant part within the publicly-financed educational system in the provision of denominational schools. Popular education in

England and Wales owes its origin to the early initiative of the religious bodies and their interest is perpetuated today in what is known as the 'dual system' whereby, although all schools within the public system are maintained out of public funds, in some cases, the actual building is provided by the local education authority and in others by the church concerned; the former are known as 'county schools' and the latter as 'voluntary schools'.

In addition to the county and voluntary schools, there are a number of schools which are either partly assisted by public funds (see glossary under 'direct grant schools') or wholly independent financially. All are subject to a measure of control by the Minister as described later.

THE DEVELOPMENT OF SECONDARY EDUCATION

Some of the oldest secondary schools trace their history back over several centuries but the nineteenth century saw a widening of secondary education both qualitatively and quantitatively. This movement was at first limited to the independent schools, State interest in popular education being confined at that time to elementary education. The Education Act of 1902 introduced striking reforms in the public education system. At that time, the term 'secondary education' meant education of an academic character as distinct from the simpler and more practical elementary education. Under that Act, remodelled local education

GLOSSARY

NOTE. Apart from the highest classes (sixth form) in the grammar schools, the chart does not indicate the designation or numbering of classes as practice in this respect is not uniform.

bilateral school: a secondary school providing clearly defined and separate courses for two of the following kinds of secondary education—grammar, modern, technical. (See *secondary grammar school*, *secondary modern school*, *secondary technical school.*)

comprehensive school: a large secondary school combining grammar, modern and technical education. (See *secondary grammar school*, *secondary modern school* and *secondary technical school.*)

direct grant school: the premises are owned by an independent non-profit making body who are responsible entirely for the conduct and finance of the school, but the Ministry gives grants directly to the school, based on the number of pupils. Fees may be charged but the amount is subject to the approval of the Ministry; a number of free places must be reserved for children from maintained primary schools. They are usually grammar schools but there are some nursery and technical schools.

evening institute: evening classes are held either in evening institutes or as part of the activities of technical colleges (see below) and provide the widest possible variety of courses for persons of all ages who have left school. Tuition ranges from preparation for the General Certificate of Education and external degrees of London University through vocational, technical and commercial courses and liberal humanistic studies to recreational subjects such as dancing.

General Certificate of Education: the main external examination for secondary school pupils in England and Wales.

independent school: the premises are held, and the school conducted by a proprietor or other profit-making body or by a non-profit-making or charitable body. No grant is received from public money but such schools are open to inspection by the Ministry. The schools commonly known as 'public schools' are for the most part independent schools.

nursery class: a class for children of about 3 to 5 years attached to an infant school or department.

nursery school: a self-contained school for children between the ages of 2 and 5 years, that is, under compulsory school age.

primary school: a school providing separate primary education for children aged 5 to 11 years; may be for 'infants' only (5 up to 7), for 'juniors' only (7 to 11) or for both.

school of art: an establishment similar in character to the technical college, but providing courses in all forms of pictorial and plastic art, including industrial design and also courses leading to the Ministry's diplomas and certificates for art teachers.

school of music: normally provides full-time courses for students who have left school and wish to train either as professional musical performers or as specialist teachers of music in schools.

secondary grammar school: provides an academic, liberal education in a course planned to lead to university education.

secondary modern school: provides general education with a practical bias influenced by local circumstances and environment.

secondary technical school: provides a course of general education with a technical bias.

selection examination commonly known as 'the 11+ examination': objective tests of reading, writing, arithmetic and intelligence, taken by all primary school children at about 11 years of age to indicate the kind of secondary education best suited to them; open also to children in private schools but not compulsory for them. A number of education authorities are experimenting with other methods of selection.

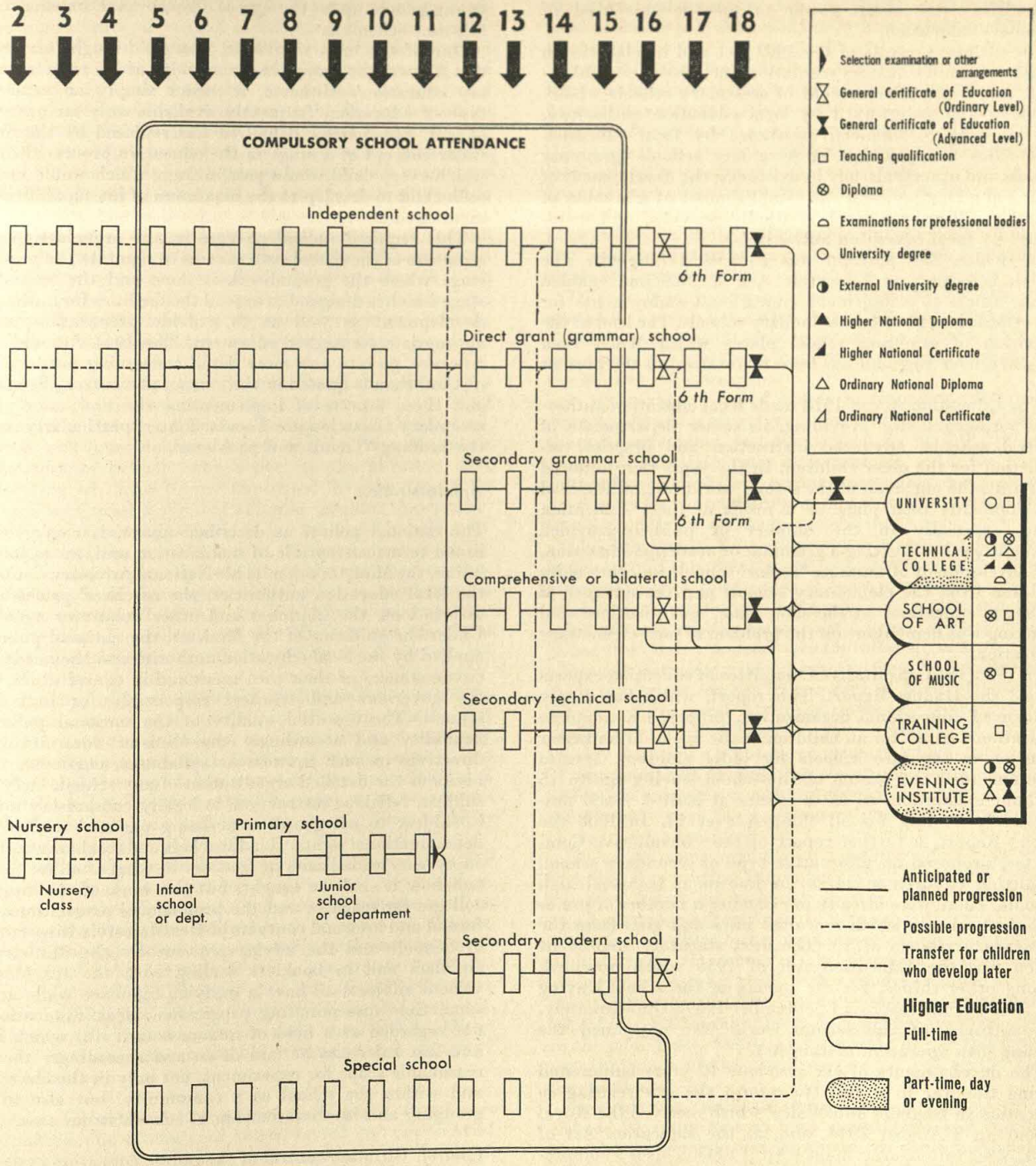
sixth form: the highest classes of the grammar-type schools, usually tending to specialize either in the arts or the sciences, and planned as direct preparation for university entrance.

special school: school for physically or mentally handicapped children with compulsory attendance to the age of 16. Courses provide, to the extent that the disability will allow, an education similar to that provided in primary and secondary schools for normal children.

technical college: an establishment providing scientific, technical and commercial education as distinct from industrial training for persons who have finished their compulsory education in a school. Courses may be full-time or part-time during the day or in the evening. At the highest level, technical colleges provide technological education parallel with universities.

training college: an establishment providing education and professional training for teachers.

universities: are in no way under the control either of the Ministry of Education or other Government Department. They are self-governing institutions but receive grants from the State through the agency of the University Grants Committee, a body of persons experienced in university administration and education.


2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
COMPULSORY SCHOOL ATTENDANCE
Selection examination or other arrangements
General Certificate of Education (Ordinary Level)
General Certificate of Education (Advanced Level)
Teaching qualification
Diploma
Examinations for professional bodies
University degree
External University degree
Higher National Diploma
Higher National Certificate
Ordinary National Diploma
Ordinary National Certificate
Independent school
6th Form
Direct grant (grammar) school
6th Form
Secondary grammar school
6th Form
Comprehensive or bilateral school
Secondary technical school
Secondary modern school
Special school
Nursery school
Nursery class
Primary school
Infant school or dept.
Junior school or department
UNIVERSITY
TECHNICAL COLLEGE
SCHOOL OF ART
SCHOOL OF MUSIC
TRAINING COLLEGE
EVENING INSTITUTE
Anticipated or planned progression
Possible progression
Transfer for children who develop later
Higher Education
Full-time
Part-time, day or evening

authorities were given power to provide this kind of secondary education.

The ultimate results of the 1902 Act and its elaboration in later acts and statutory regulations included the establishment and rapid development of secondary schools wholly provided and maintained by local education authorities, the granting of financial assistance by local education authorities to a number of secondary schools (grammar schools and others) already in existence, the development of technical education, and the establishment of a number of training colleges for teachers wholly provided and maintained by local education authorities.

In Wales, the position was somewhat different. The Welsh Intermediate Education Act of 1889 had enabled public funds to supplement educational endowments for the establishment of new secondary schools. The lead in the provision of grammar school places which Wales then obtained over England has been maintained to the present day.

The Education Act of 1918 made local education authorities responsible for providing, in senior departments of central schools, advanced instruction and practical instruction for the older children. In the years that followed and until the outbreak of the second world war, widespread developments took place as a result of these Education Acts, especially in the number of publicly-provided secondary schools giving a grammar or academic education, the development of separate 'senior' schools for other older children from the elementary schools and the advance of technical education. At the same time, much fundamental thinking was being done on the problem of post-elementary education.

In 1926, the Consultative Committee of education experts issued the Hadow Report. This report, which has deeply influenced educational organization, proposed a complete educational break for all children at the age of 11 and their transfer to separate schools for older children. It also recommended the raising of the school leaving age to 15 without exemption, so as to ensure at least 4 years' progressive schooling for all children over 11. In 1938 the Spens Report, a further report of the Consultative Committee, proposed an alternative type of secondary school, admitting children at 11, to be known as technical high schools. There were already in existence a number of junior technical schools which recruited boys and girls from the elementary schools at 13. The next statutory step to be taken was the Education Act of 1936 which provided, among other things, for the raising of the school leaving age from 14 to 15 (as from 1 September 1939). Unfortunately, the outbreak of the second world war postponed the coming into operation of this Act.

The developments of the previous 40 years culminated during the war in a Bill 'to reform the law relating to education in England and Wales' which received the Royal Assent on 3 August 1944, and, as the Education Act of 1944, came into operation on 1 April 1945. This is a comprehensive Act; in addition to many changes which took place immediately or subsequently, it provides for certain reforms which have yet to come into effect, namely the raising of the minimum school leaving age to 16 and the introduction of 'county colleges', i.e. establishments for continuing the general education, on a part-time basis, of young people up to the age of 18 who have finished their full-time schooling.

One of the most significant changes brought about by this Act was the change in the meaning of the term 'secondary education'. Hitherto, it meant simply an academic type of education, frequently available only on payment of fees. This narrow definition was replaced by the much wider concept of a stage in the educative process through which every child would pass, a stage which would enable each child to develop to the maximum of his capabilities as mentioned above.

This required radical changes in the organization and structure of the school system so as to separate the primary stage where the groundwork is done and the secondary stage which is designed to extend the facilities for individual development as well as to provide preparation where appropriate for higher education. The 1944 Act did not, however, go into any more detail concerning purpose and method than is quoted in the extract above from Section 8 and these aspects of implementing the new concept of secondary education are discussed later, particularly under the heading 'Trends and problems'.

Administration

The national policy, as described above, is conceived in broad terms susceptible of modification and, in its formulation, the Minister consults his National Advisory Councils, the local education authorities, the teachers' professional associations, the Churches and other voluntary agencies. Under the guidance of the Minister, the national policy is applied by the local education authorities to the needs and circumstances of their own areas and in consultation with the governors and teachers responsible for individual schools. The essential quality of the national policy is flexibility and accordingly the Minister does not issue directives in such matters as syllabuses, curricula, textbooks or the detailed organization of any school. Only one subject, religious instruction, is legally compulsory and it is subject to safeguards concerning parents' wishes and denominational rights. Head teachers and teachers generally enjoy very wide limits of freedom in what shall be taught and how it shall be taught, but the work of the training colleges for teachers and the professional associations, the formal and informal contacts of Her Majesty's Inspectorate of Schools and the advice put out by the Ministry in circulars and in booklets dealing with the teaching of various subjects all have a unifying influence while at the same time disseminating progressive ideas. Education is not regarded as a field of human activity in which hard and fast rules can be laid down and accordingly there is reasonable scope for experiment, not only in the classroom and within the school as a community, but also in the grouping and interrelationship of schools in an area.

Control. Ultimate control of the public education system is vested in the Minister and, under the Education Act of 1944, local education authorities submit for his approval their plans for the development of primary and secondary education in their areas. Although the Minister can apply sanctions against a local education authority which, in his view, is not fulfilling its statutory duties, it is only on very

rare occasions indeed that these powers have to be invoked. Administration and control is effectively carried out by co-operation, compromise and mutual understanding between the Central Government Department and the bodies, official and otherwise, responsible for the local operation of the system. This fact is the salient feature of educational administration in England and Wales.

While the Minister and the local education authorities exercise responsibility in their own spheres, each secondary school has a body of governors, who are persons of standing interested in the well-being of the school and who have certain statutory duties. Articles of government of a school define the functions to be exercised by the local education authority, the governors and the head teacher in such matters as the appointment and dismissal of teaching and other staff, holidays and, in the case of voluntary schools, the provision and maintenance of the buildings.

Supervision and inspection. Supervision of the schools is a matter in the first place for the head teachers, the local education authorities and the school governors. Inspection, formal and informal, is carried out by Her Majesty's Inspectors of Schools who report to the Minister. HM Inspectors of Schools are appointed by the Queen in Council and must have had suitable teaching experience. Their duties are organized so as to provide adequate inspection of the schools and at the same time to make available their expert knowledge of the various branches of learning and wide experience of what is happening in different schools. Thus, they are able to give expert advice on educational problems to the Minister, to the local education authorities and to the governors of the schools as well as to the teachers.

A number of local education authorities also maintain their own inspectorates (restricted of course, unlike HM Inspectors, to the schools of one authority and normally more closely associated with matters of administration) and employ organizers and advisers, who are specialists in a particular subject with teaching experience, to be responsible for advising on and guiding the teaching of their subject in a number of schools.

All independent schools are open to inspection by the Minister and about a quarter of them are 'recognized as efficient' by the Minister. As independent schools are free to apply or not for this limited form of approval, absence of such recognition does not necessarily imply any comment on a school. All independent schools must, however, be 'registered' with the Ministry and it is illegal to conduct a school which has not been registered. In this way, the Ministry is able to ensure that seriously unsuitable buildings are not used and that unsuitable persons are not employed on the staff.

Finance. Educational expenditure in England and Wales is financed out of national taxes, levied by the Central Government, from which a grant is made to the local authorities in respect of the services for which they are statutorily responsible, and out of local rates, related to the value of land and buildings and levied by the local authorities. The greater part of educational expenditure is incurred directly by the local authorities and although the assistance from central government funds is considerable, education represents by far the largest single item in a local authority's budget and the largest charge on the local taxes.

For all 'maintained' schools, whether county or voluntary, the local education authority is responsible for all the costs of running the school—the salaries of teaching and other staff, books and stationery, heating, lighting, etc. In the case of county and voluntary controlled schools, the local education authority is responsible for the cost of erection and upkeep of the building. In the case of a voluntary aided school, the voluntary governors are responsible for the erection and external maintenance of the building but they may receive a grant from public funds of 75 per cent of the cost.

Tuition fees in maintained secondary schools were abolished by the Education Act, 1944, but they are still payable in independent schools and in certain grammar schools (about 180) receiving a *per capita* grant direct from the Ministry of Education.

If an authority takes up an independent day school place because of a shortage of places in maintained schools, the authority must pay the tuition fee in full. In other cases, an authority may assist parents with the cost of tuition fees to the extent needed to avoid hardship, but this is a matter for the authority, and parents have no guarantee that a request for assistance will be met.

The Ministry of Education controls the fees chargeable in the case of the direct grant schools and such schools are required to offer 25 per cent of their places each year, free of charge, to pupils who have previously attended grant-aided primary schools for at least 2 years. These places are called free places and are usually offered through a local education authority which pays the fees. School governors must also put a further 25 per cent of their places at the disposal of the local education authority if required, but candidates for these places (reserved places) do not need to have attended a grant-aided primary school. The parents of day pupils not holding free places can claim a remission of fees in accordance with an approved income scale and the Ministry pays the governors of the school the amount of the fees so remitted.

There are some maintained boarding schools at which boarding fees ranging from about £120 to £200 a year are payable. Where an authority provides board and lodging at a maintained school because it cannot otherwise provide education suitable to the pupil's age, ability and aptitude, it must remit the whole of the boarding fees. Where an authority provides a pupil with a boarding place in a non-maintained school because, owing to shortage of maintained school places, it cannot otherwise provide education suitable to the pupil's age, ability and aptitude, the authority must pay the whole of the boarding fees as well as the tuition fees as above.

In other cases an authority may assist parents with the cost of boarding fees at both maintained and non-maintained schools to the extent needed to avoid hardship, but here again this is a matter for the authority to decide.

Local education authorities may provide clothing for any child at a maintained or independent school if they consider the child to be so poorly clothed that he cannot benefit fully from his schooling. The authority must recover the cost from the parent if they think that this can be done

without hardship. School uniforms may also be provided in cases of need. Authorities are further empowered to award maintenance allowances for pupils over compulsory school age staying on at school for full-time education. The allowance is assessed in accordance with an income scale drawn up by the authority.

Buildings and equipment. The educational reforms envisaged in the Education Act of 1944, an abnormally high birthrate in the years immediately following the end of the war, the destruction of schools during the war, the creation of new towns and the drift of population away from old centres, all combined to present an immense problem of providing sufficient school buildings. After the war, priority was given to the allocation of the country's national building resources to housing, education and industry. Over 1,500 new secondary schools together with improvements and additions at a total cost of £250,000,000 have been built between the end of the war and 1959 and this progress continues.

The size of the educational building problem presented a challenge and an opportunity. New ideas and methods were introduced in the design and construction of schools, taking account of such varied factors as educational principles and practices, constructional techniques, speed in erection and durability of the product and the necessity of getting the maximum amount of buildings for the resources available. Great advances have now been made in developing buildings which are good both architecturally and educationally and the results of this research and development by the Ministry and the local education authorities is made generally available by means of special publications, conferences and constant consultations.

In accordance with the liberal tradition of educational administration, the Ministry's Building Regulations set minimum standards of a simple and flexible kind governing the accommodation and construction required for various types of school, while the costs of schools are controlled by a simple system of 'costs per place'; at present this is £264 for secondary schools. In accordance with the standards of the Building Regulations and for the total figure calculated on the basis of this cost per place multiplied by the number of places a school is planned to provide, good schools designed in the light of detailed educational requirements as well as architectural and constructional techniques can be built economically.

In line with the development of the buildings themselves, much thought and research has been devoted to the question of equipment of all kinds, including writing tables and desks, chairs, washbasins, and other sanitary equipment all designed in relation to the needs of the children who will use them. These studies have of course not been confined to the classrooms or practical instruction rooms but have also included the kitchens, common rooms and other such places in the schools.

Overall national planning is done by means of annual building programmes. Local education authorities submit their proposals for new schools and for extensions and additions to old schools to the Ministry, and a national plan is then drawn up after which local education authorities are notified of the Minister's approval or modification of their proposals. This is done in sufficient time to enable the forward planning by architects and others in conjunction with educational experts to take place so that the schools may eventually be provided at the time when they are needed.

School welfare services. Local education authorities must make available free medical inspection and treatment and provide a school dental service for the children attending maintained schools in their areas. While treatment can be and is provided directly by authorities through the school health service, much treatment of a specialized nature is arranged through the National Health Service. The aim of the school health service is to prevent and check disease or defects and to secure early treatment. Its principal weapon is regular medical and dental inspection. Except where the Minister has agreed to special arrangements, local education authorities must provide for the general medical inspection of all pupils in schools maintained by them on at least three occasions at appropriate intervals during the period of compulsory school age. More frequent inspection is made of children whose condition makes it necessary. Many authorities provide child guidance clinics for children with psychological difficulties. Speech therapy is an important part of school health provision; as it is closely linked with the work of the school it is usually provided by the local education authority and not by the National Health Service.

Every local education authority is required to make milk and meals available to pupils attending maintained schools. At present one third of a pint of milk is provided daily free of charge and about 85 per cent of the children take it. Milk is also available free of charge to pupils at independent schools and about 80 per cent avail themselves of this milk. Most maintained schools now have facilities for school dinners supplied either from a central kitchen or from a special kitchen on the school premises. A charge is made, at present one shilling per meal, but if a parent cannot afford this sum the pupil may receive dinner free or at a reduced rate according to the parents' ability to pay. About 50 per cent of the children in maintained schools take school dinners.

If a pupil has to travel 3 miles or more to the nearest secondary school suitable to his age, ability and aptitude, the local education authority must provide him with free transport to that school. The authority may provide, or assist with the provision of, transport to a school other than the nearest, but is under no obligation to do so. Transport may be in the authority's own vehicles or arrangements may be made for private hire vehicles to be used; where public transport exists an authority may make use of it by paying the children's fares.

TYPES OF SECONDARY EDUCATION

Secondary education in England and Wales is generally of two types (grammar and modern) and is usually provided in separate schools. A third type, secondary technical, exists in some areas. A number of local education authorities have now introduced comprehensive schools, which are generally bigger than the selective schools and provide for all forms of secondary education in a particular locality.

There are also some bilateral schools giving two forms of secondary education. Whereas the primary schools are usually co-educational, about 50 per cent of the secondary schools are single sex.

The local education authorities decide how to determine which form of secondary education will best suit the individual children and this has usually been done by means of a test in the spring of the year in which the children attain the age of 11, reports from the primary school teachers and the wishes of the parents being taken into account as far as practicable. The test has come to be known as the 11 + examination because it affects the form of secondary education the child follows when he is over 11 years of age, and the same test is taken by most of the children in the authority's area who are due for transfer. The form of the examination is usually such as to measure general aptitudes and attainment in arithmetic and in English. Many authorities are, however, experimenting with other methods of selection, often involving much greater reliance on primary school assessment of the children's potentialities together with the results of tests taken over the last year or two.

The school year. The secondary school year, as also does the primary school year, begins in September and continues until late in July. It is divided into 3 'terms' separated by vacations at Christmas and at Easter, each lasting about 3 weeks, and a summer vacation of about 6 weeks. Mid-term is usually marked by a long week-end of 4 or 5 days' duration. The teaching routine is planned in relation to a working week of about 35 lessons of 34–45 minutes in duration.

Out-of-class activities. Life in a secondary school involves a good deal more than attending classes and doing home-work and there is a wide range of extra-curricular activities which encourage membership of clubs and societies of all kinds. In many schools, the pupils are divided into 'houses' and this system encourages individual effort in work and in games, in drama and in other cultural activities, while inter-house matches stimulate an interest in sport among many who could never aspire to representing the school in inter-school events. Responsibility for school discipline is delegated as far as possible to older students who are appointed first as house 'prefects' or monitors and later as school prefects or monitors.

Vocational guidance. Guidance on careers is afforded through the Youth Employment Service, a service offered either by the local education authority or by the Ministry of Labour and National Service to all secondary schools in the area. In some schools a particular master or mistress is, in addition to teaching duties, given the responsibility of advising pupils on suitable careers.

Grammar schools

The curriculum of the average secondary grammar school is progressive from a broad base of general subjects to a comparatively narrow platform of specialized studies in the sixth form in preparation for university entrance at the age of 18. A typical first-year programme would include religious instruction, English, history, geography, French, mathematics, general science, art, music, handicraft or housecraft and physical education; Latin is commonly added in the second year. The first 3 years are regarded largely as diagnostic; in the subsequent years, the students begin to concentrate on those subjects in which they wish to specialize. Much of the work in the grammar school is geared to the General Certificate of Education (GCE). The certificate examination is conducted by 9 examining boards, nearly all of which are connected with universities, and it is a means of entry to university and is accepted as equivalent to the preliminary examinations of many professional bodies. A candidate may offer as many or as few subjects as he wishes and for each subject papers are set at two levels, 'ordinary' taken at a minimum age of 16, and 'advanced', normally taken at 18. Candidates competing for scholarships to universities may attempt certain subjects at 'scholarship' level which is more rigorous than 'advanced'. The certificate examination is open to candidates not at school and may be taken by school candidates younger than 16 years of age at the discretion of the headmaster or headmistress.

A typical grammar school would have about 500 pupils and admit 90 to 100 new pupils annually but there are smaller schools in many rural areas and larger ones in some big cities. The pupils are generally classified by general ability into three 'streams' for work in literary, scientific, cultural and practical subjects and these streams are usually also their 'forms' for general administrative purposes; promotion or demotion from stream to stream would take place in accordance with the pupil's performance. Syllabuses of work reflect the varying accomplishments expected of the several streams. For mathematics and languages the pupils are frequently 're-set' into differently graded classes to allow for the marked differences in aptitude which pupils manifest for mathematics or languages as compared with literary subjects.

For many pupils the GCE examination at ordinary level marks the end of their school career, but the tendency to continue at school in order to spend a year or two in the sixth form has grown steadily of recent years, and the proportion of pupils continuing in this way has now risen to about 40 per cent. The sixth form comprises the group of pupils who remain at school for a further 2 or 3 years, generally with a view to entering universities or training colleges for teachers. Their curriculum is narrowed to about 5 subjects of which the pupil will specialize in 2 or 3, devoting about two-thirds of the working week to them. The choice of subjects tends to divide the sixth form into two sides, the science side and the arts side; about 60 per cent of all sixth-form pupils are currently studying on the science side.

Technical schools

Secondary technical schools are numerically much fewer than grammar schools and cater for only about 5 per cent of the total age group. They represent a development of a type of vocational school which was established in certain industrial areas before the second world war. Recent developments in curriculum planning, however, have brought the work of these schools more into line with the

standards set by the grammar schools. Their individuality of character is marked by a greater emphasis upon practical subjects and commercial skills, and by a certain bias of treatment of other subjects.

About one-half of the technical schools now recruit children at the age of 11, and, with these, the curriculum of the first 2 or 3 years is markedly similar to that of a grammar school. The curriculum is modified with progress through the school to take increasing account of individual abilities and aptitudes. Courses in shorthand and typing are offered and pre-nursing courses are sometimes arranged. The work in practical subjects is stepped up, while in subjects like English, science and mathematics the work is as exacting as in a grammar school. The majority of students who attend secondary technical schools take the GCE at ordinary level, and an increasing proportion are electing to remain at school for a sixth form course, usually in mathematics and science, preparatory to taking the GCE at advanced level.

Modern schools

Secondary modern schools provide the broad general education required by the majority of pupils who leave school at 15. The range of subjects studied is similar to that offered by the selective secondary schools, except that the majority of secondary modern schools do not include a foreign language and that the teaching approach is often different. With pupils of moderate ability, emphasis is placed upon learning through discovery from books and other sources of information, and by paying local visits to farms or factories, to historical buildings and to places of geographical interest. Such subjects as history, geography, science, music, art and craft, handicraft or housecraft, and physical education are generally taught by specialist teachers. English and mathematics are frequently the responsibility of the form teacher, who thereby sees his pupils more frequently than any other member of the staff and gets to know them particularly well.

Initially, pupils who are of average or above average ability follow the same curriculum as those who form the middle group, but more is expected of them, and of recent years there has been a strong trend towards introducing extended courses for these abler pupils who wish to continue at school beyond the age of 15. Some of these extended courses reflect a bias towards technical studies, others are a preparation for the GCE. Such provision has so encouraged the trend towards continuing at school that the numbers staying have increased appreciably over recent years, and during these years the number of entries for GCE from secondary modern schools has increased to two and a half times the earlier total.

Particular attention is paid to those who find learning difficult. The work of these groups is often the responsibility of one teacher who has had special training for or is particularly interested in the problem of teaching slower learners. Reading and writing are given special emphasis, and the work in history, geography and science is often directed towards securing improvement in the use of these basic skills. In arithmetic the aim is frequently confined to imparting the skills in computation that ordinary citizens need in everyday life. Because secondary modern schools draw their pupils from a wider geographical area than primary schools, and cater for a wider range of abilities than other secondary schools, slow learners are more numerous in them than in any primary school. Special attention to their particular needs can accordingly be more readily given, and they are often found to respond so well as to enable them after one or two years to join students who are nearer to the average in ability.

Pupils in secondary modern schools who demonstrate after two or three years that they are more suited to the work of a grammar or technical school may be transferred to an appropriate school.

Other kinds of secondary school

There are some schools organized to provide secondary education of more than one type; these are known as bilateral (two types, usually grammar and modern) or comprehensive (providing courses suitable for all the children in a particular area). Schools of this kind may be established as a practical means of providing the right kind of secondary education where there are difficulties in having separate schools, e.g. where the pupils are spread over a sparsely-populated area. On the other hand, they are more frequently the result of purely educational considerations and principles as described below under 'Trends and problems'.

Independent schools

Independent schools cater for about 7 per cent of the total school population. They vary widely in type from the small kindergarten school, often conducted in a private house, to the famous 'public schools' which in many respects have set the standards and pioneered the path which the state system has subsequently followed. The usual age of entry to a public school is 13. The majority of pupils continue until the age of 18, and a large proportion go on to the universities. Most public schools use a Common Entrance Examination for the selection of new entrants and preparation for this examination is the function of the independent preparatory schools, which admit pupils at about the age of 8 and keep them until the age of 13. In these schools, subjects like Latin, French, algebra and geometry are begun at the age of 9 or 10, depending upon ability, i.e. a year or two earlier than in the state grammar schools.

Vocational education

In England and Wales, education specifically designed for the requirements of a particular profession, trade or employment as distinct from general education in subjects which are basic to a vocational education, falls within the term 'further education' as used in the Education Act of 1944 and does not form part of the statutory provision of secondary education. However, as much of the work done in the primary and secondary stages lays the foundation for successful further education, a brief explanation of the educational facilities open to those who have left school is given below.

In the United Kingdom, there is a long tradition of post-

school work in technical colleges and evening institutes but in recent years the demand for trained scientists, technologists, technicians and craftsmen has grown apace and the attention of the Government, educationalists and industry has been focused on the adequate education, both technical and liberal, of skilled workers of all grades. Through the years, the pattern of vocational education had developed haphazardly but it is now being rapidly remodelled to a national plan of local colleges at the lowest level, rising through area colleges and regional colleges to a limited number of colleges of advanced technology which offer courses and research facilities similar to those in universities but of a kind more closely linked with industrial requirements. In addition, there are a number of national colleges providing advanced courses for the work of certain specialized industries. In 1956 the Government announced a 5-year development programme to cost £85,000,000 and in 1959 a further 3-year programme of £54,000,000. Attention has recently been directed to the need for more comprehensive facilities for education in commerce and agriculture which are at present available both in specialized institutions and in departments of technical colleges.

Vocational education may be part-time or full-time. Students come from all kinds of secondary education. Many start soon after leaving a secondary modern school at the age of 15, others stay on at school till they are 16, 17 or 18 and so enter on their vocational studies better prepared and perhaps with successes in the General Certificate of Education which may exempt them from a certain amount of preliminary work in the technical college. Many full-time students follow what is called a 'sandwich' course, made up of alternating full-time periods (generally of 6 months each) in college and in industry leading to a qualification at degree level. Most part-time students are released by their employers to attend technical college for one day a week with supplementary evening study. Apprenticeship in itself does not come under the aegis of the educational system but most apprenticeship schemes make great use of the educational facilities available. A number of the largest employers and nationalized undertakings run their own education and training schemes in close alliance with the education authorities.

The facilities outlined above provide vocational education not only for all forms of industry but also for commerce and management. Facilities are also offered in technical colleges or in special colleges and in a limited number of private establishments for a wide range of other vocational studies—the merchant marine, agriculture, art and architecture, drama, domestic science, nursing, aeronautics and many others. The armed forces have their own establishments for vocational education and training.

Teachers

Teachers in maintained schools are not civil servants, that is to say, they are not employed by the Central Government. They are employees of the local education authority as a result of application for employment, and not of direction; they are free to move from the service of one authority to that of another or into direct-grant and independent schools (service in independent schools may, in certain circumstances, affect pension rights). Many teachers move voluntarily several times in the course of their careers in search of experience and promotion.

Teachers seeking a career in publicly-maintained schools must be approved as 'qualified' by the Ministry. Apart from university graduates, most teachers in primary and secondary schools qualify by studying at a training college. All the colleges in a given area are linked to the institute or school of education of a university, in an area training organization; this body approves the courses at the colleges, examines students and recommends those successful to the Ministry for approval as 'qualified teachers'. In the area training organizations, the university and its department of education and the training colleges and local education authorities in the area are represented. There are over 150 training colleges in England and Wales. Some are provided by local education authorities and others by voluntary organizations usually connected with a religious denomination. The voluntary colleges receive from the Ministry grants for the full cost of maintenance and of up to one half or, for certain projects, three quarters of their approved capital expenditure.

Some colleges are for men or women only, others are mixed. Training colleges vary widely in the courses they offer; some specialize in primary work, others in a particular subject such as physical education or art. The general courses at present last for 2 years, but this is to be increased to 3 from 1960; the course is already of 3 years' duration for women specializing in housecraft or in physical education at the highest level. Students usually enter college at 18 and must normally have obtained at least 5 passes at the ordinary level of the General Certificate of Education. They must also be in good health and be physically fit for teaching. Students who are British subjects living in England and Wales and who intend to teach in grant-aided schools may receive financial help to cover the cost of tuition, board and lodging, travelling and other personal expenses according to their own or their parents' means.

At the present time university graduates may become qualified teachers without further special training but many graduates intending to teach pursue a 1-year post-graduate course of professional training. These courses, for the most part, are held in university departments of education and are supervised by the area training organizations. British subjects living and intending to teach in England and Wales may obtain grants from the Ministry towards the cost of this training.

Salaries in maintained schools are in accordance with scales agreed to by representatives of the authorities and of the teachers and approved by the Minister. There is a basic scale related to length of service to which additions are made in respect of extra training and qualifications, and for responsibility such as headship of a school or department or for organization and general supervision of the teaching of a particular subject throughout the school. Contributory pension arrangements have been established by statute and are administered directly by the Ministry. They apply to service in many independent schools as well as in maintained and direct-grant grammar schools and are designed to permit movement in the course of a career, including periods of teaching abroad.

TRENDS AND PROBLEMS

In the secondary schools. In December 1958, the Government published a White Paper 'Secondary Education for All—a New Drive', representing an outline of its policy in this field over the next 5 or 6 years. On the one hand, it contained an account of the progress which the Government hopes to make in improving the physical conditions of secondary education. About £300,000,000 are to be spent in 5 years on new school buildings, with the aim of getting rid of the remaining 'all-age' schools (schools providing both primary and secondary education, usually in unsatisfactory buildings, and attended by about 6 per cent of the country's children) and of improving facilities of all kinds in these old secondary schools when accommodation limits the courses which can be offered. Particular attention will be given to the improvement of facilities for science teaching, especially in grammar schools.

A second part of the government's policy is directed towards increasing the supply of teachers, concurrently with the lengthening of the training course to 3 years. Sixteen thousand additional places in training colleges are to be provided, partly by extending existing colleges but also by creating new ones, particularly in or near university towns so that the students may benefit from association with others pursuing higher education. The Government also intends to continue its policy of controlling the distribution of teachers in the interests of those areas which find it difficult to recruit them. This policy, inaugurated in 1956, has already brought substantial benefits to some industrial areas which had particularly unfavourable staffing ratios. It is hoped to ensure by these means that, by the mid-1960s, no classes in primary schools will have more than 40 children, the maximum prescribed by the Ministry's regulations, and that the number of secondary school classes with more than 30 children (the corresponding prescribed figure) will have been greatly reduced.

The White Paper also set out the government's attitude towards the organization of secondary education. It emphasized that different patterns would suit different areas, and that the principal objective was the provision of an adequate choice of secondary schools offering overlapping courses so that every child should have the chance to go to the limit of his abilities. In new housing areas lacking established secondary schools, or in sparsely populated areas where the alternative was a profusion of rather small and possibly unsatisfactory schools, the comprehensive school may be a practicable solution; but the Government has made it plain that it will use the powers vested in it by the Education Acts to prevent the closure or amalgamation of thriving grammar or modern schools simply to enable large comprehensive schools to be built.

The provision of better buildings, the recruitment of more and better-trained teachers and the growing public interest in education, reflected in the striking increase in the number of children in modern schools staying on beyond the age of 15 and in the number of grammar school children undertaking sixth form courses leading to full-time further education, all give cause for hope that steady progress will be made in the next few years towards securing a more fully and more liberally educated society. There are plenty of problems, such as the shortage of science teachers, the dangers of over-specialization in sixth form courses as a result of university entrance requirements and the competing demands of other services for the resources of capital investment on which education leans so heavily; but education is already the major social service in terms of the national budget, and politicians and the public are beginning to recognize that expenditure for this purpose is capable of yielding a more valuable reward than any other.

In establishments of further education. In the field of vocational education within the age-range 15 to 18 years conducted, not in schools, but in the technical colleges, commercial colleges and schools of art, the main attention in the coming years is likely to be concentrated on: (a) expanding the provision of full-time and sandwich courses both for the training of technicians and as a preparation for advanced courses for scientists, technologists and managerial staff in industry; (b) increasing the facilities in colleges generally for the part-time education of employees in industry at all levels, and especially of technicians; (c) developing and improving commercial education, both full-time and part-time; (d) remodelling the system of education for agriculture.

Much still remains to be done to bring the benefits of part-time vocational education, which has been very successfully developed for the skilled workers in industry, within the reach of the semi-skilled and unskilled workers, who at present rarely maintain any contact with education after leaving school at 15. The Education Act of 1944 included a provision for the establishment of 'county colleges' which would provide compulsory part-time education (one day a week) for all young people up to the age of 18 who were not receiving full-time education. The question of whether and when this far-reaching reform should be implemented is still an open one and is being widely discussed. The chief difficulty over its introduction, apart from the problem of the supply of suitable teachers, is the fact that there is little in the existing part-time system of vocational education, orientated as it is towards skilled employment, which provides any guide in devising suitable courses for the non-skilled worker.

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STATISTICS

Population (mid-year 1958 estimate): 45,244,000.
Area: 58,345 square miles; 151,113 square kilometres.
Population density: 775 per square mile; 299 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58 there were some 7,638,646 students attending full-time educational courses at all levels, representing about 17 per cent of the total population. There were in addition about 2,685,025 people attending further educational and adult evening classes. Of full-time pupils 63 per cent were enrolled in pre-primary and primary schools, 35 per cent in general secondary schools, 0.6 per cent in special educational institutions and less than 2 per cent in universities and teacher training colleges. Girls made up just under half the enrolment in primary and secondary schools, 77 per cent in teachers' colleges and 24 per cent in universities and university colleges. Full-time teachers in primary, general secondary schools and teacher training colleges numbered 298,871 in 1957/58 of whom 62 per cent were women. The average pupil-teacher ratio, excluding part-time staff, was 28 in primary and 21 in general secondary schools. Compared with 1953/54, enrolment had increased by 6 per cent in primary schools, by over 21 per cent in general secondary schools, 13 per cent in teacher training colleges and 19 per cent in universities. (See Table 1.)

Trends in secondary education, 1930–57. Over the years 1930–57 the estimated child population 15–19 years old declined from 3,405,000 to 2,771,000. Nevertheless average enrolment in general secondary schools since the war has steadily increased, the general secondary enrolment ratio rising from 65 to 88 over the period 1945 to 1957. (See Table 3.)

Examination results in secondary education, 1953–57. No diploma or certificate is awarded in the United Kingdom upon completion of secondary education; the General Certificate of Education can be taken by subject at any stage of the secondary course. Figures available on the numbers of pupils aged 17 to 18, i.e. pupils who may be considered to have completed the general secondary school course, show an increase of 30 per cent in 1957/58 compared with 1953/54. Girls made up about 45 per cent of the total in both years. It is estimated that over 50,000 pupils completed secondary schooling in 1957/58 of whom about 22,000 were girls.

Educational finance, 1957/58. Total expenditure on education in the fiscal year beginning April 1957 amounted to 618,055,000 pounds sterling, representing approximately £13.8 per inhabitant. Of total receipts, 69 per cent came from the Central Government, 29 per cent from local education authorities, less than 1 per cent from fees and the remainder from university donations and research grants. Capital expenditure amounted to £23,606,000 or 4 per cent of the total spent. Debt repayments were very high, amounting to £42,168,000 or 7 per cent of the total expenditure. Recurrent expenditure, 89 per cent of the total, is given by level and type of education in Table 2C. A separate breakdown of receipts and expenditure for universities only is given in Tables 2D and 2E.

Source. England and Wales: Ministry of Education, replies to Unesco questionnaires.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff[1]		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools, publicly maintained	1957/58	457	990	990	22 193	10 437
	Nursery schools, direct grant	1957/58	20	41	41	819	372
	Nursery schools, recognized, private	1957/58	11	32	32	336	176
	Nursery schools, unrecognized, private	1957/58	230	330	325	4 688	2 275
	Total	**1957/58**	**718**	**1 393**	**1 388**	**28 036**	**13 260**
	" [2]	1956/57	491	1 055	1 055	24 115	11 395
	" [2]	1955/56	496	1 071	1 071	24 484	11 580
	" [2]	1954/55	495	1 052	1 052	24 272	11 546
	" [2]	1953/54	486	1 051	1 051	23 728	11 142
Primary	Primary schools, publicly maintained	1957/58	23 725	142 746	108 465	4 369 118	2 127 944
	Primary schools, direct grant	1957/58	3	39	6	832	34
	Primary schools, recognized, private	1957/58	1 185	13 957	8 468	213 863	112 530
	Primary schools, unrecognized, private	1957/58	2 642	11 402	9 138	203 546	106 078
	Total[3]	**1957/58**	**27 555**	**[4]168 144**	**[4]126 077**	**4 787 359**	**2 346 586**
	" [2 3]	1956/57	24 928	[4]157 736	[4]117 494	4 638 519	2 264 549
	" [2 3]	1955/56	24 851	[4]155 597	[4]115 525	4 713 789	2 350 728
	" [2 3]	1954/55	24 767	[4]152 923	[4]113 349	4 602 743	2 245 251
	" [2 3]	1953/54	24 577	[4]148 189	[4]109 927	4 530 186	2 208 151

1. Full-time teachers only.
2. Not including unrecognized schools.
3. Including data on junior departments of all-age schools.
4. In addition, there were part-time teachers who numbered: 14,887 (F. 11,741) in 1957/58; 7,074 (F. 5,640) in 1956/57; 6,574 (F. 5,130) in 1955/56; 6,075 (F. 4,742) in 1954/55; 5,490 (F. 4,196) in 1953/54.

Level and type of education	Type of institution[1]	School year	Number of institutions	Teaching staff[1]		Students enrolled	
				Total	Female	Total	Female
Secondary							
General	Secondary schools, publicly maintained	1957/58	5 550	109 702	48 822	[5] 2 331 063	[5] 1 131 010
	All-age schools (senior), publicly maintained	1957/58	(2 297)	5 738	2 296	[5] 139 297	[5] 68 253
	Grammar schools, direct grant	1957/58	173	5 345	2 835	100 892	50 981
	Technical schools, direct grant	1957/58	5	59	–	817	–
	Secondary schools, recognized, private	1957/58	251	5 108	1 882	67 195	23 659
	Secondary schools, unrecognized, private	1957/58	157	891	370	15 542	8 061
	Total	**1957/58**	**[6] 8 433**	**[7] 126 843**	**[7] 56 205**	**2 654 806**	**1 281 964**
	„ [2]	1956/57	[6] 8 612	[7] 119 981	[7] 53 566	2 510 924	1 215 227
	„ [2]	1955/56	[6] 8 809	[7] 114 379	[7] 51 041	2 395 476	1 163 041
	„ [2]	1954/55	[6] 9 090	[7] 110 131	[7] 48 541	2 262 738	1 099 723
	„ [2]	1953/54	[6] 9 426	[7] 106 820	[7] 46 724	2 184 954	1 063 684
Higher							
Teacher training	General teacher training colleges, public	1957/58	64	1 523	1 071	13 395	10 977
	Specialized teacher training colleges (non technical), public	1957/58	31			2 776	2 612
	General teacher training colleges, private	1957/58	50	968	612	10 485	6 936
	Specialized teacher training (non technical), private	1957/58	7			633	602
	Total	**1957/58**	**152**	**2 491**	**1 683**	**27 289**	**21 127**
	„	1956/57	152	2 404	1 647	25 847	20 270
	„	1955/56	150	2 317	1 629	25 118	19 655
	„	1954/55	150	2 300	1 620	24 621	19 238
	„	1953/54	151	2 296	1 625	24 083	18 811
General and technical[5 9]	Universities and university colleges						
	Total	**1957/58**	**...**	**9 901**	**...**	**79 031**	**19 042**
	„	1956/57	...	9 577	...	74 525	18 293
	„	1955/56	...	9 363	...	70 405	17 357
	„	1954/55	...	9 042	...	67 562	16 582
	„	1953/54	...	8 729	...	66 604	16 065
Special	Schools for blind and partially sighted children	1957/58	47	317	...	2 936	...
	Schools for deaf and partially deaf children	1957/58	50	614	...	4 897	...
	Schools for physically handicapped and delicate children	1957/58	218	1 120	...	17 629	...
	Schools for maladjusted and delicate children	1957/58	44	200	...	1 658	...
	Schools for the educationally sub-normal	1957/58	308	2 051	...	28 601	...
	Schools for epileptic children	1957/58	6	46	...	723	...
	Schools for children with speech defects	1957/58	1	3	...	44	...
	Hospital schools	1957/58	114	562	487	5 637	2 535
	Total	**1957/58**	**788**	**4 913**	**...**	**62 125**	**...**
	„	1956/57	772	4 753	2 918	60 417	25 273
	„	1955/56	749	4 499	2 807	59 175	24 898
	„	1954/55	743	4 381	2 738	58 034	24 637
	„	1953/54	712	4 126	2 619	56 394	24 090
Further[10]	Full-time courses, publicly maintained	1957/58	[11] 9 043	15 369	2 236	66 609	34 308
	Part-time day courses, publicly maintained	1957/58				477 466	120 791
	Evening courses, publicly maintained	1957/58				1 972 887	966 869
	Full-time courses, recognized, private	1957/58	[11] 46	405	189	7 046	2 076
	Part-time courses, recognized, private	1957/58				1 406	820
	Total	**1957/58**	**[11] 9 089**	**15 774**	**2 425**	**2 525 414**	**1 124 864**
	„	1956/57	[11] 9 374	14 213	2 278	2 487 213	1 132 112
	„	1955/56	[11] 9 924	12 847	2 113	2 497 638	1 184 542
	„	1954/55	[11] 9 937	11 920	1 975	2 355 600	1 119 240
	„	1953/54	[11] 9 831	11 024	1 876	2 283 858	1 111 677
Adult	Adult Courses						
	Total	**1957/58**	**7 941**	**[12] 267**	**...**	**159 611**	**85 384**
	„	1956/57	8 104	[12] 260	...	165 035	88 975
	„	1955/56	7 915	[12] 255	...	158 509	85 940
	„	1954/55	7 448	[12] 254	...	147 782	81 459
	„	1953/54	7 190	[12] 252	...	142 779	78 366

5. Including some pupils doing advanced work. In 1957/58, there were 76,279 (F. 33,027) in publicly maintained schools and about 33,000 (F. 13,000) in the other types of school.
6. Including all-age schools, already counted under primary.
7. In addition, there were part-time teachers who numbered: 9,360 (F. 6,422) in 1957/58; 7,926 (F. 5,309) in 1956/57; 7,515 (F. 4,783) in 1955/56; 7,103 (F. 4,377) in 1954/55; 6,890 (F. 4,133) in 1953/54.
8. Not including technical teacher training colleges. In 1957/58 there were three of these colleges with 362 students (F. 88).
9. Not including advanced courses in further education. The number of students following these courses were: 69,877 (F. 6,913) in 1957/58; 62,158 (F. 6,505) in 1956/57; 53,495 (F. 6,109) in 1955/56; 47,294 (F. 5,953) in 1954/55; 45,474 (F. 5,816) in 1953/54.
10. Not including courses in non-recognized private establishments.
11. Refers to number of institutions, not number of courses.
12. Full-time staff only. Most adult education tutors teach part-time.

2. EDUCATIONAL FINANCE, 1957/58 (in thousand pounds sterling)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**607 940**
Central government	420 000
Local education authorities	176 870
Tuition fees	4 500
University donations	1 500
Research grants, etc.	5 070

B. EXPENDITURE BY PURPOSE

		Amount
Total expenditure[2]		**618 055**
Recurring expenditure		552 281
Administration or general control	24 751	
Salaries to teachers, etc.	279 256	
Other instructional expenditure Other recurring expenditure	248 274	
Capital expenditure		23 606
Debt service		42 168

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure	**552 281**	**100.0**
Central administration	21 697	3.9
Instruction	436 420	79.0
Pre-primary education	2 044	0.4
Primary education	172 507	31.2
General secondary education	153 697	27.8
Higher education[3]	97 563	17.7
Special education	9 077	1.6
Adult education	1 532	0.3
Other recurring expenditure	94 164	17.1
Grants to students	26 259	4.8
Transport of students	7 798	1.4
Medical inspection and treatment	10 288	1.9
Provision of milk and meals	42 994	7.8
Other expenditure not specified	6 825	1.2

D. RECEIPTS BY SOURCE FOR UNIVERSITIES ONLY (INCLUDED IN ABOVE TABLE A)

	Amount
Total receipts[2]	**42 353**
Central government	29 540
Local education authorities	1 304
Tuition fees	4 941
Gifts, endowments, etc.	1 958
Research grants	2 792
Other, not specified	1 818

E. EXPENDITURE BY PURPOSE FOR UNIVERSITIES ONLY (INCLUDED IN ABOVE TABLES B AND C)

		Amount
Total expenditure[2]		**52 178**
Recurring expenditure		41 417
Administration and general control	3 091	
Salaries to teachers, etc.	18 171	
Other instructional expenditure Other recurring expenditure	20 155	
Capital expenditure		10 761

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.
2. Closed account.
3. Includes vocational education at the secondary level.

3. TRENDS IN GENERAL SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled[1]		Average total enrolment (000's)	Estimated population 15–19 years old (000's)	General secondary enrolment ratio
	Total	Per cent female			
1930	1 844 900	49			
1931	2 049 000	49			
1932	2 146 000	51	2 107	3 405	*62*
1933	2 304 800	49			
1934	2 192 200	49			
1935	2 111 000	49			
1936	2 051 200	49	2 056	3 279	*63*
1937	2 005 000	49			
1945	1 697 785	49			
1946	1 704 090	49			
1947	1 966 103	49	1 906	2 933	*65*
1948	2 071 592	49			
1949	2 088 148	49			
1950	2 107 398	49			
1951	2 112 990	49			
1952	2 101 477	49	2 129	2 721	*78*
1953	2 123 499	49			
1954	2 200 020	49			
1955	2 331 416	49			
1956	2 445 223	49	2 450	2 771	*88*
1957	2 572 069	49			

1. Figures for the years 1930–37 are estimates and exclude independent schools.

SCOTLAND

As education in Scotland is controlled by the same Government and Parliament as control education in England and Wales, it is not surprising that the systems of education on the two sides of the Anglo-Scottish border have strong similarities. For this reason it will be possible to condense parts of this article by making suitable references to the article on England and Wales. Nevertheless, despite the similarities between the two countries, there are also important differences, principally in the classification of schools, in the qualifications and training of teachers, and in the fact that the percentage of children attending private schools is much smaller in Scotland than in England.

A highly democratic conception of education with universal free education leading on to the universities was set before Scotland by the Reformers as early as the sixteenth century. Nevertheless, while there were schools before the Reformation and many were established later, it was not until the Act of 1872 that universal free primary education became compulsory. Similarly, although widespread secondary education had developed earlier, it was the 1918 Act which first made it the duty of all local authorities to provide free secondary education for all who wanted it; but parents were still given the right to send their children to fee-paying schools if they so desired. The Education (Scotland) Act of 1945 brought about further improvements in primary and secondary education but also provided, particularly through a more generous bursary (scholarship) system, for a wide extension of further education (education for persons having left school), without financial hardship, for all those who desired it.

All earlier Acts were consolidated into one document, the Education (Scotland) Act, in 1946. This has been amended by the Acts of 1949 and 1956.

THE EDUCATIONAL SYSTEM

Political, legislative and financial responsibility for education in Scotland rests primarily upon the Government, with the Secretary of State for Scotland as the responsible Minister and the Scottish Education Department as his administrative agency. (The responsible Minister for England and Wales is the Minister of Education who acts for England and Wales only.) The detailed administration of education in Scotland is undertaken by the 35 education authorities (the four main cities and the 31 counties); it is these authorities which build and maintain schools and which engage and pay teachers. The schools which they administer are called public schools and the work of the education authorities in this regard is largely controlled by regulations made by the Secretary of State. The functions of central (government) control and of local (education authority) control are very similar in England and in Scotland.

There are also 45 schools of all types which are not under education authorities but are conducted by voluntary bodies which receive grants from the Secretary of State. These 'grant-aided' schools are required to satisfy the Schools Code, the regulations made by the Secretary of State to govern the conduct of schools. Private agencies may also conduct schools to cater for particular interests or to provide education of particular types. Such schools must be registered and must comply with the Secretary of State's requirements regarding minimum standards of accommodation and efficiency; they enrol about 2.5 per cent of the total school population.

Under the present Acts it is the duty of parents to provide their children between the ages of 5 and 15 with efficient education either by sending them to public schools or by other means; and it is the duty of education authorities to ensure that adequate and efficient provision is made in their areas for all forms of primary (including nursery) and secondary schools and for further education.

Primary and secondary education is free and pupils receiving free education also receive free books and stationery. Provided that the provision of free education is adequate for all who desire it, education authorities are not precluded from maintaining in addition some fee-paying primary and secondary schools.

There are some 7,400 Gaelic-speaking children in Scotland out of a total school population of 890,000. These constitute the only native linguistic problem and the education authorities concerned are required to make adequate and efficient provision for the teaching of Gaelic in the Gaelic-speaking areas, which are mainly in the north-west of the country.

Public schools are normally conducted as Protestant schools, but wherever numbers warrant it the authorities must also provide other denominational schools. The Act requires that children should be educated in accordance with the religious beliefs of their parents and the responsible religious bodies have the right to seek the establishment, where necessary, of additional denominational schools.

The Scottish system does not at any level permit discrimination against a pupil on grounds of race, colour, religion or sex.

To help with his major educational problems the Secretary of State may seek, and from time to time does seek, the advice of the Advisory Council on Education, whose appointment is provided for in the Act. At least two-thirds of the Council are required to be drawn from such bodies as the education authorities, the universities, the teaching profession, business and industry, including both employers and workers.

Structure of the school system. This is seen in the diagram on page 1173.

Nursery schools. These are provided, where there is a demand for them, for children from 2 to 5. The children are introduced to a regime of healthy living and have their recreational needs well provided for. Although attention is paid to the development of language through speech, there is no formal education.

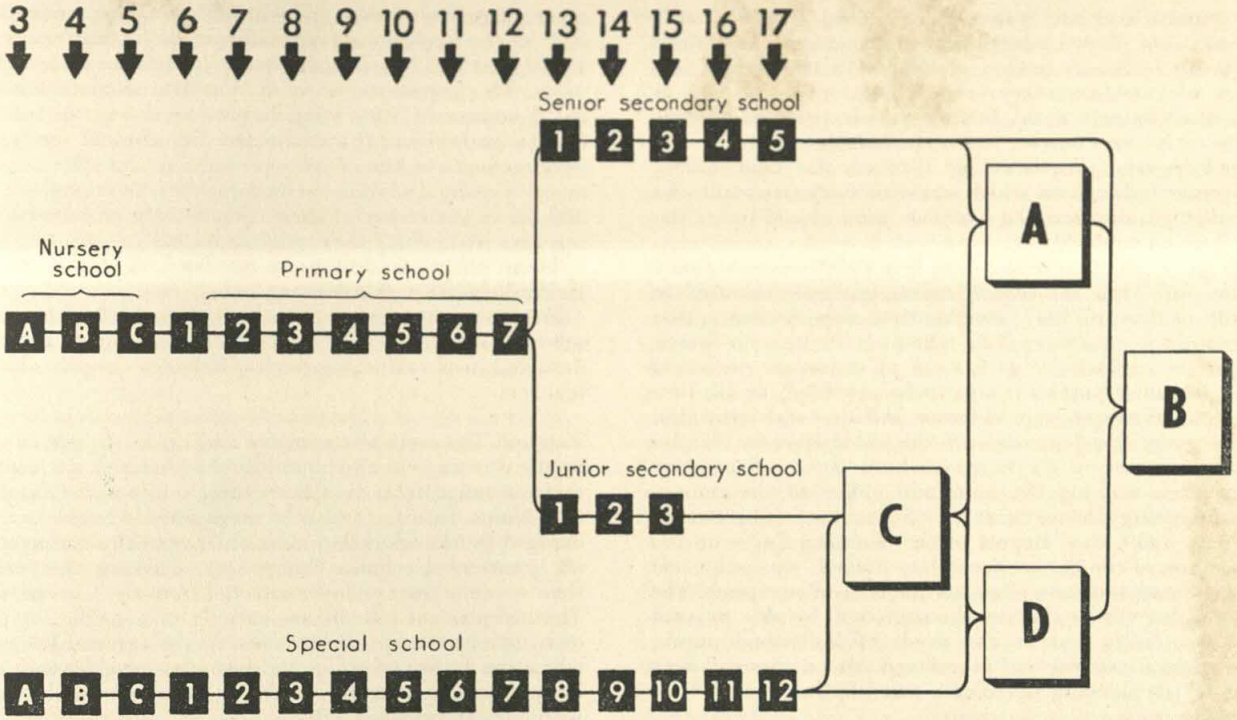
Primary schools. Education becomes compulsory at age 5, when children enter primary schools. The object of these schools is to establish the tools of education, reading, writing and arithmetic, but attention is also paid to physical education, history, geography, nature study, music, art and handwork. There is no common curriculum enforced by the State or by individual education authorities, but as the result of many professional conferences curricula are fairly similar all over the country.

Secondary schools. Between the ages of 11½ and 12½ pupils are normally promoted to secondary courses. They are not promoted as a result of passing an examination, but at the appropriate age are graded according to their ability. The pupils proceed to secondary courses which are adapted to their abilities and aptitudes as ascertained by the grading (promotion) procedure. Pupils who do not intend to remain at school beyond the statutory leaving age of 15—they tend to be the average and the less able pupils—take what are usually called junior secondary courses which are planned to give a rounded off education in three years; pupils who intend to stay at school for five years and have the necessary ability for harder study go to what are normally called senior secondary courses which last for 5 years or 6 years. Senior secondary courses normally include English, one, two or three foreign languages, mathematics, science, history, geography, art, music, and physical education. Junior secondary courses do not normally include a foreign language; mathematics and science are adapted to the needs and abilities of the pupils, and practical work such as woodwork, metalwork and homecraft are given considerable place.

In small towns junior and senior courses are normally run in the same school; in larger towns they may be run in the same schools or in different schools, education authorities being free to plan the organization as they see fit. Thus comprehensive schools are commonly found in the smaller towns, although not uncommonly in larger towns also.

Classes are restricted to 40 in the first three years of secondary courses and to 30 in the later years; practical classes are restricted to 20 pupils. In fact, many classes have fewer than the limits prescribed.

There are no standarized curricula, the headmasters and teachers being at liberty to plan their schemes of work as they please, but the schemes are subject to scrutiny by inspectors of schools. The fact that all senior secondary



GLOSSARY

junior secondary school: lower secondary school providing general education but with curriculum including commercial, technical, home economics and rural courses.

nursery school: pre-primary school.

senior secondary school: general secondary school leading to university entrance but including a number of non-academic courses.

special school: school providing pre-primary, primary and secondary education for handicapped children.

INSTITUTIONS AT POST-SECONDARY LEVEL

A. Universities (all faculties).
B. Teacher training colleges.
C. Establishments of further education: institutions offering part-time and full-time courses mainly vocational in nature.
D. Central institutions: colleges offering full-time and part-time courses serving national or regional needs in technology, industry, etc.

pupils face at the end of their 5- or 6-year course a common examination, the Scottish Leaving Certificate examination set by the Scottish Education Department, tends to some extent to standardize the content of the various subjects.

Further education. A wide range of full-time and part-time (often evening) courses is available for students who have left school, some being at an advanced level. Some courses are cultural, others mainly vocational.

The universities. Scotland has four long-established universities at Aberdeen, Edinburgh, Glasgow, and St. Andrews and Dundee. The universities are autonomous institutions not in any way under the control of the State, although they derive a large part of their finances from state grants.

THE DEVELOPMENT OF SECONDARY EDUCATION

Some of the high schools and academies of Scotland date back for several centuries. In the earlier days, too, the headmaster of the village school not infrequently educated one or other of his bright pupils (the 'lad o' pairts') up to university entrance. The Education (Scotland) Act 1872 recognized schools of secondary type but left them to be financed from local resources and fees. In 1885 inspection of these schools was undertaken by the Department, and in 1888 the Department instituted a national examination, the Leaving Certificate, which provided an award for the satisfactory completion of a secondary course and at the same time served as a passport to the universities and the professions. Although this examination has changed

considerably over the years, its essential functions still remain; it has played a large part in bringing all secondary schools up to a satisfactory standard. In the early years of this century secondary schools became increasingly a public function and many further schools, providing 3-year courses or 5-year courses, were established.

The Education (Scotland) Act 1918 was the main charter of secondary education, which was then made free to all who desired it. Public secondary schools were placed under the 35 education authorities.

Advances which were to be made in 1939 were postponed by the war. Thus the school leaving age was increased to 15 only on 1 April 1947. By this time also the conception of secondary education had widened: it was no longer thought of exclusively as a form of academic education suited for abler pupils; it was to be provided for all, in a variety of forms to suit different abilities and aptitudes.

Two recent developments are the publication in 1955 by the Department of its memorandum 'Junior Secondary Education', defining the aims and policy of the courses and discussing the content of the various subjects. In February 1959, the 'Report of the Working Party on the Curriculum of the Senior Secondary School' was published and its main recommendations have been accepted. The chief results will be that headmasters will be able to meet to an increasing extent the needs of individual pupils, departmental control will be relaxed, and a new ordinary grade of the Leaving Certificate examination designed for less able pupils will be instituted.

Legal basis

Secondary education in Scotland is founded upon the Education (Scotland) Act 1946, and upon the Schools (Scotland) Code 1956, which prescribes the general requirements regarding size of classes, qualifications of teachers and arrangements for schemes of work. Other important regulations, e.g., on teachers' salaries, will be mentioned at appropriate points later.

Children must remain at school until they are 15 years of age.

To bridge the gap between age 15 and age 16 at which apprenticeships begin, pre-vocational courses of further education have been set up.

Administration

The functions of the Secretary of State, the Scottish Education Department, the education authorities and the Advisory Council have already been explained.

Headmasters of public (education authority) schools and grant-aided schools control the day-to-day conduct of their schools as regards time-tables, courses, syllabuses, homework and choice of textbooks, but they are responsible to the local authorities or governing bodies as the case may be. In private schools, the governing bodies normally devolve much responsibility upon the headmaster.

Supervision and inspection. Headmasters and staffs are given a great degree of freedom. Her Majesty's Inspectorate of Schools in Scotland is a unit within the Scottish Education Department numbering about 100 men and women. Vacancies are advertised and candidates are selected after a consideration of their general and special qualifications and experience. They are normally persons of high academic attainment and have usually been teachers for at least five years. The inspectors (a) advise the Department whether the Secretary of State's regulations are being carried out by the authorities; (b) advise the Department on future developments in the education areas; (c) are the Department's principal advisers on more purely educational affairs; and (d) in the course of their rounds, help and advise the teachers with whom they come in contact.

There are no inspectors in Scotland employed by the local education authorities.

Parent-teacher associations have been formed at many schools to promote the educational well-being of the children and increased understanding between the parents and teachers.

Finance. The costs of secondary education are met in part by the Government and in part by the education authorities, under arrangements similar to those outlined for England and Wales. In a few publicly maintained schools, fees are charged by the education authorities, and the managers of all grant-aided schools charge fees, deriving the rest of their revenue from endowments and from the Government. The independent schools are entirely responsible for their own finance, except that a few receive grants from the education authority, where the authority consider that they are performing a service which the authority would otherwise have to provide itself.

The cost of building is usually incurred on a loan, the interest and repayment charges being met by the Government and by the education authority in the same way as all other annual expenditure is met.

Teachers are paid by the education authority which employs them, but their salaries are laid down by the Secretary of State in regulations made on the advice of the National Joint Council to deal with the salaries of teachers in Scotland, a body composed of equal numbers of representatives of the teachers and of education authorities. These regulations prescribe basic salaries which vary according to the qualifications and length of service of the teachers. Head teachers and all others in posts of special responsibility receive additional allowances which depend upon the size and importance of their posts. Women's salaries, which were formerly less than the men's, are now in process of assimilation to the men's.

The Education (Scotland) Act 1946 empowers authorities to grant financial aid to parents to enable pupils to take advantage, without financial hardship, of any educational facilities available to them. The decision whether or not to make an award rests with the education authority, but any awards made must be in accordance with the Education Authority Bursaries (Scotland) Regulations prescribed by the Secretary of State. The authorities may pay the fees of pupils attending fee-paying schools and, where pupils over the age of 15 attend public schools, the bursary is, in general, the amount by which the cost of maintaining the pupil exceeds the amount which the parents might reasonably be expected to contribute for themselves. Bursaries covering maintenance and fees are also provided, on the same general principles, for pupils who proceed from school to higher educational institutions.

Building and equipment. The period since the war has been extremely active in regard to school building.

When a new school is planned, account is taken of the number of pupils likely to be in attendance and of the variety of courses which will be provided. A calculation is then made of all the rooms (classrooms, laboratories, gymnasia, etc.) which will be required, and a minimum area is imposed for each of these rooms. The authorities are then allowed to add 80 per cent to the total area so calculated in order to make provision for corridors and ancillary accommodation. By careful planning it is possible for the authorities' architect to use part of this 80 per cent to enlarge particular classrooms or to provide additional rooms. The school so planned is then erected according to financial standards which permit good amenities and yet prevent extravagance.

The planning of buildings is undertaken by the education authorities but the general standards are laid down by the Department. These standards have been devised to ensure comfortable heating, adequate lighting and good sanitation. In recent years the Department have employed a team of architects who have made a special examination of school architectural problems and their advice is available to authorities.

School welfare services. These services—the medical and dental inspection of school children, the provision of meals and milk, and the provision of transport for pupils who reside far from their school—are provided in Scotland on the same lines as in England and Wales.

Education authorities are required to ascertain which children, because of a physical or mental handicap, need special educational treatment, and to provide it for them in special schools. The children concerned must remain at school until 16. The later years of the course, particularly for the physically handicapped, are similar to secondary courses provided in other schools.

TYPES OF SECONDARY EDUCATION

The promotion procedure for the transfer of pupils from primary to secondary schools, the classification of secondary schools into junior secondary and senior secondary schools, and the fact that junior and senior secondary schools are frequently united have been alluded to above.

Fully 30 per cent of the pupils in an age group go to senior secondary schools and the remainder to junior secondary schools. The high percentage of pupils who embark upon the exacting programmes of senior secondary schools means that few children of the necessary ability fail to get the opportunity of senior secondary education (unless their parents desire them to attend junior secondary schools); on the other hand, it means that a considerable number of children find they are not able successfully to complete the course. This has resulted in many pupils leaving school prematurely and is one reason why an ordinary grade of the Leaving Certificate Examination is to be introduced.

In both junior and senior secondary schools the teachers set their own examinations on which the reports for parents are based. If it is observed that a pupil is capable of undertaking a course harder than that on which he has embarked he is encouraged to change to the more ambitious course; if on the other hand he finds the course which he has chosen too hard he may switch over to an easier one.

Guidance on careers is afforded as described in the article on England and Wales.

Most secondary schools provide a range of extra-curricular activities, which include sports, recreations and societies of many kinds. In most schools the pupils are encouraged to share in the management of these activities, as they also do, especially in senior secondary schools, in the maintenance of school discipline.

The school year extends normally to at least 40 weeks and is divided into three terms by the main holiday periods, Christmas (1½ weeks), Easter (1½ weeks) and Summer (6–8 weeks). For senior secondary schools the school year commences in all cases about the beginning of September; in junior secondary schools the school year begins then, but may also begin for separate intakes of pupils at one or two other dates. The school week extends from Monday to Friday inclusive, and each day is normally broken into seven or eight periods.

Examinations. There is no national examination for junior secondary pupils, but some education authorities provide an examination covering their own area. The pupil on leaving school receives a record to enable him to seek posts in the outside world. The Scottish Leaving Certificate examination is the aim of pupils who attend the senior secondary schools. Pupils normally take their subjects in this examination, either on the higher grade or on the lower grade, in the fifth or sixth years of their course, and many take subjects in both years. Passes in this examination, of the requisite number and kind, are accepted by the universities for entrance, and they also form a passport to the professions.

Vocational and technical education

While secondary schools, whether junior or senior, provide general education and avoid vocational education in any but the broadest sense, and while there are no vocational or technical schools in Scotland, there is a wide range of vocational and technical courses provided in centres of further education, maintained by local authorities, at the national centres of further education (the central institutions), and, at the highest level, at the universities. The schools, however, do provide a certain amount of practical instruction in commercial subjects, woodwork, metalwork, homecraft, etc. These comprise a very important part of the curriculum of junior secondary schools and are pursued, even to a fairly advanced level, in senior secondary schools, some pupils electing to take these subjects at the Leaving Certificate examination.

Teachers

All teachers in Scottish schools are required to take professional training and all male teachers of general subjects must be university graduates. All the senior posts in senior secondary schools and many in junior secondary schools are filled by honours graduates. The course of professional

training for graduates normally lasts for one year, but is at present reduced to two terms for honours graduates training to teach in senior secondary schools the subjects in which they have specialized. Women who are not graduates may take 3-year courses of training at colleges of education, but are then normally employed only in primary schools.

Specialist teachers of such 'practical' subjects as art, music, commercial subjects and homecraft usually acquire diplomas in the subjects which they will teach before taking professional training. The diploma courses, usually taken in central institutions, vary in length but in general last for 3 years, and the professional training, which is taken subsequently, for two terms. Some teachers of homecraft and educational handwork—i.e. woodwork, metalwork, technical drawing and mechanics—and all teachers of physical education take their professional and subject training concurrently. Subject training in educational handwork and in physical education are given in the colleges of education. Concurrent courses normally last for 3 years.

Teacher training is concentrated in seven colleges of education. The four main colleges are situated in the cities of Glasgow, Edinburgh, Aberdeen and Dundee, and train students of both sexes. There are also two residential Roman Catholic colleges for women and a college for women teachers of physical education.

TRENDS AND PROBLEMS

The main practical problems facing secondary education at the present time arise from the large number of children born in the immediate post-war years who will crowd the secondary schools for some years to come. Already a large amount of school building has taken place to accommodate this population 'bulge'; and, with this necessary new building either completed or under way, the Government have now asked the authorities to undertake as rapidly as possible a large programme of modernizing older schools.

The most difficult problem of all relates to staffing, especially as the increased demand by industry and commerce for university graduates has influenced the number aiming at teaching, particularly in mathematics and science. Fortunately, however, the number of graduates entering the training colleges in the last two years has shown a marked upward trend.

While it remains the purpose of secondary schools to provide a general education, it is considered that there is need to pay increased attention to the varying abilities, aptitudes, interests and vocational future of the pupils. Thus, while it is recognized that for the ablest pupils there should be no relaxation of the high academic aims which have hitherto prevailed, greater efforts should be made to check educational wastage amongst the large group of pupils who fall into the next category of ability, and to enable as many as possible of them to attain the highest academic success that is within their compass. For this reason headmasters are being asked to adapt some of their courses more fully to the needs of this large group. It is also hoped that the introduction from 1962 of the new ordinary grade in the Leaving Certificate examination will encourage a larger number of pupils to complete senior secondary education at least to this level.

In order to meet the demands of a technological age, there may be some swing, at least on the part of some pupils, from linguistic studies to the sciences.

[*Text prepared by the Scottish Education Department in October 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 5,223,000.
Area: 30,411 square miles; 78,764 square kilometres.
Population density: 172 per square mile; 66 per square kilometre.

Summary of school statistics, 1953–57. In the school year 1957/58 some 903,919 students were enrolled in full-time educational institutions at all levels, representing about 18 per cent of the total population. Of the total enrolment, 69 per cent were pupils in kindergarten and primary schools, 28 per cent in general secondary schools, 2 per cent in higher educational institutions including teacher training colleges and the remaining 1 per cent in special schools for delinquents and the handicapped. Girls made up about half the enrolment in primary and general secondary schools, over 81 per cent of enrolment in teacher training colleges and 28 per cent at university level. The teaching staff in all full-time institutions numbered 38,882 in 1957/58 of whom 63 per cent were women. The average pupil-teacher ratio was 31 in primary and 16 in general secondary schools. Compared with 1953/54 enrolment increased by 2.5 per cent in primary schools and by nearly 7 per cent in general secondary schools. Enrolment also increased in institutions for teacher training and at university level by about 17 per cent over the period under review. (See Table 1.)

Enrolment trends in secondary education, 1930–57. Average enrolment in general secondary schools increased from 172,000 in the five-year period 1930–34 to 247,000 in the three years 1955–57. Over the same period the estimated child population 15–19 years old declined from 440,000 in 1930–34 to 360,000 in 1955–57. The ratio of children enrolled in secondary schools thus increased from 39 to 69 over the years 1930–57. (See Table 3.)

Examination results in secondary education, 1953–57. No data are available which show pupils entering and passing examinations. Children completing six years of secondary schooling increased from 2,638 in 1953/54 to 3,656 in 1957/58; those completing three years of secondary schooling increased from 29,767 to 30,181 over the same period.

Educational finance, 1957/58. Total expenditure on education in the fiscal year beginning April 1957 amounted to 104,647,411 pounds sterling, representing approximately £20 per inhabitant. Total receipts from all sources amounted to £86,207,428 of which 64 per cent came from the Central Government, 28 per cent from local authorities, less than 1 per cent from tuition fees and the remaining 7 per cent principally from other receipts from parents, and teachers' superannuation payments. Capital expenditure financed by loans amounted to £20 million or nearly one fifth of the total spent. (See Table 2.)

Source. Scottish Education Department: reply to Unesco questionnaire.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools and classes, public	1957/58	[1]75	115	114	4 496	2 212
	Nursery schools and classes, aided private	1957/58	[1]2	1	1	157	95
	Nursery schools and classes, unaided private	1957/58	[2]90	...	...	1 138	540
	Total	**1957/58**	**[1]167**	**[3]116**	**[3]115**	**5 791**	**2 847**
	,,	1956/57	[1]167	[3]112	[3]112	5 698	2 832
	,,	1955/56	[1]161	[3]121	[3]121	5 624	2 781
	,,	1954/55	[1]164	[3]128	[3]128	5 938	2 967
	,,	1953/54	[1]165	[3]132	[3]132	5 870	2 879
Primary	Primary schools, public	1957/58	2 319	19 906	16 761	599 296	292 430
	Primary departments of secondary schools, public	1957/58	564				
	Primary schools, aided private	1957/58	2	154	116	6 423	2 771
	Primary departments of secondary schools, aided private	1957/58	18				
	Primary departments, unaided private	1957/58	143	...	...	11 069	5 925
	Total	**1957/58**	**[1]2 321**	**[3]20 060**	**[3]16 877**	**616 788**	**301 126**
	,,	1956/57	[1]2 296	[3]19 722	[3]16 529	614 448	299 788
	,,	1955/56	[1]2 255	[3]19 375	[3]16 374	613 537	299 513
	,,	1954/55	[1]2 237	[3]19 919	[3]16 455	608 817	297 902
	,,	1953/54	[1]2 213	[3]19 741	[3]16 251	601 650	294 624

1. Number of schools only.
2. Number of schools providing pre-primary education.
3. Not including unaided schools.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Secondary							
General	Secondary schools, public	1957/58	765	15 017	6 578	230 776	114 522
	Secondary schools, aided private	1957/58	20	516	176	8 678	3 096
	Secondary schools, unaided private	1957/58	97	...	...	9 921	4 498
	Total	**1957/58**	**882**	**[3]15 533**	**[3]6 754**	**249 375**	**122 116**
	"	1956/57	882	[3]15 366	[3]6 811	249 804	122 897
	"	1955/56	899	[3]15 096	[3]6 680	241 431	118 839
	"	1954/55	904	[3]14 475	[3]6 414	235 942	116 293
	"	1953/54	912	[3]14 235	[3]6 320	233 408	115 173
Higher							
Teacher training	Teacher training colleges						
	Total	**1957/58**	**7**	**257**	**143**	**4 024**	**3 277**
	"	1956/57	7	250	137	3 945	3 283
	"	1955/56	7	239	131	3 796	3 112
	"	1954/55	7	234	128	3 496	2 816
	"	1953/54	7	234	129	3 441	2 703
General and technical	Universities and colleges						
	Total	**1957/58**	**5**	**2 017**	**...**	**[4]16 411**	**[4]4 545**
	"	1956/57	5	1 965	...	[4]15 341	[4]4 263
	"	1955/56	5	1 870	...	[4]14 789	[4]4 074
	"	1954/55	5	1 778	...	[4]14 143	[4]3 328
	"	1953/54	5	1 761	...	[4]13 998	[4]3 744
Special	Schools and classes for deaf and partially deaf children	1957/58	[1]11			845	372
	Schools and classes for blind and partially sighted children	1957/58	[1]3			422	202
	Schools and classes for mentally handicapped children	1957/58	[1]75	760	633	7 120	3 063
	Classes for epileptic children	1957/58	(2)			51	15
	Schools and classes for physically handicapped and speech defective children	1957/58	[1]13			1 693	760
	Schools and classes for maladjusted children	1957/58	[1]2			56	12
	Approved schools for delinquents	1957/58	21	139	28	1 326	203
	Total	**1957/58**	**125**	**899**	**661**	**11 513**	**4 627**
	"	1956/57	119	954	705	11 530	4 721
	"	1955/56	114	939	689	11 467	4 684
	"	1954/55	112	983	714	16 517	6 722
	"	1953/54	106	969	702	16 820	6 712
Further[5]	Central institutions						
	Total	**1957/58**	**...**	**1 390**	**183**	**[6]6 615**	**[6]2 503**
	"	1956/57	...	902	183	[6]6 374	[6]2 653
	"	1955/56	...	...	...	[6]6 169	[6]2 636
	"	1954/55	...	646	152	[6]6 071	[6]2 636
	"	1953/54	...	...	...	[6]6 403	[6]2 743

4. Full-time students only; in addition, there were 5,156 (F. 420) part-time students in 1957/58, 5,162 (F. 418) in 1956/57, 5,084 (F. 424) in 1955/56, 5,196 (F. 401) in 1954/55, 5,247 (F. 406) in 1953/54.

5. Not including data on further education centres (4,821 full-time students in 1956/57).

6. Full-time students only; there were 23,172 part-time students in 1956/57.

2. EDUCATIONAL FINANCE, 1957/58 (in pounds sterling)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**86 207 428**
Central Government	55 692 132
Local authorities	24 385 674
Tuition fees	741 897
Other receipts from parents	2 464 210
Gifts, endowments, etc.	291 595
Teachers' superannuation contributions	2 121 189
Other sources	510 731

B. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[2]		**[3]104 647 411**
Recurring expenditure		78 146 364
For administration or general control	2 826 929	
For instruction		
Salaries to teachers, etc.	39 766 500	
Other instructional expenditure	11 317 151	
Other recurring expenditure	24 235 784	
Capital expenditure		[3]19 965 632
Educational facilities	[3]18 815 203	
Auxiliary facilities	[4]1 150 429	
Debt service		6 535 415

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**78 146 364**		**100.0**
Central administration		883 390		1.1
Instruction		55 458 565		71.0
Pre-primary education				
Primary education	47 079 628		60.25	
Secondary education				
Special education				
Higher education	7 721 770		9.88	
Adult education	657 167		0.84	
Other recurring expenditure		21 804 409		27.9
School meals and milk service	7 314 422		9.36	
School health service	1 149 064		1.47	
Local administration	1 769 684		2.26	
Fuel, light, repairs, etc.	10 732 327		13.73	
Miscellaneous, not specified	838 912		1.07	

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.
2. Closed account.
3. Includes capital expenditure by education authorities met from loans.
4. Capital expenditure made directly from revenue income for the school meals service.

3. TRENDS IN GENERAL SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled		Average total enrolment (000's)	Estimated population 15–19 years old (000's)	General secondary enrolment ratio [2]
	Total [1]	Per cent female			
1930	151 064	...			
1931	160 795	...			
1932	176 745	...	172	444	*39*
1933	186 563	...			
1934	182 839	...			
1935	179 670	...			
1936	176 013	...			
1937	172 764	...	175	418	*42*
1938	173 195	...			
1939	173 764	...			
1940	173 927	...			
1941	162 380	...			
1942	158 987	...	165	397	*41*
1943	162 361	...			
1944	164 899	...			
1945	166 764	...			
1946	171 193	...			
1947	206 929	...	200	366	*55*
1948	225 050	...			
1949	228 763	...			
1950	232 897	...			
1951	236 242	...			
1952	233 671	...	234	358	*66*
1953	233 408	49			
1954	235 942	49			
1955	241 431	49			
1956	249 804	49	247	360	*69*
1957	249 375	49			

1. Not including unaided schools.
2. General secondary education only.

NORTHERN IRELAND

The Education Act (N.I.) 1947 provides that the statutory system of public education shall be organized in three progressive stages to be known as primary education, secondary education and further education.

The structure of the school system is seen in the diagram on page 1181.

Secondary schools fall into two main categories; intermediate schools providing 4-year courses of study designed for pupils who intend to leave school at 15, and grammar schools providing 5- or 6-year courses of study for pupils who intend to remain at school until 17 or 18 and to take the Grammar School Certificate examinations conducted by the Ministry of Education for Northern Ireland.

As in England and Wales, the break between primary and secondary education comes when the pupil reaches the age of about 11 years. If a pupil does not wish to pursue the more academic form of education provided at the grammar school (or is deemed to be unfitted to profit from such education) he is transferred to the secondary intermediate school, if such a school has been provided in his locality; otherwise, and as a special arrangement pending completion of educational reorganization, he continues at the primary school. The first two years of the intermediate school course provides continuing general education; in the last two years the course has a practical bias. On completion of the two years' general course the pupil has the opportunity of transferring to a grammar school; alternatively he may transfer to a junior technical school. The latter is a type of intermediate school which is conducted in association with an institution of further education and which offers practical courses (for boys only) and is intended to cater for pupils who propose to take up apprenticeships or other form of employment in engineering, building and allied trades. Education at the intermediate schools is provided free of charge.

Local education authorities award grammar school scholarships to pupils who pass a qualifying test conducted each year by the Ministry of Education and a very high proportion of the pupils in grammar schools are holders of scholarships. However, an important feature of the Northern Ireland system is the arrangement which requires certain schools to reserve up to 80 per cent of their places for scholarship holders but which permits the remaining places in those schools to be allocated to fee-paying pupils. The problem of secondary education is still the subject of much thought and research.

Many of the new secondary intermediate schools which will be necessary in order to make secondary education available to all children will be under voluntary management as are the majority of the grammar schools. The importance of the voluntary element in the Northern Ireland educational system is recognized by the decision of the Government to make grants equal to 65 per cent of the expenditure incurred on the provision of new, or the improvement of existing, voluntary schools.

[*Text prepared by the Ministry of Education, Belfast, in December 1959.*]

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GLOSSARY

grammar school: general secondary school.

independent school: private school providing pre-primary and/or primary and/or general secondary education.

nursery school: pre-primary school.

preparatory department of grammar school: primary classes attached to a general secondary school.

secondary intermediate school: lower general secondary school with pre-vocational bias.

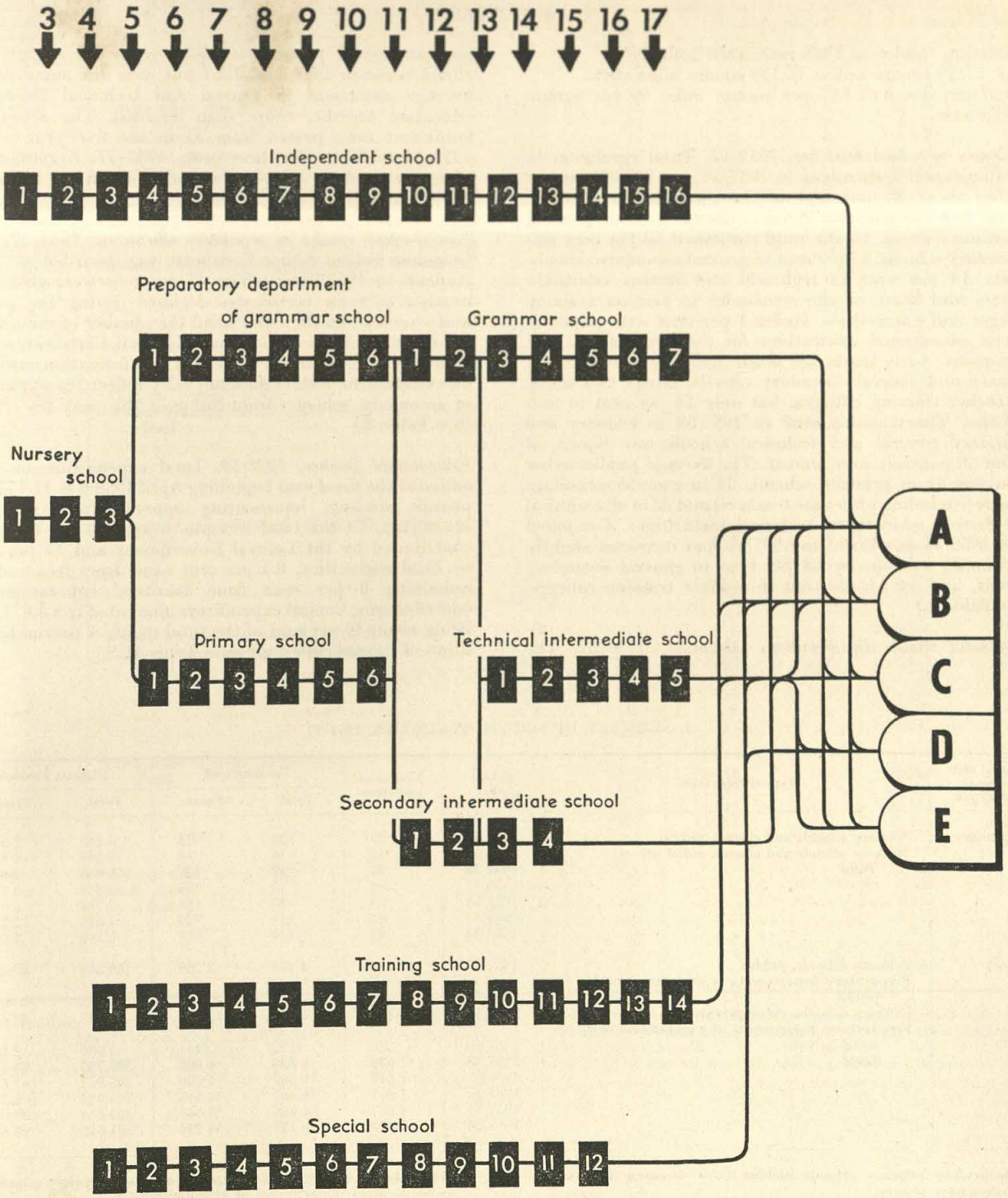
special school: school providing primary and secondary education for mentally or physically handicapped children.

technical intermediate school: vocational secondary school.

training school: school providing primary and secondary education for delinquent or vagrant children.

INSTITUTIONS AT POST-SECONDARY LEVEL

A. Adult education centres.
B. Establishments of further education: institutions offering full-time and part-time courses, mainly vocational in nature.
C. Agricultural colleges.
D. Universities (all faculties).
E. Teacher training colleges.


3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Independent school
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Preparatory department
of grammar school
Grammar school
1 2 3 4 5 6 1 2 3 4 5 6 7
Nursery
school
1 2 3
Primary school
1 2 3 4 5 6
Technical intermediate school
1 2 3 4 5
Secondary intermediate school
1 2 3 4
A
B
C
D
E
Training school
1 2 3 4 5 6 7 8 9 10 11 12 13 14
Special school
1 2 3 4 5 6 7 8 9 10 11 12

STATISTICS

Population (mid-year 1958 estimate): 1,403,000.
Area: 5,459 square miles; 14,139 square kilometres.
Population density: 257 per square mile; 99 per square kilometre.

Summary of school statistics, 1953–57. Total enrolment in all educational institutions in 1957/58 was 308,037, representing about 22 per cent of the estimated population. There were in addition 3,635 students attending adult education courses. Of the total enrolment 68 per cent was in primary schools, 17 per cent in general secondary schools, nearly 13 per cent in technical and further education courses and most of the remainder in teacher training colleges and universities. Under 1 per cent were pupils in special educational institutions for the handicapped and delinquent. Girls made up about half the enrolment in primary and general secondary schools, nearly two thirds in teacher training colleges, but only 23 per cent in universities. The teaching staff in 1957/58 in primary and secondary general and technical schools was 10,628, of whom 59 per cent were women. The average pupil-teacher ratio was 31 in primary schools, 21 in general secondary schools (excluding part-time teachers) and 23 in all technical and further educational technical institutions. Compared with 1953/54 enrolment in 1957/58 had increased slightly in primary schools, by 60 per cent in general secondary schools, and by 11 per cent in teacher training colleges. (See Table 1.)

Enrolment trends in secondary education, 1930–57. The estimated child population 15–19 years old slightly declined between 1930 and 1957 but over the same period average enrolment in general and technical secondary education together more than doubled. The secondary enrolment ratio passed from 31 in the five year period 1930–34 to 75 in the three years 1955–57. Enrolment in general secondary schools alone was four times higher in 1957 than in 1930. (See Table 2.)

Examination results in secondary education, 1953–57. The Grammar School Senior Certificate was awarded to 2,554 students in 1957/58 of whom 47 per cent were girls. The number of these certificates declined during the period under review; on the other hand the number of certificates for technical studies, including National Certificates, was higher in 1957/58 than in 1953/54. The information available on examination results does not fully reflect the expansion in secondary school enrolment over the past few years. (See Table 3.)

Educational finance, 1958/59. Total expenditure on education in the fiscal year beginning April 1958 was 17,177,753 pounds sterling, representing approximately £12 per inhabitant. Of the total receipts, nearly 80 per cent was contributed by the Central Government and 14 per cent by local authorities; 0.1 per cent came from fees and the remaining 6 per cent from teachers' superannuation contributions. Capital expenditure amounted to £3,271,988, being about 19 per cent of the total spent. A partial breakdown of expenditure is given in Table 4C.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools and classes, public	1957/58	28	[1] [2]23	[1] [2]23	3 167	1 545
	Nursery schools and classes, aided private	1957/58	32	[1] [2]4	[1] [2]4	2 899	1 484
	Total	**1957/58**	**60**	[3]**27**	[3]**27**	**6 066**	**3 029**
	"	1956/57	63	[3]25	[3]25	5 868	3 014
	"	1955/56	59	[3]25	[3]25	5 788	2 899
	"	1954/55	61	[3]29	[3]29	5 416	2 726
	"	1953/54	62	[3]29	[3]29	5 593	2 824
Primary	Primary schools, public	1957/58	754	[1]3 173	[1]2 229	100 353	47 581
	Preparatory departments at grammar schools, public	1957/58	12	[2]44	[2]43	1 005	624
	Primary schools, aided private	1957/58	822	[1]3 117	[1]2 189	98 528	48 677
	Preparatory departments at grammar schools, aided private	1957/58	36	[2]172	[2]141	3 908	2 276
	Total	**1957/58**	**1 624**	[4]**6 506**	[4]**4 602**	**203 794**	**99 158**
	"	1956/57	1 649	[4]6 567	[4]4 599	205 952	101 402
	"	1955/56	1 651	[4]6 467	[4]4 519	205 994	101 239
	"	1954/55	1 657	[4]6 386	[4]4 448	203 814	100 089
	"	1953/54	1 670	[4]6 183	[4]4 254	201 655	98 522

1. Teachers in primary schools include those teaching in attached kindergarten classes.
2. Teachers in pre-primary classes of preparatory departments of grammar schools are included with those in primary classes.
3. Not including teachers in kindergarten classes of primary schools and in preparatory departments of grammar schools.
4. Including teachers in pre-primary classes.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Secondary							
General	Intermediate schools, public	1957/58	43	799	346	20 189	9 645
	Grammar schools, public	1957/58	18	337	166	6 605	3 658
	Intermediate schools, aided private	1957/58	13	193	68	3 802	865
	Grammar schools, aided private	1957/58	63	1 181	550	22 426	10 876
	Total	**1957/58**	**137**	[5]**2 510**	[5]**1 130**	**53 022**	**25 044**
	,,	1956/57	116	[5]1 997	[5]915	42 281	20 546
	,,	1955/56	112	[5]1 828	[5]839	39 342	19 043
	,,	1954/55	104	[5]1 717	[5]785	36 074	17 506
	,,	1953/54	99	[5]1 646	[5]782	33 095	16 050
Vocational	Technical intermediate schools, public[6]						
	Total	**1957/58**	**33**	[7]...	[7]...	**5 462**	**1 234**
	,,	1956/57	30	[7]...	[7]...	5 059	1 075
	,,	1955/56	31	[7]...	[7]...	5 319	1 621
	,,	1954/55	30	[7]...	[7]...	6 069	2 564
	,,	1953/54	30	[7]...	[7]...	6 047	2 663
Higher							
Teacher training	Teacher training college, public	1957/58	1	78	29	1 108	723
	Specialist colleges, public	1957/58	3	33	17	102	99
	Teacher training college, aided private	1957/58	1	34	17	468	274
	Total	**1957/58**	**5**	**145**	**63**	**1 678**	**1 096**
	,,	1956/57	5	140	63	1 703	1 115
	,,	1955/56	5	136	60	1 599	1 055
	,,	1954/55	5	126	53	1 609	1 059
	,,	1953/54	5	121	52	1 505	1 003
General and technical	University and university college, aided private						
	Total	**1957/58**	**2**	**321**	**20**	**3 090**	**715**
	,,	1956/57	2	316	20	2 858	710
	,,	1955/56	2	318	19	2 805	742
	,,	1954/55	2	301	21	2 777	698
	,,	1953/54	2	274	21	2 771	702
Special	Schools for handicapped and ill children	1957/58	19	103	80	1 375	585
	Primary classes for subnormal pupils	1957/58	40	40	28	570	249
	Total	**1957/58**	[8]**19**	**143**	**108**	**1 945**	**834**
	,,	1956/57	[8]16	114	82	1 753	740
	,,	1955/56	[8]14	91	72	1 372	542
	,,	1954/55	[8]14	70	56	1 072	498
	,,	1953/54	[8]13	67	52	1 017	463
Further education	Institutions of technical instruction						
	Total	**1957/58**	**179**	[7]**1 612**	[7]**520**	**32 980**	**16 529**
	,,	1956/57	165	[7]1 598	[7]504	36 482	18 571
	,,	1955/56	172	[7]1 534	[7]491	33 188	16 965
	,,	1954/55	154	[7]1 501	[7]475	32 331	16 319
	,,	1953/54	150	[7]1 513	[7]492	30 518	15 830
Adult	One-year and 3-year courses	1957/58	42	...	...	1 131	...
	Short courses	1957/58				2 504	...
	Total	**1957/58**	**42**	**...**	**...**	**3 635**	**...**
	,,	1956/57	40	...	...	3 326	...
	,,	1955/56	38	...	...	3 186	...
	,,	1954/55	37	...	...	3 477	...
	,,	1953/54	34	...	...	3 068	...

5. In addition, there were part-time teachers numbering 236 (F. 162) in 1957/58, 224 (F. 156) in 1956/57, 213 (F. 144) in 1955/56, 210 (F. 149) in 1954/55, 235 (F. 165) in 1953/54.
6. Full-time courses only.
7. Teachers in technical intermediate schools are included with those in further education; their number includes part-time teachers [958 (F. 302) in 1957/58].
8. Number of schools, not including special classes in primary schools.

2. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education				Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational[1]				
	Total	Per cent female	Total	Per cent female			
1930	12 094	50	24 073	60			
1931	12 267	49	22 569	58			
1932	12 339	49	21 287	56	35	115	*31*
1933	12 710	49	23 234	57			
1934	12 974	50	23 218	56			
1935	13 165	51	20 163	54			
1936	13 440	51	20 778	54			
1937	13 683	51	22 998	54	34	114	*30*
1938	14 083	50	23 147	54			
1939	11 854	49	17 554	50			
1940	11 840	49	20 462	44			
1941	11 842	50	22 119	43			
1942	12 667	51	22 435	46	37	114	*32*
1943	13 680	51	24 889	50			
1944	14 577	51	28 104	51			
1945	15 308	51	29 335	54			
1946	16 605	51	34 633	50			
1947	17 178	51	27 522	45	50	114	*44*
1948	24 179	49	28 024	44			
1949	27 383	49	30 841	49			
1950	29 870	49	31 602	50			
1951	31 095	43	33 051	51			
1952	31 713	50	35 920	50	67	110	*61*
1953	33 095	49	36 565	51			
1954	36 074	49	38 400	49			
1955	39 342	48	38 507	48			
1956	42 281	49	41 541	47	84	113	*75*
1957	53 022	47	38 442	46			

1. Including technical intermediate schools and technical institutions of further education with part-time students. There is no teacher training at secondary level.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Grammar School Senior Certificate	2 712	1 331	2 558	1 296	2 719	1 315	2 316	1 132	2 554	1 212
Technical Day School Certificate	263	81	295	115	280	85	313	75	351	56
National Certificates of technical and industrial schools	219	...	182	...	217	...	244	...	254	...
Chemistry	7	...	14	...	7	...	7	...	10	...
Mechanical engineering	144	...	118	...	154	...	165	...	168	...
Electrical engineering	53	...	44	...	46	...	63	...	67	...
Naval architecture	15	...	6	...	10	...	9	...	9	...

4. EDUCATIONAL FINANCE, 1958/59 (in pounds sterling)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts[2]	**17 505 795**
Central Government	13 905 765
Local authorities	2 594 910
Tuition and examinations fees	18 693
Superannuation contributions	986 427

B. EXPENDITURE BY PURPOSE

		Amount
Total expenditure[2]		**17 177 753**
Recurring expenditure		13 905 765
For central administration	311 871	
For salaries to teachers, etc.	7 636 853	
Other recurring expenditure	[3]5 957 041	
Capital expenditure		3 271 988

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

		Amount	Per cent
Total recurring expenditure		**13 905 765**	**100.0**
Central administration		311 871	2.2
Instructional expenditure for all levels[4]		7 636 853	54.9
Teacher training—secondary level		561 112	4.0
Other recurring expenditure		5 395 929	38.8
School meals and milk service	1 121 982		8.1
Scholarships	1 013 730		7.3
Superannuation of teachers	726 394		5.2
Miscellaneous	2 533 823		18.2

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.
2. Closed account.
3. Includes teacher training (£561,112).
4. Not including teacher training (secondary level) and universities.

BRITISH SOMALILAND

THE EDUCATIONAL SYSTEM

The provision of education in any but the most exiguous form may be said to have started in 1944 for boys and in 1953 for girls. Earlier attempts to introduce schools had failed for such reasons as religious prejudice or objection to the taxation which would have been entailed.

The present system consists of 3-year elementary course, a 4-year intermediate course and a 4-year secondary course, with various alternative courses following the intermediate course. Recruitment to the elementary schools is limited to pupils who have attended Koranic schools and have reached a certain standard in knowledge of the Koran. Great attention is paid to the encouragement of these Koranic schools and to attempts to improve their standard of instruction. Many do, in fact, teach Arabic and arithmetic in addition to the Koran.

As Somali is not, at present, a written language, Arabic is used as the medium of instruction in the elementary schools and a change is made to English in the first year of the intermediate course. Arabic continues as a school subject.

Until recently central government and Colonial Development and Welfare grants had been responsible for the financing of education. In the last few years, local government councils have taken over more and more responsibility for elementary education.

THE DEVELOPMENT OF SECONDARY EDUCATION

Up till 1953, a limited number of boys who had completed the intermediate course were sent to secondary schools in the Sudan. In 1953 a secondary school was started in the

Protectorate with an intake of 20 boys a year. This intake has since been increased to 25 and from 1959 will be 50. A new secondary school to house, initially, 200 pupils is at present under construction.

There is no secondary education for girls as yet, as the first girls have not yet completed the intermediate course.

Administration. There is no legislation directly affecting secondary education.

The Department of Education plans the secondary education provided with the advice of the Standing Committee on Education, which is a statutory body consisting almost entirely of Somalis. The curriculum is based on the requirements of the General Certificate of Education (United Kingdom) examination, which is taken at the Ordinary level.

The headmaster of the secondary school is directly responsible to the Director of Education. Inspection is carried out by the headquarters staff, European and Somali, of the Education Department.

Capital building costs have been met from Colonial Development and Welfare grants, and recurrent costs, including teachers' salaries, from protectorate funds. Fees of Shs. 450/- per annum are charged. Up to 20 per cent of free places are available as scholarships awarded on merit. Needy parents are assisted by the Protectorate Welfare Fund.

The school now being built will be in every way suitable as regards space, lighting and sanitation. Medical services for pupils are readily available.

TYPES OF SECONDARY EDUCATION

As stated above, there is only one secondary school which prepares students for the General Certificate of Education examination at Ordinary level. Pupils are selected by a competitive examination taken on completion of the intermediate school course. Subjects taught are English (including English literature), Arabic, arithmetic, geography, history, physics, chemistry, Koran.

The staff, with one exception, consists of graduates (European, Indian and Somali). In time, the proportion of Somalis will increase as graduates return from England and Beirut.

Vocational and technical schools. Training provided comes under the following heads:

Clerical training. Courses are run for in-service clerks and for new recruits from the intermediate schools. The subjects studied are English, arithmetic, typing, local accounting and office procedure.

Rural science training. Courses are run for junior staff of the Department of Natural Resources who have completed the intermediate school course. The subjects studied are English, arithmetic and science subjects connected with the various branches of the Department of Natural Resources.

Technical training. A limited apprenticeship scheme is in being. The future of technical education is at present under discussion, but it is likely that two 3-year courses will be instituted, for carpenters and joiners and motor vehicle mechanics, leading to the Intermediate City and Guilds (United Kingdom) examination, followed by an apprenticeship organized in conjunction with the Public Works Department.

Teacher training. A teacher training centre offers a 2-year course designed to produce teachers for the intermediate and elementary schools. As an emergency measure, shorter courses are also run to raise the proportion of teachers with some form of training. Teachers attending the short courses will later return for the full 2-year course. At the conclusion of the 2-year course, an examination is held and grade certificates are issued.

Out-of-class activities. The secondary school has committees of pupils which organize school meals, games, debates, and the school magazine. Football and hockey are played and athletic sports are held.

TRENDS AND PROBLEMS

All education at secondary level is directed towards filling the needs of the Protectorate for persons with the desired qualifications. It is hoped that as a result of the increase in secondary education, government posts which have hitherto been filled by intermediate school products will be taken by secondary school leavers; this should go far towards raising the general level of the service. Openings outside government employment are very limited.

[*Text prepared by the Department of Education, Berbera, in June 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 650,000.
Area: 68,000 square miles; 176,120 square kilometres.
Population density: 10 per square mile; 4 per square kilometre.

Summary of school statistics, 1953–57. Enrolment in public primary (elementary and intermediate) schools and in secondary schools in 1957/58 was 2,253 pupils, representing a considerable increase on the 1953/54 figure of 1,444. There were in addition 120 aided Koranic schools, with 2,750 pupils and 125 unaided Koranic schools with some 2,000 pupils. The number of girls in public primary schools has increased over the period under review from 29 to 135, but there are as yet no girls in secondary education. According to official estimates, school-age population in Somaliland in 1957 was 128,000 children, distributed as

follows: 35,000 children of elementary school age of whom approximately 4.1 per cent were enrolled in school; 46,500 children of intermediate school age of whom approximately 1.4 per cent were enrolled in school; 46,500 children of secondary school age of whom approximately 0.4 per cent were enrolled in school. In all 1.8 per cent of children of school age were estimated to attend school. (See Table 2.)

Examination results in secondary education, 1957. The General Certificate of Education was held in Somaliland for the first time in 1957; 16 candidates were awarded certificates. Eleven candidates obtained the elementary teaching certificate in 1957 compared with 5 in the previous year.

Educational finance, 1958. Total expenditure on education in the fiscal year beginning January 1958 amounted to 268,115 pounds sterling; of this sum 55 per cent (£147,508) was derived from United Kingdom funds, 42 per cent (£111,545) from Territorial revenue and the remainder (£9,062) from local authorities. Capital expenditure (£134,361) made up about 50 per cent of the total spent. The distribution of recurring expenditure by level and type of education is given in Table 1.

Sources. British Somaliland: Education Department, annual reports.

1. EDUCATIONAL FINANCE, 1958 (in pounds sterling)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure	**133 754**	**100.0**
Central administration	19 894	14.9
Primary education[2]	84 273	63.0
Secondary education	8 945	6.7
Vocational education	13 379	10.0
Teacher training	7 263	5.4

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.
2. Includes intermediate education.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Elementary schools, public	1957/58	26	62	5	1 439	97
	Intermediate schools, public	1957/58	9	36	2	633	38
	Total	**1957/58**	**35**	**98**	**7**	**2 072**	**135**
	,,	1956/57	24	98	6	1 622	95
	,,	1955/56	22	83	4	1 539	64
	,,	1954/55	22	[1]77	...	1 342	47
	,,	1953/54	22	[1]75	...	1 360	29
Secondary *General*	Secondary school, public						
	Total	**1957/58**	**1**	**8**	–	**68**	–
	,,	1956/57	1	5	–	63	–
	,,	1955/56	1	5	–	47	–
	,,	1954/55	1	3	–	29	–
	,,	1953/54	1	3	–	16	–
Vocational	Trade school, public[2]	1957/58	1	11	–	77	–
	Vocational training centre, public	1957/58	1			9	–
	Total	**1957/58**	**2**	**11**	–	**86**	–
	,,	1956/57	2	15	–	73	–
	,,	1955/56	2	12	–	87	–
	,,	1954/55	2	...	...	87	–
	,,	1953/54	2	...	...	53	–
Teacher training	Teacher training class, public						
	Total	**1957/58**	**1**	**2**	–	**27**	–
	,,	1956/57	1	2	–	25	–
	,,	1955/56	1	1	–	13	–
	,,	1954/55	1	...	...	5	–
	,,	1953/54	1	...	...	15	–

1. Including teachers of trade school.
2. Providing technical instruction at the level of the intermediate school.

KENYA

THE EDUCATIONAL SYSTEM

The statutory basis of the public system of education in Kenya today is the Education Ordinance of 1952 (No. 58 of 1952) which charges the Minister of Education with the promotion of education in the Colony and the progressive development of schools, and empowers him to use public funds to establish schools, make grants-in-aid or advances on loans in respect of schools and libraries, and assist in the provision of the welfare schemes which are nowadays associated with a public system of education.

The Kenya system is administered through a Department of Education with headquarters and provincial and district branches, under the over-all control of a Director of Education. The Ordinance also provides for the establishment of appropriate consultative machinery by enabling the Minister to set up a series of educational advisory councils.

The schools and colleges in the public system are either government or aided institutions, the latter being owned and run by 'managers' who must be approved by the Minister. In the case of Christian schools the duties of management are normally undertaken by various missionary agencies, while the non-Christian communities have established approved managements, usually on the basis of race, religion or sect. In smaller centres of population there is a tendency, however, for the Asians of all communities to pool their resources in a single common school.

The public system of education is supplemented by a number of private schools which receive no assistance from public funds. Such schools are required to be registered with the Department and are subject to official visits and inspection.

Education is compulsory for Europeans between the ages of 7 and 15 years and also for Asian boys in the three largest towns in the Territory. As yet there is no compulsory education for Africans.

In the technical and trades schools students are indentured as apprentices.

THE DEVELOPMENT OF SECONDARY EDUCATION

Although a common pattern for the education of all races is emerging, it will be necessary in this section to treat the various racial groups separately.

African. Until 1925 the only secondary education available for Africans was a certain amount of private tuition given by the missionaries to a few of their more promising pupils. Secondary education in the formal sense began with the establishment of the Alliance High School in 1926. This was followed by the opening of a Roman Catholic secondary school at Kabaa, later transferred to Mangu.

Education Ordinances passed in 1931 and 1934 delegated the responsibility for the financing of primary education to the local councils, the Government assuming responsibility for running a number of junior secondary schools which which previously been built and managed by the councils.

Practically all secondary schools began as primary schools to which higher classes were added, one by one, as the demand made it economically feasible to do so. Moreover, in the early period almost all schools provided teacher training side by side with the regular school curriculum. As the secondary classes became more firmly established it become possible progressively to drop the primary, and later the teacher training classes.

The academic standard of these early secondary courses was several years below the present standard and for further education up to that level only a very few selected students continued their studies at Makerere College in Uganda, where more advanced general courses, and specialized courses for teachers, agriculturists, and medical assistants were available. Indeed, it was not until 1940 that the first African school candidates (seven in number) passed the Cambridge School Certificate.

The five years immediately following World War II witnessed a marked expansion in the facilities for secondary education, and by 1950, 11 secondary schools had been established. However, as in the past, comparatively few of the pupils survived the whole of the 4-year course, and the last years of the course were given only in a few institutions. In 1950, 63 African boys passed the Cambridge School Certificate but no girls had yet reached this level of education, although two separate secondary schools for girls had by this time been established.

In 1949, the Government set up a committee known as the Beecher Committee 'to examine the scope, content and methods of the African educational system'. The findings of this committee, which were accepted by the Government in 1950, have formed the basis of subsequent development plans, although in most respects the targets set by the report have been greatly exceeded. The plan envisaged a 4-year primary course aimed at teaching vernacular literacy to the largest possible number of students, followed by a 4-year intermediate course for approximately 22½ per cent of these, and again by a 4-year secondary course leading to School Certificate for about 10 per cent of the intermediate output.

Progress up to the end of 1958 has been quite spectacular, with a primary enrolment representing over 80 per cent of the potential intake, an intermediate enrolment of 25 per cent, and a secondary enrolment of over 11 per cent, the latter schools having entered over 600 Africans for School Certificate at the end of this period.

Wastage, which was hitherto one of the major bugbears of the African system, has been greatly reduced and the Government's present aim is to provide the first eight years of education on as universal a scale as funds permit. At present therefore the only major difference between the

African system and that followed by the other racial groups is that the 8-year course is divided into two 4-year courses, known as primary and intermediate. Another difference is that the African primary/intermediate course at present takes 8 years as against 7 for the other races. It is expected, however, that the introduction of better qualified teachers and the greater attention given to the teaching of English in the earlier years will gradually eliminate this difference of duration.

Asian. The first Asian school was opened by the Uganda Railway Authorities in 1906 and was taken over by the Government in 1912. During the greater part of the period under review Asian education was organized under an eight-class system (six regular standards preceded by two sub-standards), followed by a three-class secondary system. At the end of the first year, secondary pupils sat for the Cambridge Junior Certificate, which was a requirement for further promotion. The Junior Certificate was abolished in 1945, and the present pattern of seven years primary followed by four years of secondary education was instituted shortly thereafter.

In 1950 an advanced course of 2 years leading to the Cambridge Higher School Certificate was introduced for selected pupils in one school. This course is now available in two boys' schools and one girls' school.

In 1958 a 2-year secondary modern course was introduced in most secondary schools and at the top of certain primary schools to cater for pupils whose abilities and aptitudes were considered unsuited to the formal academic type of secondary education.

European. Up to 1930, the primary schools included additional secondary classes up to the level of the Cambridge Junior Local Examination, but in 1931 all pupils who had completed the normal primary course were transferred to Nairobi to the first separately organized secondary schools, one for boys and one for girls, the latter sharing buildings with the Nairobi Primary Mixed Boarding School. There are now two boarding schools and one day school for boys, and equal provision is made for girls.

In 1932 the first class beyond the School Certificate stage was established at the Prince of Wales Boys' School. Although the European secondary schools have always provided instruction in practical subjects, in recent years facilities for woodwork, metalwork, and the various branches of home crafts have been gradually improved, so that 'modern' classes formally exist in all the schools.

Administration

The policy governing the organization, content and expansion of education is formulated by the Minister, with the professional advice of the Director of Education and the Advisory Councils, one each for African, Arab, Asian, European and Goan education, higher education, and technical education and vocational training.

The Director of Education is responsible for the execution of policy, and he is assisted in the planning and administration of education by five assistant directors. An Assistant Director is in charge of the planning and organization of secondary schools for each of the three racial groups—African, Asian (including Arab and Goan) and European. A fourth Assistant Director is responsible for the administration and planning of Technical and Trades Education, and a fifth is responsible for advising on the education of girls.

The Chief Inspector of Schools, advised by Syllabus Committees and a number of specialist staff, is in charge of curricula and examinations. However, most examinations given in secondary schools are set by public examining bodies in the United Kingdom, a situation which has a strong bearing on the curricula followed in the schools.

Control. A small number of government schools and training institutions which draw their students from more than one province are administered directly from the headquarters of the Department, and the only private European secondary school has its own Board of Governors. The heads of all other government European and Asian schools come under the control of the Provincial Education Officer, who is the local representative of the Director of Education.

Asian private schools, the majority of which are government-aided, also come under Provincial Education Officers, but have managers who are responsible for all matters of organization, the head of the school being in charge of all academic matters.

The control of African secondary schools is organized somewhat differently in that they are grouped by provinces under Regional Boards, of which the Provincial Education Officer is executive officer. Most of these schools also have their own boards of governors.

All schools and colleges conducted by voluntary agencies are owned and run by managers approved by the Minister, and all are required to be registered by the Education Department and are subject to official visits and inspections. The great majority of such schools at secondary level receive financial assistance towards teachers' salaries and are eligible to receive grants towards the cost of capital development. The fees they charge, the staff they engage, and their curricula are subject to the approval of the Department.

Supervision and inspection. The Chief Inspector of Schools is responsible for the academic standards of schools and all matters affecting their curriculum, including the selection and supply of textbooks and the production of syllabuses. He is also responsible for all examinations organized by the Department and for matters arising out of overseas examinations.

The staff of the Chief Inspector of Schools includes three specialist supervisors, for domestic science, physical education and English. The Chief Inspector of Schools is also concerned directly with the inspection of secondary schools.

The staff of the inspectorate is usually recruited from the government teaching service; professional qualifications and considerable teaching and administrative experience are required.

Parents' committees have been set up for individual schools or groups of schools of all races and, while they have no statutory powers, they provide a link between the parents and the management of the schools.

Finance. All government funds for secondary education are allocated by the Treasury of the Central Government to the Ministry from the general revenue of the Colony.

In the case of government schools of all races, funds are distributed by the Ministry directly to the schools in accordance with their approved annual estimates of expenditure. Grants-in-aid to aided Asian and European schools are paid direct to the managers of the schools against claims for salary grants which are checked and passed by the Education Department. The grants are paid at the rate of four-fifths of the approved staff salaries.

Aided African secondary schools are financed by Provincial Education Boards from an annual government subvention based on approved expenditure. The majority of grants are paid according to a budget calculated to meet the difference between approved expenditure and the estimated revenue, from fees. Such grants are conditional upon a board of governors or a school committee being in charge of the school management. Schools are free, however, to maintain their managerial autonomy, in which case they receive capitation and salary grants.

School fees are fixed by regulation in all government schools and are payable by all pupils, except in cases of indigency where, in Asian and European government schools, partial or total remission of the fee may be granted on the recommendation of the school committees. In aided schools for Europeans and Asians, school fees are fixed by the managers but are subject to the approval of the Director of Education. Parents of pupils in African secondary schools who cannot afford to pay the fees are assisted in part or in full by the African District Council.

In government schools the cost of all new buildings and equipment is met from the development funds of the Central Government. These funds are also made available to aided European and Asian schools, which receive grants amounting to 50 per cent of the cost of approved new buildings and equipment. Similarly, capital grants are made to African aided secondary schools, but in their case virtually 100 per cent of the cost is met from government funds.

Buildings and equipment. The following requirements are laid down under the Education Ordinance, 1952:

No room used as a classroom shall accommodate in single-seat desks a greater number of pupils than the number produced by the following calculation

$$\frac{\text{area of room in square feet} - 140}{11.3}$$

No room used as a classroom shall accommodate in double-seat desks a greater number of pupils than the number produced by the following calculation

$$\frac{\text{area of room in square feet} - 140}{8.5}$$

No room used as a dormitory shall accommodate a greater number of pupils than the number obtained by dividing the area of the floor in square feet by 40.

The ordinance also lays down detailed requirements for lighting, ventilation and sanitation.

TYPES OF SECONDARY EDUCATION

The following are the broad types of secondary education:

Grammar schools. These are provided for all racial groups and are available to both boys and girls; they are not usually co-educational. Courses are available for the Cambridge School Certificate (4 years) and in a limited number of schools for the Cambridge Higher School Certificate (2 years after School Certificate).

Secondary technical schools. These exist only in the African and Asian (including Goan and Arab) groups. The 4-year course leads to the General Certificate of Education (Ordinary level) of the Associated Examining Board in either technical or commercial subjects.

Secondary modern schools. These are common to all racial groups except African. They are available for both boys and girls and are designed to meet the needs of pupils who are not suited for a full grammar or technical course. The course is at present of 2 years' duration and consists of general education with a practical bias towards technical, commercial or domestic science work. A Leaving Certificate is awarded on the conclusion of these courses on the results of an examination conducted by the Education Department.

Trade schools. These exist only for African boys. They all offer a 4-year course in a wide variety of trades.

Teacher training colleges. For Africans there is a 2-year post-primary teacher training course.

Selection of pupils for admission is based on the results of the Primary Schools Leaving examination, on the reports of primary school headmasters, and on age. Provided a pupil achieves sufficiently good results, he or she is free to choose any type of secondary course available.

Types of further education open to secondary school leavers include: degree courses and professional courses overseas; degree courses and professional courses at Makerere College, Uganda, and the Royal Technical College, Nairobi; courses at the Technical Institute, Nairobi; teacher training courses; training schemes run by government departments.

The secondary school year, which starts in January, is divided into three terms, the opening and closing dates varying slightly from year to year. In 1959 they were: 1st term, 12 January to 26 March; 2nd term, 27 April to 8 August; 3rd term, 7 September to 5 December.

The normal school week is from Monday to Friday inclusive and working hours are on the average from 8.30 a.m. to 4 p.m. Periods usually last for 45 minutes and there are breaks at mid-morning and for the mid-day meal.

General secondary schools

Pupils admitted to African schools proceed without further formal selection up to the School Certificate examination after a 4-year course. In the schools for all other racial groups, however, the first year in the secondary school is treated as a diagnostic year and pupils who are initially

placed in grammar or modern streams may, during the course of or at the end of the first year, be transferred from one to the other in the light of their aptitudes.

Those pupils who pass the School Certificate sufficiently well to show that they will profit from a further two years' secondary education are admitted to the Higher School Certificate classes where some degree of specialization is permitted.

The aims of these secondary schools are to provide the basic formal education which will qualify pupils for entry to institutions of higher education or for further training or employment on completing their secondary courses.

Owing to the large number of racial groups for which secondary education must be provided and the multiplicity of vernaculars spoken amongst these racial groups, the subjects taught vary considerably in the different schools. For example, within a single secondary school Asian pupils may be taking either Gujarati, Hindi, Urdu or Punjabi in addition to English. The submission of sample time-tables would, therefore, tend to confuse rather than to clarify the situation.

The subjects taught are as follows.

Grammar schools. Schools of all races: English, history, geography, mathematics, physics, chemistry, biology, zoology, domestic science,[1] economics, art, physical education. African and Arab schools: Swahili,[1] Arabic.[1] Asian schools: Hindi,[1] Punjabi,[1] Gujarati,[1] Urdu.[1] European and Asian schools: Latin, French. European schools: Spanish, German, Greek, Afrikaans.[1] Asian schools: health science.[1]

Secondary technical schools. First year: English, chemistry, physics, mathematics, history, geography, art. Second, third and fourth years: mathematics, English, physics and chemistry (as one subject), history or geography, and *either* metalwork, woodwork, and technical drawing, *or* book-keeping, typewriting and shorthand.

The subjects taught in the second, third and fourth years are taught up to School Certificate and General Certificate of Education (Ordinary level).

Secondary modern schools. English, mathematics, geography, history and *either* woodwork, metalwork, and technical drawing, *or* book-keeping and typewriting, *or* domestic science and home nursing.

Since there are in Kenya no facilities for training European or Asian teachers for secondary schools, it is necessary to rely on overseas countries for such courses. From amongst young European and Asian men and women who have obtained the necessary basic qualifications locally, and from amongst qualified serving teachers, selections for the award of scholarships to the United Kingdom, South Africa, or Makerere College, Uganda, are made. The majority of the scholarships awarded are for university degree courses, post-graduate education courses, or special subject courses.

There are two centres in Kenya for the training of African teachers for service in secondary schools. African teachers are also trained in the Faculty of Education at Makerere College (Uganda). At the end of the 2-year course for the Intermediate examination, those who do not qualify for the degree course can take a 2-year course for the Diploma of Education. Scholarships for overseas study are also awarded to Africans.

In view of the inadequate supply of teachers, it is also necessary to recruit from overseas specialist teachers of English, science, mathematics, and domestic science.

African teachers are members of a unified African teaching service but the teachers of all other races are either civil servants (in government schools) or are employed by the managements of private schools.

The salaries paid to teachers in aided private schools are on the same scale as those paid in government schools.

In the African teaching service and in the government teaching service for the other races, all teachers have the opportunity of reaching the highest teaching and administrative posts through promotion, which depends on merit, experience, qualification and length of service. The normal age of compulsory retirement is 55 years. A considerable number of married women are employed on temporary terms of service.

Vocational and technical schools (Ministry of Education)

Industrial training. Since 1949 five government 'technical and trade' schools for African boys have been opened in the Colony and plans have been made for an expansion of the system. Boys are selected for admission on the results of the Kenya African Preliminary Examination (Standard 8). All five schools offer a 4-year course in carpentry, joinery and building, four offer 3-year courses for painters and tailors, and two give courses for general mechanics. The oldest established school (Kabete Technical and Trade School) also offers courses for farm mechanics, sheetmetal workers, plumbers and pipe fitters, electrical wiremen, fitters and turners, and shoemakers and tanners. Additional courses are being provided at other schools as capital funds become available.

All students serve a three months' probationary period at the end of which they are indentured for a three or four-year period. Each apprentice is issued with a kit of tools appropriate to his trade; the kit is on loan whilst he is under training but becomes his own property when he successfully completes his course.

On four days a week practical craft training is given in the school workshops supplemented by teaching in elementary technology and trade theory. One full day per week is allocated to general education in mathematics, English, civics, drawing and elementary science.

The basic practical training in the workshops is supplemented by extra-mural training, mainly in connexion with school building projects thus, enabling the builders, carpenters, painters, sheetmetal workers, plumbers and electrical wiremen to obtain experience under normal working conditions.

The object of the courses is to produce artisans capable of bringing the advantages of their training to the industrial enterprises where they are employed. On completing the course, each student is given a Leaving Certificate which records the trade skills he has been taught and gives an assessment of his competency. In addition, all students take the lowest of the official trade tests which are administered by the Labour Department. After suitable experience in industrial employment, the artisan may attempt the

1. Taken only up to School Certificate standard; others may be taken to Higher Certificate level.

higher trade tests. A number of tailors, shoemakers and others, on completing their training, set up small businesses in their home districts.

The heads of the schools maintain close liaison with employers and with the Labour Exchanges throughout the Colony. In some cases, arrangements are made, in consultation with employing firms, for students to be given specialized training during their final year.

An on-training scheme has also been devised for building students with the object of training them to operate as petty contractors in their home districts. Teams of eight students are given loans to purchase building equipment and are engaged as labour contractors on school building projects. The operations are supervised by the staff of the technical and trade schools and the teams are taught how to organize site works, estimate quantities and the cost of the work undertaken. The object is to provide the teams with equipment and allow them to accumulate some working capital so that they will be capable of independent operation.

Wherever possible, students are placed with firms who have established apprenticeship schemes, and in such cases they are allowed credit for their school training.

A small number of students are selected, after two years of trade training, for entry to teacher training centres for training as handicraft teachers in the intermediate schools.

Secondary technical schools. There are two maintained secondary technical schools for Asian boys and one grant-aided school. Admission to these schools is by selection on the results of the Kenya Asian Preliminary examination. All students take a common first-year course in mathematics, English, science, history, geography, drawing and some craft work. On the results of the first year's work, they are placed in one of two streams, one group taking general subjects (mathematics, English, science, history or geography) and technical subjects (metalwork, woodwork and technical drawing), and the second group taking commercial subjects (book-keeping, typewriting and shorthand) in lieu of the technical subjects. In two schools the 4-year course leads to the examination for the Cambridge Oversea School Certificate, and in the third school the aim is to prepare students for the General Certificate in Education (Ordinary) of the Associated Examining Board. On completion of the course students either proceed to higher education or take up employment with industrial and commercial firms.

A secondary technical section for African students was established at the Kabete Technical and Trade School in 1956. Students are selected by competitive examination from those who have completed one year of a trade course. The secondary course is of 4 years' duration and leads to the GCE (O) examination of the Associated Examining Board. Subjects taken in common are English, mathematics, geography and science. Engineering students take, in addition, engineering technology and practice and technical drawing; the building students take brickwork, plumbing, carpentry and drawing.

Technical institutes. One grant-aided institution offers full-time courses in the mechanical and electrical engineering trades. Students are admitted who have completed one or two years of an academic secondary course, and the 4-year course leads to the intermediate craft examinations of the City and Guilds of London Institute. This institute admits Muslims from any of the East African territories. The institute also offers part-time day release classes in the mechanical engineering trades for students of all races.

A comprehensive technical institute for students of all races will open in Nairobi in 1960. In the interim, part-time day release and evening classes have been arranged at a number of centres. The courses offer tuition facilities for post-primary school pupils in preliminary technical and commercial subjects and there is a post-School Certificate course leading to the oversea certificate examinations of the City and Guilds of London and the joint preliminary examination of the professional engineering institutions. Some evening classes in domestic science subjects have also been made available. With the opening of the Nairobi Technical Institute, a full range of part-time classes in technical, commercial and domestic science will become available to residents in the city area. Progressive courses will be organized leading to recognized examinations conducted by the overseas examining bodies, and some local certificates will also be issued. At some future date, residential accommodation will be provided and at this stage sandwich courses for students resident outside the city will be offered.

A full-time clerical training course of one year's duration is available for African students at the Kabete Technical and Trade School. The standard of entry has been raised and completion of a School Certificate course is now required. At the end of the course, students sit the Pitman's shorthand examination and certain examinations of the Royal Society of Arts.

Vocational schools (other government agencies)

Although some of the courses at higher levels are available for staff of all races, the predominant aim of these schools is to train African professional and administrative staff for the public service. The instruction is given in full-time courses, and whilst some of it is post-primary there is also an element of post-secondary training. Details of courses conducted at secondary level are given below.

Railway training school. Mechanical Department apprentices recruited at the post-primary level are required to undertake a five-year apprenticeship. During the whole of this period they spend one day each week at the Railway Training School where they receive instruction in English, arithmetic, elementary geometry, history, geography and current events, plus, in the first year only, first aid.

Trainee drivers receive five years' training, of which the first two are spent at the Railway Training School. Throughout the whole of the five years they are given general instruction similar to Mechanical Department apprentices.

There are shorter courses, almost wholly vocational, for permanent way staff and station and clerical staff.

Livestock improvement centre schools. Eight of these schools, each of which provides resident accommodation for 20 students, are being operated by the Department of Veterinary Services. The main object is to train suitable applicants for employment as Veterinary Scouts in the Department or in the veterinary sections of African District Councils.

The students entering the schools are required to have completed their primary education. The course is of 2 years' duration and covers all practical aspects of selective breeding, care and nutrition of dairy cattle. In addition, instruction is provided on the care and feeding of sheep and poultry.

Agricultural instructor training centres. The Department of Agriculture maintains four of these centres, situated at Siriba, Embu, Matuga, and Kapenguria. Only School Certificate level students are now accepted at Siriba for entry to the first year. At Embu all the students at the school are of School Certificate standard, but at the other two centres the standards are lower.

The 2-year courses at these schools include crop and animal husbandry, survey for farm planning, other agricultural subjects and a certain amount of mathematics. The curriculum includes a considerable amount of practical work which is carried out on school farms at each centre. These schools are administered by the Provincial Agricultural Officers, who also select the applicants for entry.

Farm institutes. It is the aim to have one of these institutes in each of the major districts of the Colony. They were first founded in Nyanza Province and originally the plan was that farmers wishing to undergo training would settle at the institute for one whole year, and would manage model holdings under guidance by qualified staff.

As it was not possible to have more than a limited number of holdings at each institute the output of trained farmers was necessarily small. It has now been decided to aim at training from 50 to 100 farmers at these centres in short practical courses of a few weeks' duration covering the needs of the farmers in the particular area, e.g., coffee planting in coffee areas and dairy farm husbandry in potential dairying areas.

These centres have become increasingly popular and are playing a notable part in the follow-up after land consolidation.

Medical training centre. The Medical Department gives training at secondary level to students who wish to make a career in the Department.

Health assistants (male only) are given nine weeks of lectures at the centre on hygiene, sanitation, and communicable diseases. They are then sent out to a district for 18 months to gain practical experience under the direction of a European Health Inspector. On their return to the school for a final 9-weeks' course of lectures, they take an internal examination.

Hospital assistants are recruited from male and female 'dressers' who have worked for at least six months at a hospital. They are given four years' training. After one year they take preliminary, and after three years the final examination of the Nurses and Midwives Council of Kenya, and are given the title 'assistant nurse'. After a further year's training they take the internal examination which qualifies them as 'hospital assistant'.

Dark room assistants are given a two-year training of lectures and practical work in the X-ray Department of King George VI Hospital.

Teacher training schools

There are no teacher training institutions at secondary level for Asians or Europeans, but in African education 'T3' teachers are accepted at teacher training colleges on passing the leaving examination taken at the end of the 8-year primary course. The course is of 2 years' duration and there are separate colleges for men and women, all of which provide boarding facilities. Of the total of 40 colleges at this level, six are maintained by the Government and the remainder by missions, with financial assistance from the Government.

The course aims to consolidate academic knowledge previously acquired and teach the principles of education and psychology. A strong emphasis is placed on practical teaching.

At the end of the 2-year course teachers in training are required to undergo both a written and a practical examination. The written examination is set internally by the respective colleges, but it is moderated by the inspectorate and a sample selection of scripts is also scrutinized. The examination in practical teaching is conducted by a panel consisting of an inspector, a member of the Provincial Education Officer's staff, and a member of the Delegacy, which is the co-ordinating body for standards of teacher training throughout the Colony.

The normal staff of a T3 Teacher Training College consists of two graduates, or two non-graduate specialists, for each class in training. In practice it is the aim to select as one of the two an expatriate graduate, the other being an African, not necessarily a graduate, but with specialist teacher training ability.

The tendency is to concentrate teacher training at this level in fewer but larger colleges, i.e., usually with not less than 10 classes. It is felt concentration will enable the most economic use to be made of the specialist staff available.

Out-of-class activities

Considerable importance is attached to the participation of pupils in the running of the school, and the prefect system is encouraged in all schools. To enable the best results to be obtained from the system schools are divided into 'houses'. Within these 'houses' most of the day-to-day discipline and organization of extra curricular activities are the responsibility of prefects under the general supervision of housemasters.

A wide variety of school games are played. Teachers are encouraged to coach their pupils and contests between various schools are a regular feature of the school year and arouse great enthusiasm. Regional championships are arranged and annually a triangular athletics match is held between the leading African, Asian and European schools. The most popular school games and sports are association football, cricket, volley ball, basket ball, rugby football, tennis, swimming, athletics, hockey.

In every school and more particularly in boarding schools there are numerous cultural clubs and societies which are encouraged by the staff. The range includes literary, debating, dramatic, scientific, choral and musical, natural history, art, photography and gardening clubs.

The activities of the Boy Scouts and Girl Guides movements, the Red Cross Society, the St. John Ambulance Brigade, Young Farmers Clubs, and many other groups are enthusiastically supported in schools of all races.

TRENDS AND PROBLEMS

The most formidable problem facing the Ministry is that of finance. Kenya is a relatively poor country and the revenue is strictly limited. Accordingly the rate at which expansion and improvement of the present system can be achieved is controlled first and foremost by the funds which can be allocated to the Department. The expansion of the educational system is planned in three-year development periods and particular attention is being paid during the current period to the provision of accommodation, practical teaching facilities and staff for the recently introduced secondary modern courses in Asian and European schools.

These secondary modern classes are, at present, of two years' duration and the comparative shortness of the course is due to the late age at which pupils, particularly Asians, have in the past left the primary schools. Measures have been introduced to reduce the primary school leaving age to about 12 years so that the secondary modern course may be extended to three years and may yet be completed by pupils before they reach the statutory school leaving age of 15 years.

The secondary modern course is not designed to give technical or vocational qualifications. Rather it is intended to provide a level of general education which will enable the school leaver to profit by technical or vocational courses provided by government training schemes, commercial concerns and the Technical Institute. Accordingly much importance is attached to the extension of these post-school training facilities.

It has been mentioned earlier that Higher School Certificate courses (fifth and sixth secondary years) are conducted at a limited number of secondary schools. It is the intention of the Education Department to increase the facilities for such courses as the necessary funds become available, since nearly all institutions for higher studies now insist on the Higher School Certificate as a qualification for admission.

Mention has been made of the various forms of management of secondary schools. Many schools, both government and aided, have been placed under boards of governors and it is probable that this form of management will be gradually extended. At the same time the possibility is being examined of creating for Asian and European teachers a unified teaching service such as that which already exists for African teachers. At present the terms of service enjoyed by teachers in government schools (who are Civil Servants) are more attractive than those which aided schools are able to offer to their staffs. In the interests of the educational system as a whole the terms of service should be the same for all teachers in secondary schools, whether aided or government.

[*Text prepared by the Education Department, Nairobi, in June 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 6,351,000.
Area: 224,960 square miles; 582,646 square kilometres.
Population density: 28 per square mile; 11 per square kilometre.

Summary of school statistics, 1953–57. In 1957 enrolment in all educational institutions, excepting adult education classes, totalled approximately 567,000 students, representing 9 per cent of the total population. The total enrolment represented an increase of 42 per cent over the 1953 figure. In 1957 almost 97 per cent of all pupils enrolled were in primary schools, about 2 per cent in general secondary schools and vocational training institutions, and under 1 per cent in teacher training schools and in special educational institutions.

The proportion of girls in primary schools in 1957 was 20 per cent compared with 26 per cent in 1953, in general secondary schools 35 per cent in 1957 against 30 per cent, while in secondary teacher training schools enrolment of girls rose from 455 in 1953 to 1,000 in 1957, so that the proportion of girls to total enrolment increased from 22 per cent to 30 per cent.

The number of teachers in primary schools in 1957 was 13,095, of whom 21 per cent were women, and the average pupil-teacher ratio in primary schools was 42 compared with 40 in 1953.

Total enrolment in general secondary schools increased by 33 per cent between 1953 and 1957 and the number of girls enrolled by 54 per cent over the same period. However, of total enrolment in general secondary schools, over 46 per cent of pupils were in Asian secondary schools and only 30 per cent were in African secondary schools, the remaining 24 per cent being in European and Arab schools. Vocational training was reported only for African boys and enrolment had risen from 1,039 in 1953 to 1,913 in 1957, an increase of 84 per cent.

Students in African and Asian teacher training centres increased from 2,038 in 1953 to 3,288 in 1957, a rise of 61 per cent. The number of students in institutions of higher education (Royal Technical College, Makerere

College and in foreign universities) was over 1,850 in 1957 compared with 860 in 1953, an increase of about 115 per cent. (See Table 2.)

Examination results in secondary education, 1953–57. The number of children of all races successfully completing their secondary education with the School Certificate examination rose by 89 per cent between 1953 and 1957. The number of Africans obtaining a secondary school certificate increased by 152 per cent over the same period. Of the total successful African candidates 6 per cent were girls in 1957 compared with only 3 per cent in 1953. In the Higher School Certificate examination there were still no African or Arab candidates in 1957. The number of Europeans and Asians obtaining certificates rose by 45 per cent compared with 1953, and the number of girls awarded Higher School Certificates by 43 per cent. Grade T2, T3 and T4 teaching certificates are awarded to African students. Data for recent years are incomplete, but in 1956 the number of T3 certificates awarded was 579 compared with only 251 in 1953. 98 T2 certificates were granted in 1956 compared with 72 in 1953. The proportion of successful women candidates in 1954 was about 20 per cent in T3 and T4 courses; more recent data are not available. The number of Asians completing teacher training was 109 in 1957 compared with 58 in 1953, an increase of 88 per cent. (See Table 3.)

Educational finance, 1956/57. Total public expenditure on education in the fiscal year beginning 1 July 1956 was 5,331,781 pounds sterling—approximately £0.85 per inhabitant. Of this sum almost 99 per cent (£5,273,601) came from the Central Government, £52,531 from the voluntary agencies and £5,649 from local authorities. Capital expenditure amounted to £459,749 or 8.6 per cent of the total. The distribution of recurring expenditure by level and type of education is shown in Table 1. Of this recurring expenditure 59 per cent was for African education, 20 per cent for Asian, 19 per cent for European and 1.4 for Arab.

Source. Kenya: Education Department, annual reports.

1. EDUCATIONAL FINANCE, 1956/57 (in pounds sterling)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure	**4 872 032**	**100.0**
Central administration	198 165	4.1
African schools	111 292	2.30
Arab schools	4 245	0.09
Asian schools	41 314	0.87
European schools	41 314	0.87
Primary education[2]	3 033 051	62.2
African[2]	1 891 357	38.8
Arab	49 180	1.0
Asian	602 409	12.4
European	490 105	10.0
Secondary education	979 561	20.1
African	308 707	6.3
Arab	13 423	0.3
Asian	269 455	5.5
European	387 976	8.0
Vocational education	271 033	5.6
Teacher training	361 221	7.4
African	317 686	6.5
Asian	43 535	0.9
Other education	29 001	0.6
African	16 209	0.3
European	12 792	0.3

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.
2. Includes intermediate education.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	European primary schools, public	1957	17	216	184	5 292	2 485
	Asian primary schools, public	1957	27	521	217	18 134	5 157
	Arab primary schools, public	1957	8	94	26	2 214	618
	African primary schools, public	1957	8	24	–	530	16
	African intermediate schools, public	1957	12	63	19	1 330	377
	European primary schools, aided private	1957	16	65	55	979	474
	Asian primary schools, aided private	1957	87	643	469	18 991	12 566
	Arab primary school, aided private	1957	1	4	–	99	48
	African primary schools, aided private	1957	2 694	8 556	1 314	406 770	115 825
	African intermediate schools, aided private	1957	451	1 918	374	57 242	11 120
	European primary schools, unaided private	1957	12	78	65	1 436	777
	Asian primary schools, unaided private	1957	7	28	9	530	163
	Arab primary schools, unaided private	1957	1	1	–	28	5
	African primary schools, unaided private	1957	712	842	41	33 618	9 270
	African intermediate schools, unaided, private	1957	11	42	4	776	205
	Total	**1957**	**4 064**	**13 095**	**2 777**	**547 969**	**159 106**
	,,	1956	3 680	11 052	2 317	486 937	136 361
	,,	1955	3 588	10 255	2 019	432 678	114 066
	,,	1954	3 390	10 068	1 775	386 211	96 897
	,,	1953	3 471	9 229	1 566	365 580	95 580

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Secondary							
General	European secondary schools, public	1957	5	132	70	2 010	879
	Asian secondary schools, public	1957	8	197	75	3 155	1 059
	Arab secondary schools, public	1957	1	8	1	144	–
	African secondary schools, public	1957	10	82	5	1 420	–
	European secondary school, aided private	1957	1	32	24	158	158
	Asian secondary schools, aided private	1957	9	69	44	1 109	586
	Arab secondary school, aided private	1957	[1] ...	[1] ...	[1] ...	16	16
	African secondary schools, aided private	1957	11	87	21	1 557	307
	European secondary schools, unaided private	1957	8	38	27	615	335
	Asian secondary schools, unaided private	1957	5	38	10	924	573
	African secondary schools, unaided private	1957	4	10	3	157	29
	Total	**1957**	**62**	**693**	**280**	**11 265**	**3 942**
	„	1956	55	700	232	10 856	3 423
	„	1955	51	760	274	9 997	3 150
	„	1954	[2]96	[2]917	[2]282	9 132	2 726
	„	1953	[2]87	[2]948	[2]332	8 449	2 559
Vocational	Asian technical high schools, public	1957	2	57	–	750	–
	African technical and trade schools, public	1957	4	166	–	1 002	–
	Institute of Muslim Education, aided private	1957	1	...	...	[3]161	–
	Total	**1957**	**7**	[4]**223**	–	**1 913**	–
	„	1956	[5]5	[4]169	[4]5	[5]1 087	–
	„	1955	[6]4	[4]139	–	[6]1 083	–
	„	1954	[7]4 (3)	[8] ...	[8] ...	[7]1 067	–
	„	1953	[9]4 (3)	[8] ...	[8] ...	[9]1 039	–
Teacher training	Asian training centres, public	1957	3	20	10	218	130
	African training centres, public	1957	9			789	99
	African training centres, aided private	1957	31	276	71	2 250	768
	African training centres, unaided private	1957	1			31	3
	Total	**1957**	[10]**44**	[10]**296**	[10]**81**	[10 11]**3 288**	[10 11]**1 000**
	„	1956	[10 12]52	[10]224	[10]68	[10 13]3 121	[10 13]970
	„	1955	[10]46	[10]237	[10]77	[10 14]2 630	[10 14]745
	„	1954	[8] ...	[8] ...	[8] ...	[10]2 334	[10]523
	„	1953	[8] ...	[8] ...	[8] ...	[10]2 038	[10]455
Higher							
Teacher training[10]		...	...	...	...	...	...
General and technical	Royal Technical College of East Africa						
	Total	**1957**	**1**	...	...	**272**	**45**
	„	1956	[15]1	...	...	210	...
	„	1955	–	–	–	–	–
	„	1954	–	–	–	–	–
	„	1953	–	–	–	–	–
Special	Schools for physically and mentally handicapped						
	Total	**1957**	**9**	...	...	**2 665**	...
	„	1956	9	...	...	2 702	...
	„	1955	9	...	...	2 367	...
	„	1954	9	...	...	2 088	...
	„	1953	...	...	...	...	...
Adult	Literacy and evening classes						
	Total	**1957**	...	...	...	**3 732**	...
	„	1956	...	...	...	2 116	...
	„	1955	...	...	...	10 966	...
	„	1954	...	...	...	2 821	...
	„	1953	...	...	...	1 116	...

1. Included in primary education.
2. Including data on vocational and teacher training.
3. Including 58 Kenya students, 53 from Zanzibar, 40 from Uganda and 10 from Tanganyika.
4. Not including teachers of the Mombasa Institute of Muslim Education.
5. Including Mombasa Institute of Muslim Education with 140 students (38 from Kenya).
6. Including Mombasa Institute of Muslim Education with 190 students (59 from Kenya, 93 from Zanzibar, 27 from Tanganyika, 9 from Uganda and 2 from British Somaliland).
7. Including Mombasa Institute of Muslim Education with 201 students (67 from Kenya, 93 from Zanzibar, 30 from Tanganyika and 11 from Uganda).
8. Included in secondary general education.
9. Including Mombasa Institute of Muslim Education with 161 students (59 from Kenya, 24 from Tanganyika, 5 from Uganda, 71 from Zanzibar and 2 from British Somaliland).
10. Data on higher teacher training included with secondary teacher training.
11. In addition there were 23 (F. 2) students in Makerere Faculty of Education (Uganda).
12. Includes four centres running a one year in service course.
13. In addition there were 29 (F. 2) students in Makerere Faculty.
14. In addition there were 26 male students in Makerere Faculty.
15. Opened in April 1956.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Higher School Certificate										
European	44	23	50	25	47	17	59	25	64	28
Asian	9	–	16	4	8	–	22	6	13	5
Arab	–	–	–	–	–	–	–	–	–	–
African	–	–	–	–	–	–	–	–	–	–
School Certificate										
European	288	131	[1]347	176	310	156	318	156	406	195
Asian	286	69	410	105	475	160	432	123	588	208
Arab	7	–	6	–	7	–	6	–	12	–
African	144	5	162	9	233	7	299	16	363	22
Kenya African secondary examination	443	26	598	44	647	35	...	...	...	...
Royal Society of Arts	...	...	...	...	...	...	...	...	37	...
Teachers Training Certificate										
European	–	–	–	–	–	–	–	–	1	–
Asian	58	24	54	21	69	...	96	...	109	...
Arab	–	–	–	–	–	–	–	–	–	–
African T4	379	93	480	111	–	–	...	...	...	...
African T3	251	51	264	58	–	–	579	...	...	...
African T2	72	7	111	8	–	–	98	...	...	...

1. In addition there were 35 private candidates.

MAURITIUS

THE EDUCATIONAL SYSTEM

Primary education although not compulsory is provided free in state and in aided primary schools. There are also unaided private schools which teach either the three R's or one of the principal Oriental languages spoken in the island.

At the secondary level education is not free, except for pupils who win scholarships at annual competitive examinations and for poor pupils whose parents (or guardians) pass a 'means test' held by the Assistance Department.

All schools, including those run by religious bodies, are open to pupils of all races and creeds. A few, where Chinese is the medium of instruction, are, of course, of interest only to Chinese pupils, and one school under the jurisdiction of the French Government prepares pupils for the *baccalauréat*.

The basis of the school system is a 7-year primary school, leading to secondary grammar school (5–7 years), technical college (3–5 years), central school (3 years), or 3-year continuation classes. A 3-year part-time apprenticeship course (evening classes) is run by the Central Electricity Board. Post-secondary education is provided at the College of Agriculture, the Teachers' Training College, the science extension classes, or any of the training courses (nursing, midwifery and sanitary inspection) given by the Medical Department. For other types of higher education students go abroad; six government scholarships are awarded each year (four for boys and two for girls) on the results of the Cambridge Higher School Certificate examination.

THE DEVELOPMENT OF SECONDARY EDUCATION

A *lycée* was founded in 1800 during the French occupation. In 1840 this became the Royal College, organized as an English secondary grammar school, and it remained the only government secondary school until a secondary school for boys was opened in Port Louis, the capital, in 1929.

Secondary education for girls was in the hands of the Loreto Order until 1951 when the only government secondary grammar school for girls, the Queen Elizabeth College, was opened.

A central school, mixed until 1959, and now for boys only, was opened in 1953, offering post-primary education of a more general and practical nature. A central school for girls was opened in 1959.

A technical college and trade centre giving a 3-year course, with a further two years for selected pupils, was also opened in 1959 in temporary premises.

Twenty schools provide post-primary continuation classes. After experiments made by the village councils, these classes were taken over by the Education Department. Science extension classes have been in existence for many years and give students the opportunity to do practical work in the evenings in order to prepare for their General Certificate of Education examinations both at Ordinary level and Advanced level and, if they so wish, for the university degree of Bachelor of Science.

The main event of these last few years has been the establishment in 1957 of a ministerial system which makes the Director of Education reponsible to the Minister.

Legal basis

The laws relating to education in Mauritius are set out in Education Ordinance No. 39 of 1957 amended by Ordinance No. 25 of 1958 and Government Notices Nos. 59 and 90 of 1958 and No. 39 of 1959.

Administration

Education is planned by the Director of Education, who works under the Minister. The Director of Education is assisted by a number of committees, i.e., the Education Board, the Youth Advisory Committee, the Students Advisory Committee and the Adult Education Committee, the School Furniture Board and the Cambridge Examinations Local Committee which discusses matters relating to this university's overseas examinations.

The three government secondary schools are under the direct control of the Director of Education. The aided and non-aided schools are autonomous under the general control of the Director of Education and are required to fulfil certain conditions laid down in the Education Ordinance.

Government and aided secondary schools are inspected by the Assistant Director of Education for Secondary Schools. The private schools are inspected by an Education Officer who is a university graduate with teaching experience. Laboratories are inspected, with particular reference to standard of equipment, by a science graduate. Some schools have parents' committees, but these bodies usually play only a minor part in the organization of school life.

Funds for education are obtained from capital funds and recurrent revenue.

The Government meets all expenses for the running of its three secondary schools and contributes 80 per cent towards the salaries of teachers employed in recognized secondary institutions.

New buildings and equipment are paid for from capital funds and maintenance and replacement from general revenue.

Except in the cases already mentioned, fees are charged in all schools.

An allowance of 25 rupees is paid monthly to the parties responsible for a scholarship-holder domiciled in Mauritius, and 65 rupees for those domiciled in Rodrigues.

Buildings and equipment. In new schools classrooms are 40 feet square; the window space is no less than 10 per cent of the floor area and 80 per cent of the window area can be opened. Old schools are very often below standard and private secondary schools are sometimes poorly lit and equipped. Schools which offer science for the School Certificate examination must have an approved laboratory with the requisite equipment.

School welfare services. On entering a government secondary school, pupils undergo a medical examination. They are also examined by the School Medical Officer in the course of their school career if the principal thinks fit.

TYPES OF SECONDARY EDUCATION

Secondary education is mainly of the grammar school type. Altogether over 70 schools, for the most part private, offer this type of education. The two government central schools provide a 3-year course with emphasis on homecrafts and handicrafts. The Technical College runs a 3-year course in technical or commercial subjects, and for selected pupils a further 2-year course.

At present there are 20 schools offering post-primary continuation classes, the majority in small localities. They provide a 2-year course beyond the sixth standard with a definite practical bias.

The dates of the three school terms in the government schools are decided by the Director of Education. Five floating holidays are also granted. The school week is five days and the school day usually lasts from 9 a.m. to 3.30 p.m. Aided and unaided schools organize their year as they wish, provided their arrangements are reasonable and approved by the Director.

General secondary schools

The only schools which do not prepare students directly for a career are the grammar schools. The government schools recruit their pupils on the basis of the results of an examination held each December; the aided and better non-aided schools usually hold their own entrance examinations. Many private schools appear to be run on a purely commercial basis and to accept practically all applicants.

In the government and aided schools, pupils are grouped in streams according to ability. The subjects taught include English, English literature, French, Latin, mathematics, history, geography, physics, chemistry, biology, art, physical training and music.

Teaching methods vary, but schools are encouraged to use such teaching aids as films, the radio, records, maps, to send their pupils out on excursions, to build up a well equipped library, etc.

TIME-TABLE FOR ONE OF THE ROYAL COLLEGES, 1959
(in periods of 45 minutes)

Subject	1	2	3	4	5	Lower 6th		Upper 6th	
						Arts	Science	Arts	Science
English	8	8	7	7	6	7	4	7	4
French	7	5	4	4	4	7	4	7	4
Mathematics	5	5	5	5	5	–	7	–	7
Physics	1	2	2	4	5	–	7	–	7
Chemistry	1	2	3	4	4	–	7	–	7
Biology	1	1	2	3	3	–	7	–	7
History	3	3	3	3	3	7	–	7	–
Geography	2	2	2	2	2	3	–	3	–
Latin	2	4	4	4	4	7	–	7	–
Greek	–	4	4	4	5	7	–	7	–
Music	1	1	1	–	–	–	–	–	–
Art	1	1	1	–	–	–	–	–	–
Handwork	2	2	2	–	–	–	–	–	–
Physical training	2	2	2	2	2	2	2	2	2
Religious instruction	1	1	1	1	1	1	1	1	1

Most government and aided schools give terminal reports and hold at least two examinations a year to test the pupils' achievements. Some schools give more frequent reports. Usually if a pupil has not reached the required standard by the end of a school year he is not promoted. On completion of their fifth year in an 'A' or 'B' secondary school (i.e., schools which fulfil certain requirements in staffing, building, etc.), pupils sit for the Cambridge School Certificate examination. Pupils of other private secondary schools sit for the General Certificate of Education examination. The government and the aided schools and a number of unaided schools also provide a Cambridge Higher School Certificate course.

Most of the staff in the government and the aided schools are graduates recruited locally or overseas. A few teachers with only the Higher School Certificate or an equivalent qualification are also employed in these schools, but usually on a temporary basis until qualified staff can be found. In unaided schools the staffing is generally of a lower standard, most of the teachers holding only the Higher School Certificate or often only the School Certificate.

Vocational and technical schools

Pupils for these schools are selected on the results of their sixth standard examination and their performance at an interview.

The weekly time-table at the central school for boys, in periods of 45 minutes, is as follows: English 5, French 4, mathematics 4, general science 3, social science 3, art 3, handicrafts 9, technical drawing 2, religious knowledge 1, and one period is devoted to film shows or talks.

At the central school for girls the time-table is on the same lines as that of the boys' school; the girls do four hours of needlework, four hours of homecrafts and two hours and forty minutes of light craft.

For the technical college pupils are selected on the results of the same examination as that by which candidates are selected for admission to the grammar schools. As already stated, the college is now providing a 3-year course, after which a selection will be made, the best pupils continuing their studies for a further two years. Subjects taken by the technical stream and the number of 40-minute periods per week are as follows: English 9, mathematics 9, history 3, geography 3, technical drawing 8, mechanics 4, physics 4. The commercial stream has English 7, mathematics 8, history 2, geography 2, book-keeping 7, shorthand 4, general science 2, typewriting 4.

Vocational training courses run by the Medical Department and the Central Electricity Board have been referred to above.

TRENDS AND PROBLEMS

The great problem of Mauritius is its over-population, and the education authorities are not in a position to offer a sufficient number of places in their secondary schools to satisfy the great desire for education which is sweeping the country. Unfortunately the greatest demand is for the grammar school type of education, which explains why so many private schools have sprung up in the last few years. The Department of Education is trying to raise the standard of these schools (their percentage of passes is often below 10) and also to limit their growth, since Mauritius can offer white-collar jobs to only very few of the pupils leaving the secondary schools.

In view of the crying need for technicians a technical college has been opened, which will be able to produce each year all the technicians the Island needs.

The lack of university graduates among the teaching staff in the private schools is also being partially remedied through the provision by the Education Department of science extension classes where students may prepare for the B.Sc. General degree of the University of London.

[*Text prepared by the Education Department, Port Louis, in June 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 603,000.
Area: 720 square miles; 1,865 square kilometres.
Population density: 838 per square mile; 323 per square kilometre.

Summary of school statistics, 1953–57. In 1957 enrolment in educational institutions at all levels excluding adult education courses totalled approximately 115,000 pupils, representing nearly 20 per cent of the total population. Of this total, nearly 89 per cent were pupils in primary schools and 11 per cent in secondary and teacher training schools. In addition, students at universities abroad increased from 263 in 1953 to about 400 in 1957, a rise of 52 per cent. The proportion of girls in primary schools was 44 per cent in 1957 against 42 per cent in 1953; in general secondary schools 32 per cent against 31 per cent in 1953 and in the teacher training college 45 per cent against 52 per cent in 1953. The teaching staff in primary schools numbered over 3,000 in 1957 of whom 55 per cent were women. In general secondary and teacher training schools, 34 per cent of the 647 teachers were women. Compared with 1953, enrolment in primary schools increased by 29 per cent in 1957. The average pupil-teacher ratio in primary schools was 34 in 1957.

The total number of pupils enrolled in general secondary schools increased by 60 per cent between 1953 and 1957 and the number of girls by 65 per cent. In the teacher training college, enrolment rose by 24 per cent and the number of women students by 6 per cent over the same period. The number of pupils in the central vocational school has fluctuated since its inception in 1955. In 1957 it had 67 students of whom 15 were girls. The average pupil-teacher ratio in general secondary and teacher training schools was 20 in 1957 compared with 17 in 1953. (See Table 3.)

Examination results in secondary education, 1953–57. The number of students obtaining the Cambridge School Certificate increased by 17 per cent between 1953 and 1956. Students awarded the Cambridge Oversea Higher School Certificate increased by 28 per cent over the same period. 52 students passed the final examination in teacher training in 1955. (See Table 2.)

Educational finance, 1956/57. Total public expenditure on education in the fiscal year beginning July 1956 was 19,113,520 Mauritian rupees, representing about 33 rupees per inhabitant. Of this sum, local authorities contributed only 0.1 per cent (19,927 rupees), the remainder coming from territorial revenues to the Central Government. Capital expenditure (4,461,011 rupees) was 23 per cent of the total spent. The distribution of recurring expenditure by level and type of education is given in Table 1.

Sources. Mauritius: Education Department, annual reports.

1. EDUCATIONAL FINANCE, 1956/57 (in Mauritian rupees)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure by Central Government	**14 632 582**	**100.0**
Central administration	431 646	3.0
Primary education	10 833 595	74.0
Secondary education	2 116 276	14.5
Vocational education	32 129	0.2
Teacher training	746 690	5.1
Other education	472 246	3.2

1. Official exchange rate: 1 Mauritian rupee = 0.210 U.S. dollar.

2. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year				
	1953/54	1954/55	1955/56	1956/57	1957/58
Cambridge Oversea Higher School Certificate	103	126	131	132	...
Cambridge Oversea School Certificate	409	507	440	474	...
General Certificate of Education—Ordinary and Advanced levels	...	...	1 501	...	1 508
Teacher Training Final examination	...	60	52	–	...

3. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	98	1 364	580	46 309	18 856
	Primary schools, aided private	1957	77	1 238	775	43 536	20 290
	Primary schools, unaided private	1957	152	420	309	12 446	5 721
	Total	**1957**	**327**	**3 022**	**1 664**	**102 291**	**44 867**
	,,	1956	313	2 733	1 648	89 434	38 595
	,,	1955	315	2 455	1 510	85 446	36 723
	,,	1954	247	2 257	1 385	80 666	34 333
	,,	1953	240	2 123	1 316	79 878	33 592
Secondary							
General	Secondary schools, public	1957	3	75	17	1 152	217
	Secondary schools, aided private	1957	8	136	81	2 256	1 298
	Secondary schools, unaided private	1957	58	403	113	9 198	2 573
	Total	**1957**	**69**	**614**	**211**	**12 606**	**4 088**
	,,	1956	68	575	217	10 960	3 509
	,,	1955	65	532	178	10 228	3 317
	,,	1954	60	[1]472	[1]177	8 320	2 621
	,,	1953	55	[1]460	[1]180	7 861	2 476
Vocational	Central school, public						
	Total	**1957**	**1**	**7**	**3**	**67**	**15**
	,,	1956	1	6	2	64	27
	,,	1955	1	[2]19	[2]4	78	36
	,,	1954	–	–	–	–	–
	,,	1953	–	–	–	–	–
Teacher training	Teacher training college, public						
	Total	**1957**	**1**	**33**	**8**	**233**	**104**
	,,	1956	1	[3]32	[3]8	224	62
	,,	1955	1	[3]35	[3]7	[4]204	[4]80
	,,	1954	1	[5]...	[5]...	123	63
	,,	1953	1	[5]...	[5]...	188	98
Higher	Post-secondary College of Agriculture						
	Total	**1957**	**...**	**...**	**...**	**...**	**...**
	,,	1956	1	[6]...	[6]...	[7]92	...
	,,	1955	1	[6]...	[6]...	61	...
	,,	1954	1	16	–	55	...
	,,	1953	1	16	–	46	...
Other	Health Department Training School						
	Total	**1957**	**...**	**...**	**...**	**...**	**...**
	,,	1956	1	...	...	241	182
	,,	1955	1	[8]...	[8]...	221	94
	,,	1954	...	...	...	...	...
	,,	1953	...	...	...	...	...

1. Including teachers of the training college.
2. Including teaching staff of the Health Department courses.
3. Including teaching staff of the College of Agriculture.
4. Not including 82 female teachers who followed a 6-months' course.
5. Included in general secondary education.
6. Included in secondary teacher training.
7. Including eight part-time students.
8. Included in vocational secondary education.

SEYCHELLES

The Colony of Seychelles, with dependencies, comprises 92 islands and islets, the largest of which are Mahé and Praslin. The population is of African and European (mainly French) descent, and the languages spoken are Creole, English and French. The Governor is assisted by an Executive and a Legislative Council, the latter including elected members.

THE EDUCATIONAL SYSTEM

Although the Government is responsible for public education, the Education Department itself directly maintains only a few schools, its chief contribution to the provision of educational facilities being the generous financial assistance it gives to almost all the schools run by missions and the guidance and supervision it gives on matters pertaining to the secular curriculum. There are also a few unaided schools. The whole system is under the general control and supervision of the Director of Education, who is assisted by a supervising teacher, a visual aids officer, and a small clerical staff. An advisory council, made up of the heads of the local secondary schools, government officials, the heads of the Church of England and Roman Catholic missions and leading members of the community, functions as a consultative and deliberative body. Administration is governed by the Education Ordinances of 1944 and 1949, with amendments; detailed regulations under the ordinances are issued by the Governor-in-Council. It has not yet been found practicable to introduce compulsory education. Government expenditure on education is financed from colonial revenue supplemented by fees payable at secondary grammar schools and grants from the Colonial Development and Welfare Fund.

The basis of the school system is a six-year primary school (standards 1 to 6) which leads to secondary grammar or secondary modern school and to a limited amount of vocational and teacher training. There are no facilities for higher education. A number of scholarships are available for study abroad. All schools use English as the medium of instruction and teach French as a second language.

THE DEVELOPMENT OF SECONDARY EDUCATION

Two schools for boys, St. Louis College and King's College, were founded respectively by the Christian Brothers and by the Government in 1871 and 1891. The secondary department of the government school was closed in 1920 and St. Louis College, which had in the meantime been transferred to the Marist Order, was closed in 1946. On the withdrawal of the Marist Brothers the Government opened a school now known as Seychelles College and organized it along the lines of an English secondary grammar school. Since 1950 the college has been staffed by a French-Canadian branch of the Brothers of Christian Instruction of Ploermel.

The secondary grammar school for girls, Regina Mundi Convent, traces its history back to a school founded in 1861 by the Sisters of St. Joseph of Cluny, the Order which still manages the school. Seychelles College and Regina Mundi Convent are situated in Victoria, the capital, on the island of Mahé, but both schools have ample boarding accommodation for children from outlying parts of the colony.

Under a 10-year development plan initiated in 1945 provision was made for non-academic secondary education in modern schools. Two such schools were opened in 1949, one at Victoria and the second at Grand Anse, on the island of Praslin; the former has separate departments for boys and girls, the latter is co-educational except for practical subjects and physical training.

In 1947 the Education Department established the Government Trade Technical Centre, giving instruction in carpentry and related trades. Evening and day release classes in a few commercial subjects are also provided by the Department. A building development plan approved in 1957 provides for the rehousing of the Victoria Secondary Modern School and its reorganization and extension as a secondary modern technical school. Its facilities will be available for evening classes. Institutionalized teacher training began in 1955 with the opening of teacher training centres in Victoria which provide basic secondary education for pupil teachers and a series of 2-year sandwich professional courses for teachers holding the Cambridge Oversea School Certificate or some higher educational qualifications. The Seychelles Training College, a post-secondary institution, was opened in September 1959 with a staff of three to provide a 2-year teacher training course, with 15 students in each year.

The new secondary technical school is being planned for 1,000 students. But the first phase—the provision of workshops and the replacement of the present modern school—is not likely to be completed before 1961.

Administration. All schools and centres at post-primary level except the Regina Mundi Convent are entirely maintained by the Government. The secondary department of the convent, as an aided school, receives an annual grant sufficient to cover teachers' salaries and pensions and the maintenance of the building. The two grammar schools and the preparatory schools attached to them are fee-paying. A number of government scholarships and bursaries are awarded annually to primary school leavers, after a means test. The award of scholarships is limited to children who are under 12½ years of age; there is no restriction upon scholars as to what vocation they eventually adopt. Bursaries may be awarded to children of any age, at the discretion of the Scholarships and Bursaries Sub-Committee, but bursars are required to become teachers. The maximum award covers tuition, free books and free boarding or a maintenance allowance for a period of five years.

Tuition in all other post-primary institutions is free, and pupils in secondary modern schools receive free textbooks, stationery and materials. The Trade Technical Centre undertakes remunerative work for private firms and for the Government and is largely self-supporting.

Responsibility for secondary education policy and for general direction and supervision lies with the Director of Education.

TYPES OF SECONDARY EDUCATION

The grammar schools provide a 5-year course (forms 1 to 5) for pupils aged from 12 or 13 to 17 or 18. Entrants are selected on the results of an examination set and marked by the schools themselves and standardized for both schools. The Education Department reserves the right to scrutinize the papers and it re-marks the papers of applicants for scholarships and bursaries. The grammar schools curriculum includes English, French, mathematics, biology, physics with chemistry, history, geography, hygiene, music, religious knowledge and physical education; the girls' school also teaches domestic science, instrumental music, needlework, elocution and art. The course leads to the Cambridge Oversea School Certificate, and syllabuses in individual subjects conform to the requirements of the Cambridge Local Examinations Syndicate. For sixth form studies leading to the General Certificate of Education at Advanced Level, and higher education, Seychelles students now go to the United Kingdom, but it is expected that by 1963 a sixth form for boys will be established in Seychelles College.

Secondary modern schools provide a 3-year course (forms 1 to 3) for pupils aged from 12 or 13 to 15 or 16. There is no selection test, the normal requirement being that pupils shall have completed primary school and passed the standard 6 examination. Emphasis is on practical subjects such as woodwork, boat-building, basketry, net-making and shoemaking for boys, and housecraft, basketry and hat-making for girls. Other subjects taught include English, mathematics, French, history, geography, civics, nature study, hygiene, physical education and religious knowledge. Representatives of the missions have access to the schools for religious instruction. Leaving certificates are awarded, endorsed with the practical as well as the academic subjects in which the pupils have proved their efficiency.

Children admitted to the technical school at 12 or 13 will follow a 3-year orientation course in order to discover their aptitudes and abilities. It is estimated that probably half to two-thirds of them will show sufficient promise to enter the specialized courses at the age of 15 or 16. These courses will last 2 or 3 years, and half of each day will be spent in practical work. For boys there will be a choice of agriculture, navigation and seamanship, building trades, or electrical and mechanical engineering. For girls there will be a choice of housecraft, dressmaking, art and craft, pre-nursing and secretarial training. Throughout the school attention will continue to be given to the basic subjects.

The Trade Technical Centre offers a 4-year apprenticeship course in carpentry, cabinet-making and joinery, and has an annual intake of seven boys, the minimum entrance age being 15.

The Education Department provides general secondary education for student teachers who are below School Certificate standard. They attend on Saturday mornings and are prepared for the Cambridge Oversea School Certificate in English and arithmetic, and for a local examination of the same standard in French, history and geography. Other courses at the Teacher Training Centre are at professional (post-secondary) level. The Roman Catholic mission has a small *école normale* for girls who have completed primary schooling and wish to become pupil teachers. The school provides general education at junior secondary level.

There are evening classes in shorthand and typewriting for young people who have left school, and day release classes in English, shorthand, typewriting and book-keeping for civil service probationers.

Other forms of vocational training for young people include the Medical Department course for nurses and dispensers, and employment as juniors with the Public Works Department, the Government Printer and private firms. As yet, however, there have been no generally accepted schemes for the indenturing of apprentices and no special classes for apprentices other than those at the Education Department's Trade Technical Centre.

External examinations sat by students from any level or type of school in Seychelles are conducted by the Education Department. They include examinations for the Royal Society of Arts, the London City and Guilds Institute and the Australian Incorporated Society of Accountants, as well as the Cambridge Oversea School Certificate.

Out-of-class activities. The grammar schools and modern schools provide opportunities for the pupils to participate in team games and athletic sports. Other activities include debating clubs, correspondence clubs, dramatic societies, choirs, Boy Scouts and Girl Guides. Pupils in the grammar schools are divided into 'houses' and inter-house competitions of various kinds are held. The house system, the appointment of senior pupils as prefects or monitors, the wearing of badges and colours and similar practices encourage a sense of responsibility and co-operation.

Teachers. The principal teaching posts in the grammar schools are held by members of the religious orders running the schools and are recruited overseas. All these teachers have professional qualifications and half of them have university degrees. The secondary modern schools are staffed by lay teachers most of whom are recruited locally.

TRENDS AND PROBLEMS

In recent years there has been a steady increase in the number of pupils attending secondary modern schools. Improved communications in Praslin and Central Mahé are expected to augment the demands for places and there is already a need for schools of this type in South Mahé and on the island of La Digue. The progress made in secondary education and the increased numbers attending school have now made it possible to recruit pupil teachers entirely from the secondary schools.

As soon as it becomes practicable sixth form courses

will be offered at Seychelles College. It is hoped that with the improvement of primary schools the average age of pupils entering secondary schools will be lowered. At present the average of candidates for the School Certificate examination is 18, with the result that many of those who remain at school to complete this course are then too old for various apprenticeships, studentships and cadetships that would otherwise be available in Seychelles or overseas.

In technical and vocational education there is an acute need for the development of courses in agriculture, navigation, electrical, mechanical and building trades, and for secretarial, catering and art and craft training. The rebuilding and extension of the Victoria Secondary Modern School will be a step toward meeting these needs. The problem of providing further education for apprentices, including the provision of central classes in basic theory and techniques, is now under study.

[*Text revised by the Director of Education, Victoria, Seychelles, in August 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 42,000.
Area: 156 square miles; 404 square kilometres.
Population density: 269 per square mile; 104 per square kilometre.

Summary of school statistics, 1953–57. In 1957, 39 primary and general secondary schools, 1 public apprenticeship centre and 2 teacher training centres had a total enrolment of over 5,900 pupils, representing about 14 per cent of the total population. Primary schools accounted for about 91 per cent of the total enrolment, general secondary schools 8 per cent and teacher training under 1 per cent. Girls made up about half the enrolment in primary and general secondary schools, and nearly 90 per cent in the teacher training centres. Enrolment in primary schools increased by 8 per cent between 1953 and 1957, and the pupil-teacher ratio rose from 24 to 26. Women formed over 90 per cent of the teaching staff in primary schools in 1957. Total enrolment in general secondary schools increased by 40 per cent between 1953 and 1957 and the number of girls enrolled by 32 per cent over the same period. The pupil-teacher ratio in general secondary schools was 17 in 1957 and over half the teachers were women. Enrolment in the government apprenticeship centre was 17 in 1957, slightly lower than in the previous year. Enrolment in the teacher training courses rose from 25 to 35 between 1953 and 1957. (See Table 2.)

Examination results in secondary education, 1953–57. Successes in the Cambridge Oversea School Certificate increased regularly over the five years under review from under 10 in 1953/54 to 21 in 1957/58,; the number of girls awarded a certificate was 12 in 1957/58 compared with 4 in 1955/56. Results of the final teacher training examination are incomplete but six full certificates were awarded in 1956/57 of which four to women.

Educational finance, 1957. Total expenditure on education in the fiscal year beginning January 1957 was 923,026 Seychelles rupees, representing about 22.5 rupees per inhabitant. Of total receipts, 71 per cent came from territorial resources, 9 per cent from United Kingdom revenue, 15 per cent from voluntary missions and the remaining 5 per cent from the World Health Organization and the Cable and Wireless Company Ltd. Capital expenditure amounted to 117,032 rupees and represented 13 per cent of the total spent in 1957. (See Table 1.)

Sources. Seychelles: Department of Education, annual reports.

1. EDUCATIONAL FINANCE, 1957 (in Seychelles rupees)[1]

A. RECEIPTS BY SOURCE

	Amount	
Total receipts		**923 026**
Central Government		732 408
Territorial revenue	651 933	
United Kingdom funds	80 475	
Other		190 618
Missions	139 043	
World Health Organization	40 000	
Cable and Wireless Ltd.	11 575	

B. EXPENDITURE BY PURPOSE

	Amount
Total expenditure	**923 026**
Recurring expenditure	805 994
Capital expenditure	117 032

1. Official exchange rate: 1 Seychelles rupee = 0.210 U.S. dollar.

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure	**805 994**	**100.0**
Central administration	33 800	4.2
Primary education	312 006	38.7
Secondary education	215 722	26.8
Vocational education	107 462	13.3
Teacher training	51 676	6.4
Other education	85 328	10.6

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	2	13	7	245	36
	Primary schools, aided private	1957	24	183	169	4 704	2 361
	Primary schools, unaided private	1957	8	13	13	447	323
	Total	**1957**	**34**	**209**	**189**	**5 396**	**2 720**
	,,	1956	34	205	182	5 311	2 675
	,,	1955	34	208	186	5 280	2 619
	,,	1954	35	226	204	5 412	2 662
	,,	1953	34	206	183	4 984	2 519
Secondary							
General	Secondary schools, public	1957	3	19	6	334	105
	Secondary schools, aided private	1957	1	7	7	107	107
	Secondary schools, unaided private	1957	1	1	1	24	24
	Total	**1957**	**5**	**27**	**14**	**465**	**236**
	,,	1956	4	27	14	449	219
	,,	1955	4	26	14	376	202
	,,	1954	4	[1]25	[1]13	322	166
	,,	1953	4	[2]23	[2]10	332	179
Vocational	Apprenticeship centre, public						
	Total	**1957**	**1**	**...**	**...**	[4]**17**	–
	,,	1956	1	...	...	[4]22	–
	,,	1955	1	3	–	[4]17	–
	,,	1954	1	...	...	[4]13	–
	,,	1953	1	...	...	[4]22	–
Teacher training	Teacher training centres, public						
	Total	**1957**	**2**	**3**	**1**	**35**	**31**
	,,	1956	2	2	1	28	25
	,,	1955	2	1	1	27	25
	,,	1954	–	[3]–	[3]–	[3]–	[3]–
	,,	1953	1	...	...	25	25

1. Including teachers of vocational training centre.
2. Including teachers of vocational and teacher training centres.
3. Vocational training also took place in the Medical and Police Departments; there were in addition part-time courses in shorthand and typewriting and classes in book-keeping for Civil Service probationers.
4. Teacher training was temporarily discontinued in 1954.

TANGANYIKA

Trust Territory

THE EDUCATIONAL SYSTEM

The plural society of Tanganyika, composed mainly of Africans but including a large number of Arabs, Asians and Europeans makes it advisable that the educational system should be organized on an ethnic basis. The system is affected also to some degree by the fact that the majority of schools of all types have been and are still being built by missionary organizations (although nowadays in most cases the building and maintenance of the schools are grant-aided by the Government), and are managed by these voluntary agencies under the guidance of the Government. The provision of education is no longer affected by any social factor. When the British Civil Administration took over control of the country in 1916, central schools were planned not only for selected boys of proved ability from the elementary schools of the district but also expressly for the sons of chiefs and sultans to fit them to fulfil efficiently their duty to the State and to their own people as leaders and educators. Selection in all post-primary institutions now depends upon performance only.

The 1957 census in Tanganyika showed a population of 8,788,466, including 8,665,336 Africans, 65,461 Indians, 20,958 Europeans, 19,100 Arabs, 6,299 Pakistanis and 4,776 Goans. The educational system is sub-divided into (a) African education, and (b) non-African education, which caters for the educational requirements of the European, Indian and other non-native children in the Territory.

In 1925, the Governor of Tanganyika publicly accepted the principles laid down in the London Advisory Committee's recommendations 'Educational Policy in British Tropical Africa', and the Government then undertook the responsibility of guiding the secular educational activities of the missions and of bringing them, as circumstances permitted, into conformity with a general educational scheme and approved standards of efficiency. From that date to the present time all educational institutions in Tanganyika, whether managed by the Government itself or by a voluntary agency, conform to a general policy under the direction of the Department of Education.

The role of public authorities and of private agencies. The Department of Education under the Minister for Education and Labour is responsible to the Tanganyika Government for the provision of education in the Territory.

District Commissioners are responsible (subject to the approval of the Provincial Commissioner of the Province) for the constitution and guidance of the Native Authority Education Committees which are composed of government, mission and local African representatives. These committees give advice concerning the desirability of opening or closing particular schools in the district, attendance of pupils, payment of fees and other points of local importance. It is intended that a steadily increasing degree of local responsibility and control in educational matters will be delegated to these committees in the future.

Recognized organizations, mainly missions, appoint, with the approval of the Director of Education, an Education Secretary to supervise the organization's schools and to act in liaison with the Director of Education, through their Education Secretary-General. The Education Secretary-General of the Christian Council of Tanganyika represents all Christian missions other than Roman Catholic, and the Education Secretary-General of the Tanganyika Catholic Welfare Organization acts on behalf of the Roman Catholic missions in the Territory.

European and Indian education is the concern of the European and Indian Education Authorities respectively. These are executive, not advisory, bodies of which the Director of Education is chairman, the members being nominated by the Governor or by the Minister for Education and Labour. Education for the other non-native (including Goan) section of the community is administered by the Director of Education with the assistance of an advisory committee, the members of which are appointed by the Minister for Education and Labour to represent the more important groups concerned.

The provisions of the Non-Native Education Ordinance govern the establishment and operation of schools for the education of children of the non-indigenous communities. In addition to prescribing the constitution and functions of the education authorities, this legislation provides for the appointment of managers of non-government schools, for the registration of schools and teachers, and for the inspection of schools.

THE DEVELOPMENT OF SECONDARY EDUCATION

General secondary education. No provision for general secondary education existed in Tanganyika until 1933. Accommodation for the small number of children able to proceed to such education was available in neighbouring territories. Thus, in 1932 five pupils were found places in junior secondary schools in Uganda with a view to their proceeding later to Makerere College.

In 1933 a junior secondary school course of two standards, 9 and 10, was established at Tabora Central School to take pupils as far as the level of the entrance examination into Makerere College. In this year also, junior secondary school classes had started at two mission schools, and five years later three government and two more mission schools extended their courses to include standards 9 and 10.

The outbreak of war in 1939 gave rise to a marked demand for a higher standard of education for candidates for the less remunerative posts in both government and native administration. African elders throughout the territory sent in appeals for higher standards of education particularly in English. In recognition of this need the status of the govern-

ment central school at Tabora was raised to that of a full secondary school.

During the war years the standard of entry to Makerere College was raised from standard 10 to standard 12, that is, to School Certificate level. By 1950, secondary education had advanced appreciably owing largely to the number of Education Officers recruited in the post-war years and the increased number of European staff available for the voluntary agency schools. The total enrolment in 1950 secondary classes was 2,248 divided almost equally between government and voluntary agency schools. In this year 43 candidates from the three senior secondary schools took the Cambridge Oversea School Certificate examination and 34 obtained certificates. In 1950, for the first time, Tanganyikan girls took the same standard 10 passing-out examination as was taken by the boys' secondary schools and in the following year the first Tanganyikan woman was admitted to Makerere College, after having taken her final two years of secondary school work in Uganda.

In 1959 there were 28 secondary schools, 12 of these being government institutions. Of these schools, 13 have standards 9 and 10 only, 6 have standard 11 and 6 have standards 9 to 12. The remaining 4 have standards 9 to 12 and, in addition, form 5, which is the first year of the Higher School Certificate course. The enrolment in the 56 streams of these secondary schools is 4,220 pupils, 421 of whom are girls.

By 1961 it is hoped that there will be 25 streams of standard 11 and 12 (as compared with 16 in 1959), and that the number of candidates for the Cambridge Oversea Certificate in that year will be over 500 as compared with 174 in 1958.

It is also hoped that after 1961 the number of candidates with Higher School Certificates will be sufficiently high to warrant that entry to Makerere College for government-sponsored candidates should be confined to those boys and girls possessing this qualification.

Secondary education in Indian schools was started during the period 1933–39 and a period of more rapid development followed the end of the war. Education up to School Certificate is provided at seven government schools and at seven assisted schools. The two largest government secondary schools offer higher School Certificate courses.

Secondary education for other non-native (including Goan) communities is available at four assisted schools and up to School Certificate standard at one school.

Secondary education in the Territory for European children is a comparatively recent development and followed the termination, in 1954, of the arrangement with the Kenya Government whereby Tanganyika children were admitted to Kenya Government secondary schools. St. Michael's and St. Georges' School, opened in January 1959, now provides full secondary education for European children.

Vocational education. Prior to 1914 a fairly extensive system of native education had been organized by the German administration and some six artisan schools had been established, in which a variety of trades were taught. At the beginning of the British occupation in 1916, it was found that educational organization had practically disappeared. A number of elementary and middle schools were established under native teachers; the middle schools were known as central schools and in these were organized all post-elementary school activities. These schools, in addition, to providing a further four years of primary teaching, also admitted boys who had completed the primary school course and indentured them as industrial apprentices for a period of three, and later of four, years. Improver's courses, combined with the work of junior instructors, were in operation in the schools with the object of continually improving the teaching personnel. All teaching was in the hands of native craftsmen and one Asian teacher.

By 1923, courses were being held in carpentry, tailoring, weaving, printing, welding and bootmaking. The tendency during the 1930s was to centralize vocational training, limiting it to urban schools only. In 1945 industrial training for Africans, mainly in carpentry, was being given in five government and five non-government schools, having a total enrolment of 316 boys.

The policy of trade training and technical education was changed in 1951 when the Government formulated schemes for this specialized branch of education. Trade training was to be carried out in specially built and equipped trade schools for African boys who had completed standard 8. The courses held in government and in voluntary agency schools, none of which had been of secondary standard, were gradually to work to a close.

Teacher training. Under the German administration in Tanganyika, boys who showed promise were drafted from their village schools to the nearest school conducted by a European headmaster. There they completed a course of 3 or 4 years' duration which included instruction in the local language and, this done, proceeded to Tanga to be trained as teachers and to undertake more advanced studies.

After 1916, the first normal class for the training of teachers was attached to the Government Central School in Dar-es-Salaam. Missions also trained their teachers, some by annual courses of about 3 months' duration, others by a full year's course. Two classes of teachers were trained, vernacular or grade 2 teachers, and English-language teachers, who were designated grade 1. The work was for the most part organized as a branch of central school activities although a few institutions actually were teacher training centres only and were unconnected with central schools.

In 1934 the standard of entry to both teacher training courses was raised by two years, grade 1 students being required to have a standard 10 qualification and grade 2 the Standard 6 Certificate, before being accepted for the course. Owing to the early age of marriage and the shortage of suitably qualified young women, it was not found possible, for some time, to insist on a similar standard of entrance for women students as for men, and, until the year 1953, on completion of their course the women took an examination of a lower standard than that taken by the men.

The standard required for entry to the grade 2 course has since again been raised and intending grade 2 teachers must now have a minimum qualification of Standard 8 School Leaving Certificate before being admitted. An increasing number of applicants for the grade 1 course now have the qualification of Cambridge Oversea School Certificate, although most grade 1 students are still selected on their results in the standard 10 examination.

The 1959 enrolment of grade 1 students in teacher training centres was 392, and 1,090 students were taking the grade 2 course.

An Asian teacher training centre was started in 1959 with an initial enrolment of 28 students.

The training of African domestic science specialist teachers was inaugurated in one government teacher training centre in 1952. Serving grade 2 teachers attend this 1-year course and then teach domestic science in girls' middle schools.

Courses of training as handicraft specialists or as agricultural instructors are available for serving men teachers.

Legal basis

The principal laws and regulations concerning education are contained in the Education African Ordinance and Non-Native Education Ordinance. No laws or regulations have been made which govern or bear on secondary education specifically. The following provisions refer to all schools, including secondary.

No school may be established or maintained unless (a) it is registered under the provisions of the Ordinance; (b) the owner of the school has been approved in that respect by the Minister and such approval has not been withdrawn; (c) the school is conducted either by the owner or by a manager approved in that respect by the Director of Education; (d) all the teachers employed at the school are registered under the provisions of the Ordinance.

Administration

The planning and policy of secondary education are the responsibility (a) for African education, of the Department of Education assisted by the Advisory Committee for African Education; (b) for Indian and European education, of the Indian Education Authority and the European Education Authority respectively; and (c) for other non-native (including Goan) education, of the Department of Education assisted by a representative advisory committee.

The curriculum of the secondary schools is drawn up by specially constituted panels under the guidance of the inspectorate. Considerable freedom is given to the headmasters and headmistresses of both government and voluntary agency secondary schools in their choice of textbooks, other than those actually set for the public examinations.

Supervision and inspection. Inspection of general secondary schools is the responsibility of inspectors attached to headquarters; their main duties are to inspect in secondary schools the teaching of the subjects in which they specialize, to keep under constant review the syllabuses in their subjects and to advise on books and equipment in regard to them. The inspectors are education officers, graduates of British universities and holders of diplomas of education, who have had wide experience of teaching at the secondary level.

The inspection of the teacher training centres is carried out by the Senior Education Officer in charge of Teacher Training, who is also responsible for the co-ordination of the work of teacher training throughout the Territory and for the review of syllabuses connected with it. The holder of this post is a graduate holding a diploma of education, who has had considerable experience of teacher training and of general educational work.

Finance

African education. African education is financed mainly from general revenue, although the native authorities make contributions, which are steadily increasing, towards the cost. In 1958 £2,619,072 was allocated to African education from Territorial Funds and a further £538,496 was made available from the Development Plan Reserve, the Custodian of Enemy Property Funds and the Colonial Development and Welfare Fund. The sum of £864,782 was contributed by native authority revenue.

In the case of the government post-primary schools, an allocation sufficient to cover the estimated expenditure for the year is made available to the headmaster or headmistress at the beginning of each financial year. Details of expenditure are submitted as required and more funds are made available throughout the year if necessary. In the case of voluntary agency schools a grant to cover the cost of provision and maintenance of school equipment and materials is paid by the Director of Education, through the Provincial Education Officer, to the managing agency.

A grant not exceeding 100 per cent of the approved expenditure on buildings and equipment is paid by the Director of Education to the managing agency, provided that the proposed school has been approved by the Director for inclusion in the development programme for that financial year.

Salaries of all teachers in both government and aided schools are paid by the Government.

All secondary schools are boarding establishments and a fee is charged to cover part of the cost of boarding and accommodation. Where payment of this fee would entail hardship for the parents, a remission of the whole or of part of the fee is granted. No fee is charged for tuition or for school equipment and the cost of the transport of pupils to and from school is also met by the Government.

Non-African education. Recurrent expenditure is met from the respective Education Funds (European, Indian, Other Non-Native), each of which derives its revenue from education tax, government school fees and a contribution from the Government.

Capital expenditure on government schools has been met from Custodian of Enemy Property Funds (for Indian schools) or loan funds and capital grants to assisted schools have been met from loan funds on which interest and sinking fund charges have been paid from the respective Education Funds.

Buildings and equipment. All general secondary schools have at least one laboratory which must have a minimum floor space of 1,000 square feet. The two girls' secondary schools have spacious, well-equipped domestic science blocks also. The other buildings for both secondary schools and teacher training centres include classroom blocks, dormitory blocks, a dining hall and kitchens, an administrative block, a library and usually an assembly hall. The buildings are all of a permanent nature usually with

concrete walls and tiled or corrugated iron roofs. The minimum requirements for the buildings are as follows.

The dining hall must allow 8 square feet per pupil, each classroom must be at least 27 feet by 19 feet and each dormitory must have a minimum floor space of 40 square feet per occupant and must allow for a space of 5 feet at least between the centres of each two beds. The area of windows and ventilators must be equivalent to at least 12½ per cent of the floor space.

School welfare services. Nearly all the secondary schools and teacher training centres are within easy reach of a government hospital, and the others are near mission hospitals. Free treatment is given to the students who are taken to the hospital when necessary, for treatment or examination. Many of the schools have a sick bay, and a qualified member of the staff deals with minor ailments. Students needing ophthalmic or dental treatment receive this free of charge from the government specialists.

TYPES OF SECONDARY EDUCATION

The primary schools in Tanganyika provide a 4-year course of instruction in the basic subjects. At the end of this course the children take an examination on the results of which selection is made for all middle schools of the Territory. Children who make satisfactory progress in each of the four standards (standards 5 to 8) of the middle schools, may at the end of their final year there apply to be selected for further training and they then take the General Entrance examination. On the results of this examination, pupils are selected by provincial selection boards for entry to secondary schools or to courses of training as grade 2 teachers, as male nurses or as craftsmen (the latter designation including bricklayer/masons, electrician/wiremen, plumber/pipe fitters, carpenter/joiners, painter/signwriters and engineering mechanics). Selection is also made for direct employment in the Tanganyika Subordinate Service as clerks or as agricultural instructors, or with the Police Force, the Forest Department, the Army, the Navy and the Prisons Department.

After the first two years in the secondary school (standards 9 and 10) selection again takes place, on the results of the Territorial standard 10 examination. A selection board meets and allocates places for standard 11 (in secondary schools), grade 1 teacher training, medical training, veterinary training, the clerical course, the survey course, the meteorological course, the Post Office Training School, the Railway Training School and for the Police-women Training Course. Boys and girls who are not selected for a course of training after standard 10 may apply for direct entry into various government departments, including the Labour Department and the Judiciary.

At the end of standard 12 boys and girls take the Cambridge Oversea School Certificate, and are then given places in the government department courses for further training according to their choice.

A great deal of help and direction is given to the pupils, in their choice of further training, by the headmaster or headmistress of the middle and secondary schools. A pamphlet 'Opportunities for further training, or employment with the Government' is put out each year by the staff of the Department of Education and circulated to all middle and secondary schools.

Very careful consideration is given to the selection of pupils for further training; in 1959 places in courses were found for 847 out of the 912 boys and girls who had been successful in the Territorial standard 10 examination, and every one of the 174 boys and girls who had passed the Cambridge Oversea School Certificate either began a further course of training or found direct employment with the Government or with reputable firms.

Organization of the school year. There are two terms in the school year, each of approximately four and a half months' in length. Subject to the Director of Education's approval, the actual dates are decided by the headmaster, headmistress or principal of the secondary institution concerned.

Lessons are given on five and a half days in each week although usually some time on Saturday morning is devoted to inspections and to recreational activities. Sunday is left free for attendance at church service and for reception of visitors.

General secondary schools

The schools whose principal aim is not to prepare directly for a particular career are known in Tanganyika as secondary schools.

Pupils are selected from standard 8 of the middle schools and are grouped into classes and streams according to ability or aptitude by the headmaster or headmistress.

The following subjects are taught in all secondary schools: English, Swahili, mathematics, science (physics, chemistry, biology), history and civics, geography, agriculture, physical education, handwork and art. At girls' secondary schools domestic science and needlework are also taught.

Achievement tests are carried out regularly but care is taken not to place unwarranted reliance on such assessments. Pupils receive annual reports on their academic progress, character and social value in the school. Promotion is decided by the headmaster or headmistress in consultation with the staff.

The recognized establishment for a single-stream boys' secondary school with standards 9 to 12 is three graduate and three non-graduate teachers; these may be either European or African and should each possess a diploma of education or a teachers' certificate. An instructor in art and handwork or in agriculture should also be attached to the school. Staff for secondary schools is recruited locally or from countries outside Tanganyika.

Vocational and technical schools

Trade training. Two trade schools have been established to provide trade training in the main trades associated with the engineering and building industries. These trade schools are situated respectively at Ifunda in the Southern Highlands Province, and Moshi in the Northern Province. They cater between them for students from the whole of Tanganyika. Each school is fully residential and accommodates 600 trade pupils, the intake in each school being 200 trade pupils per annum who attend for a 3-year course. The

minimum standard of entry is satisfactory completion of standard 8 and a satisfactory result in the General Entrance examination.

Students entering for courses associated with the building industry receive training in general building with specialized work in one of the following groups: carpentry and joinery, bricklaying and masonry, plumbing and pipe fitting, painting and signwriting, electrical installation.

Students recruited for courses associated with the engineering industry all receive a basic training during their first year in the following trades: welding, tinsmithing, blacksmithing, fitting and turning, auto-electrical work. During the second and third years of their training, the major portion of the time is spent in work in connexion with spark ignition and compressed ignition engines. They also study as a subsidiary trade one of the five trades listed above.

Theoretical studies in English, mathematics, technology, science and drawing as ancillaries to their particular trade are studied by all trade pupils. On the satisfactory completion of the trade school course all trade pupils are advised to enter a two-years' period of indentured apprenticeship in industry, during which period they receive further training. On the satisfactory conclusion of this they are awarded a Certificate of Apprenticeship.

In Dar-es-Salaam the first three phases of the Technical Institute are nearing completion. Further phases are planned to complete the institute, in which accommodation for 1,000 students will be available at any one time. If part-time day and evening classes and sandwich courses in addition to full-time courses are considered, it is estimated that some 2,500 students will attend in any one year.

This Technical Institute caters for both sexes of all races and is planned to meet the needs of the country for many years to come in providing facilities for education up to technician level in all branches of engineering, surveying, architecture, building, etc. Other sections will deal with domestic science, commercial subjects, etc.

The Technical Institute is planned to be the link between trade schools on the one hand and the Royal Technical College of East Africa on the other.

Agricultural and forestry. Training for employment in agriculture and in forestry is given at the Natural Resources School, Tengeru.

Boys holding the minimum qualification of the Territorial Standard 10 Certificate are accepted into the agricultural or Forest Department and, after either one or two years' experience in that Department, proceed to the Natural Resources School. Both the agricultural and the forestry courses are of two years' duration. The first year of each course includes instruction in English, mathematics, biology, civics, surveying and soil science, as well as the special subjects which apply to either agriculture or forestry. Practical work in the field is a feature of the course.

Teacher training schools

There are five centres where boys and girls are trained as grade 1 teachers to teach in the middle schools. Grade 2 teachers (for the primary schools) are trained in 23 centres, four of which are in the same institute as the grade 1 centre.

Candidates for grade 2 courses must hold the minimum qualification of a Standard 8 School Leaving Certificate, and for grade 1 must hold the minimum qualification of the Territorial Standard 10 Certificate.

The curriculum includes English, Swahili, general knowledge, general science, mathematics, education and teaching method. Girls' teacher training centres also include needlework in their curriculum.

An internal examination is held in each centre at the end of the first year of the course, and at the end of the second year the students take the Territorial examination, on the results of which Teachers' Certificates are awarded. Emphasis is laid on the great importance of practical teaching. The students have periods of practice in the schools during their course, and must pass in practical teaching, as well as in the written examination, to become eligible for certificates.

Members of the staff of the teacher training centres are graduates and non-graduates who hold a Diploma of Education or a Teachers' Certificate and who have had extensive and varied teaching experience.

Out-of-class activities

In practically all of the secondary (general) schools, the prefect system is in force and the school is organized on a house basis. In many also, the school council composed of representative pupils plays an important part in the school government. Every effort is made to foster in the pupils self-respect, initiative and a sense of responsibility.

Many social activities are organized and conducted by the staff and the prefects; and the pupils of a school, although of very many different tribes with varying cultures, traditions and customs, form a united and happy community.

Similarly in the vocational schools the students usually have class representatives and are encouraged to take an active part in the school government and to develop a sense of responsibility and a mature outlook.

Football is played enthusiastically in every boys' school, as is netball in each of the girls' schools. Hockey, volleyball and tennis are also played in some. Inter-school matches are held and matches against town clubs. Schools not only run their own Sports' Day and join in inter-school sports but also take a prominent part in the district and provincial sports and send competitors to inter-territorial sports meetings.

Other activities commonly found in secondary schools include debating societies, handicraft and art clubs, music and choral societies, school band, dramatic societies, social clubs, school magazine, Boy Scouts and Girl Guides.

TRENDS AND PROBLEMS

There is a decided need for expansion in all branches of secondary education in Tanganyika and this expansion is considered vital to the sound economic, social and political development of the territory. There are openings for more and better educated Africans in every branch of govern-

ment work, as also in industry and commerce. The standard of entry into most posts, as into most courses of training, is gradually being raised as a result of the increase in the number of applicants who can offer standard 10 or higher qualifications. It remains to be ensured that sufficient facilities for secondary education are available for all pupils able to benefit by them. At the present time, secondary school classes are not filled to capacity; but as the quality of children coming forward from the middle schools gradually improves, existing secondary classes will be filled and there will be need for expansion both as regards the number of secondary school places available and with regard to the general upward extension of the course to the Cambridge Oversea School Certificate level. It is hoped that in 1961 the number of streams in both standard 9 and standard 10 will have been raised to 56 and that in that year there will be 20 streams of standard 12, which will provide well over 500 possible candidates for the Cambridge Oversea School Certificate examination.

Higher School Certificate classes have been introduced into four senior secondary schools and it is hoped to make a significant increase in the numbers of these courses available in the future. Entry of government-sponsored candidates to Makerere College should, in the fairly near future, be confined to those who have successfully completed the Higher School Certificate course.

Consideration is also being given to the inclusion in the curriculum of technical and/or commercial subjects in selected secondary schools, up to the Cambridge Oversea School Certificate standard. It is realized that such a development would be of special value to students who wish to proceed to the Royal Technical College in Nairobi on completion of the School Certificate.

[*Text prepared by the Department of Education, Dar-es-Salaam, October 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 8,916,000.
Area: 361,800 square miles; 937,061 square kilometres.
Population density: 25 per square mile; 10 per square kilometre.

Summary of school statistics, 1953–57. In 1957 there were about 423,000 pupils in schools at primary and secondary levels representing just under 5 per cent of the total population. In addition there were some 232 students from Tanganyika in institutions of higher education outside the Territory, principally at Makarere College, Uganda. About 94 per cent of pupils were enrolled in African schools, 5 per cent in Indian schools and under 1 per cent in European and other non-native schools. The proportion of girls to total enrolment in African primary schools, grades 1–4, was 32 per cent in 1957 compared with 30 per cent in 1954; in general secondary schools, including African middle schools, grades 5–8, African girls were about 17 per cent of the total enrolment and in teacher training schools 28 per cent. The average pupil-teacher ratio in primary schools was 55 in 1957 compared with 56 in 1953 and the proportion of women primary teachers to the total was about 15 per cent during the period under review. There was an increase in total primary enrolment of 43 per cent between 1953 and 1957 and the number of girls enrolled increased by 55 per cent over the same period.

Total enrolment in general secondary schools increased by 50 per cent between 1953 and 1957 and the number of girls enrolled by 56 per cent over this period. The pupil-teacher ratio in general secondary schools was 21 in 1957 and the proportion of women teachers 18 per cent. In vocational schools enrolment did not increase as steadily as in other fields, but in 1957 was 6 per cent above the level in 1953; girls formed about 7 per cent of the total. Total enrolment in the teacher training centres increased by 21 per cent over the period under review, girls enrolment increasing by 57 per cent. (See Table 1.)

Examination results in secondary education, 1953–57. The number of Africans passing the Cambridge Oversea School Certificate increased from 86 in 1953/54 to 149 in 1957/58 (73 per cent). The number of successful Indian candidates also rose over this period, from 97 in 1953/54 to 229 in 1957/58 (136 per cent). Two European and six Indian candidates were successfully presented for the Cambridge Higher School Certificate in 1957; there are as yet no African candidates. Africans passing the grade 1 and grade 2 teacher training examinations numbered 114 and 867 respectively in 1957/58. The number of grade 2 certificates reached a peak of 1,025 in 1955/56 and has since declined. (See Table 3.)

Educational finance, 1958. Total expenditure on education in the fiscal year commencing January 1958 amounted to

5,953,703 pounds sterling or about £0.7 per inhabitant. Of this amount, 51 per cent was contributed by the Central Government from Territorial revenue, 14 per cent came from native authorities revenue, 3 per cent from tuition fees, 5 per cent from non-native education tax, 16 per cent was derived from various development and loan funds including the Colonial Development and Welfare Fund and the remaining 11 per cent came from voluntary agencies. Capital expenditure amounted to £1,620,021 or 27 per cent of the total spent. (See Table 2.)

Sources. Tanganyika: Department of Education, annual reports.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	African primary schools, public	1957	721	1 766	162	101 678	27 811
	European primary schools, public	1957	8	54	44	1 171	570
	Indian primary schools, public	1957	3	76	15	2 853	814
	African primary schools, aided private	1957	1 843	4 259	524	247 529	84 786
	European primary schools, aided private	1957	16	43	28	960	460
	Indian primary schools, aided private	1957	115	374	149	12 312	6 328
	Other non-native primary schools, aided private	1957	5	47	46	947	463
	African primary schools, unaided private	1957	68	118	5	6 425	1 884
	European primary schools, unaided private	1957	9	24	16	273	100
	Indian primary schools, unaided private	1957	3	5	3	174	50
	Total	**1957**	**2 791**	**6 766**	**992**	**374 322**	**123 266**
	,,	1956	2 742	6 310	909	353 590	113 275
	,,	1955	2 526	5 838	908	326 577	101 201
	,,	1954	2 324	5 128	762	291 091	90 256
	,,	1953	2 069	4 638	661	261 864	79 299
Secondary							
General	African middle schools, puplic	1957	99	555	59	12 023	1 188
	African secondary schools, public	1957	10	89	15	1 365	133
	European secondary schools, public	1957	1	23	12	291	122
	Indian secondary schools, public	1957	5	102	14	2 796	822
	African middle schools, aided private	1957	213	971	178	21 486	4 337
	African secondary schools, aided private	1957	16	100	12	1 624	97
	European secondary schools, aided private	1957	1	4	4	50	31
	Indian secondary schools, aided private	1957	28	193	57	3 432	1 593
	Other non-native secondary schools, aided private	1957	3	13	11	325	166
	African middle schools, unaided private	1957	23	71	19	2 002	627
	Total	**1957**	**399**	**2 121**	**381**	**45 394**	**9 116**
	,,	1956	423	2 023	335	41 435	8 222
	,,	1955	399	1 807	306	37 786	7 664
	,,	1954	[1]317	[1]1 972	[1]410	33 247	6 324
	,,	1953	[1]370	[2]1 268	[2]287	30 329	5 828
Vocational	African vocational schools, public	1957	4	86	4	898	28
	African vocational schools, aided private	1957	1	2	2	50	50
	African vocational schools, unaided private	1957	5	3	–	173	–
	Total	**1957**	**10**	**91**	**6**	**1 121**	**78**
	,,	1956	6	[3]68	[3]3	1 062	100
	,,	1955	12	93	8	929	78
	,,	1954	[4] ...	[4] ...	[4] ...	780	14
	,,	1953	[4] ...	[4] ...	[4] ...	1 056	59
Teacher training	African teacher training centres, public	1957	5	50	14	644	150
	African teacher training centres, aided private	1957	22	106	33	1 512	464
	African teacher training centres, unaided private	1957	1	4	3	60	–
	Total	**1957**	**28**	**160**	**50**	**2 216**	**614**
	,,	1956	36	176	43	2 381	561
	,,	1955	34	132	37	2 442	520
	,,	1954	[4] ...	[4] ...	[4] ...	2 172	472
	,,	1953	[4] ...	[4] ...	[4] ...	1 837	392

1. Including secondary vocational and teacher training.
2. Including secondary vocational and teacher training, but not teachers in ex-district schools.
3. Not including teachers of the unaided vocational schools with 230 (F. 51) pupils.
4. Included in secondary general education.

2. EDUCATIONAL FINANCE, 1958 (in pounds sterling)[1]

A. RECEIPTS BY SOURCE

	Amount	
Total receipts		**5 982 956**
Central Government, Territorial revenue		3 058 459
Native authority revenue		864 782
Tuition fees		176 755
Non-native education tax		287 570
Other		951 160
Development Plan Reserve Fund	237 749	
Custodian of Enemy Property Fund	559 508	
Loan funds	49 393	
Colonial Development and Welfare Fund	102 894	
Other funds	1 616	
Voluntary agencies		644 230

B. EXPENDITURE BY PURPOSE

	Amount
Total expenditure	**5 953 703**
Recurring expenditure	4 333 682
Capital expenditure	1 620 021

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**4 333 682**		**100.0**
Central administration		298 659		6.9
African schools	282 244		6.51	
European schools	6 351		0.15	
Indian schools	9 411		0.22	
Other non-native schools (including Goan)	653		0.02	
Primary education		1 908 451		44.0
African	1 466 700		33.8	
European	210 965		4.9	
Indian	216 645		5.0	
Other non-native (including Goan)	14 141		0.3	
Secondary education		[2]1 558 460		[2]36.0
African	[2]1 181 036		27.3	
European	186 589		4.3	
Indian	186 814		4.3	
Other non-native (including Goan)	4 021		0.1	
Vocational education		163 958		3.8
African	163 385		3.77	
Indian	573		0.01	
Teacher training		163 537		3.8
African	154 167		3.56	
Indian	6 200		0.14	
Other non-native (including Goan)	3 170		0.07	
Higher education		240 617		5.6
African	208 075		4.80	
European	1 000		0.02	
Indian	21 524		0.50	
Other non-native (including Goan)	10 018		0.23	

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.

2. Includes expenditure for middle schools.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year				
	1953/54	1954/55	1955/56	1956/57	1957/58
Cambridge Oversea School Certificate					
African	86	98	118	139	149
European	–	7	11	23	21
Indian	97	109	172	147	[1]229
Other non-native	8	10	12	13	18
Cambridge Higher School Certificate					
African	–	–	–	–	–
European	–	–	–	3	2
Indian	–	–	9	5	6
Other non-native	–	–	–	–	–
Teacher Training Certificate					
African, Grade 1	...	[3]67	63	90	[5]114
Grade 2	[2]737	[4]812	1 025	871	[5]867

1. Including private candidates.
2. Including 143 women.
3. Including 7 women.
4. Including 179 women.
5. Figures for 1958.

UGANDA

The African population of Uganda, making up about 98 per cent of the total, comprises representatives of various ethnic and lingustic groups. The tribes in the centre and south speak Bantu languages, while those in the north speak a series of widely differing languages belonging to the Sudaman, Nilotic and Nilo-Hamitic clusters. The principal non-African communities are the Asians (Indians and Goans) and the Europeans.

The Governor is assisted by an Executive Council and by a Legislative Council which includes representatives of the three main communities. For administrative purposes the protectorate is divided into four Provinces—Buganda, Eastern, Western and Northern—and each Province comprises a number of districts.

THE EDUCATIONAL SYSTEM

Historically the educational system grew up on a racial basis. In 1956 the Protectorate Government decided to develop common schools open to children of all races and denominations, and this policy is now being put into effect. However, for various practical reasons, the majority of the schools will, particularly at primary level, continue for some time to serve the children of the race for which they were built. English is the language of instruction for all junior secondary schools and senior secondary schools. The vernacular is used in the primary schools where English is taught as a foreign language. In the new common schools teaching is in English from the beginning.

The great majority of the schools are provided and managed by religious agencies—the Protestant and Catholic missions and, to a lesser extent, the Uganda Muslim Educational Association. There are also secular private schools. Although local authorities, i.e., the district councils acting through education committees, are taking an increasing part in educational administration and are now responsible for primary education in their respective areas, there are not as yet many local authority schools. The Government also maintains a small number of institutions, mostly at post-primary level—secondary, technical and teacher training schools. The principal contribution of the Central Government in the provision of educational facilities takes the form of granting financial aid to those voluntary agency, local government and private schools which meet prescribed standards. Thus monies spent on education come from five sources: protectorate government funds, local government funds, funds of the voluntary agencies, school fees, and community effort. By far the largest sum comes from the Protectorate Government.

In 1955, when a ministerial system was introduced for certain branches of government, education came under the

Minister of Social Services and later the Ministry of Education and Labour. The Director of Education, who is the head of the Protectorate Education Department, is responsible to the Minister for the administration and control of the educational system. He consults a number of advisory bodies, including an advisory council or committee for each of the racial communities. In addition to his headquarters staff, he is assisted by provincial and district education officers. The system is regulated by the Education Ordinance of 1959.

There is at present no legislation requiring compulsory school attendance.

The basic school system consists of a 6-year primary course leading to junior secondary school or to a farm school or a rural trade or homecraft school. Institutions based on the junior secondary school include senior secondary schools, technical schools, training colleges and vocational training schools run by other government departments. Higher education is provided in the Protectorate at the University College of East Africa (better known as Makerere College) at Kampala, and at institutions outside Uganda, particularly the Royal Technical College of East Africa at Nairobi in Kenya.

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary education was first started in the Buganda Province. Budo School, established in 1905, offered an advanced course from the beginning and may claim to be the first secondary school in the country, though Namilyango, founded in 1902, is the oldest of the schools now offering a full secondary education. The first training colleges, technical schools, rural trade schools and vocational courses were founded at much the same time. Progress was slower outside Buganda, but Busoga College, Mwiri, in the Eastern Province, originated as a high school in 1911. All these early institutions were provided by the missions. Girls' education lagged behind boys', and the first girls' senior secondary school, at Gayaza, was not opened until 1925. In the Northern and Western Provinces secondary education is of much more recent growth; in some areas it began only after the second world war.

Government participation in the provision and control of education, as distinct from financial assistance, began in the 1920s. A government technical school on Makerere Hill was opened in 1921 and a normal school (the first non-mission training college) in 1927. The Education Department was set up in 1925, following the Phelps-Stokes survey. As secondary schools in the territory developed Makerere College began to concentrate on post-secondary courses, and in 1928 its technical training courses were taken over by the government-owned Kampala technical schools. In 1938 the connexion of the college with the Education Department was severed and its subsequent evolution belongs to the history of higher education.

The first government Indian school was opened in 1932. Up to World War II Indian pupils went to Kenya or India for upper secondary education but there are now six Asian senior secondary schools providing the full School Certificate course.

In 1943, by agreement with the missions concerned, six secondary schools and two teacher training centres became self-governing institutions with boards of governors and received increased financial assistance from the Government. The principle of school management through boards of governors is now being applied as widely as possible. The Schools Government and Management Administrative Instruction of 1957 empowered the Director of Education to set up boards of governors for any school in the country.

In 1951 the East African Study Group, sponsored jointly by the Colonial Office and the Nuffield Foundation, investigated education in the British territories in East and Central Africa. In the following year the Uganda Education Department set up a committee, known as the de Bunsen Committee, to make recommendations for the protectorate in the light of the report of the study group. The committee recommended, *inter alia*, the reorganization and expansion of the system of teacher training, the expansion of secondary education and the improvement of its quality. New institutions included the Kyambogo Teacher Training College and the Domestic Science Training College. As regards senior secondary schools, the policy has been to expand and improve the equipment of existing institutions rather than to build new ones. Following the Harlow Report of 1951 an advisory council on technical education and training was formed, and the sum of £2 million was set aside from the African Development Fund to finance development in this field. Many additional opportunities, both for boys and girls, have been provided at post-primary level, including junior secondary schools, technical schools, rural trade schools, homecraft centres and vocational centres. An important development in technical education was the opening in 1955 of the Kampala Technical Institute.

The only schools in Uganda for European children are primary ones. For other types of education, European children are sent either to Kenya or the United Kingdom. To help parents whose children attend secondary boarding schools outside the territory, there is a system of government subsidies; the system also covers children of primary school age who live beyond the areas served by Uganda primary schools.

Administration. The headquarters of the Education Department is directly responsible for the planning and administration of senior secondary schools, training colleges and technical schools. Junior secondary schools are the responsibility of the provincial officers of the Department and of the voluntary agencies, and other post-primary institutions such as rural trade schools and women's vocational centres are administered by the local (district) education authorities. There is a Teacher Training Committee for the whole Protectorate and a Technical Service Committee. The Advisory Council for Technical Education has two committees, one for technical education and the other on apprenticeship. The former has various subcommittees which advise on courses for the individual trades or for a group of trades.

An important objective of policy is to increase the spirit of partnership in the administration and control of schools and to implement the administrative principle of 'self-governing institutions'. All government secondary schools, training colleges and technical schools, and most grant-aided schools at this level are now in this category. The

Administrative Instructions of 1957 require that the board, which must be representative of all parties concerned with the school, shall conduct the schools in accordance with the educational policies laid down by the Government through the Director of Education. The headmaster of the school normally acts as executive officer of the board; annual estimates have to be presented in the usual way; the accounts of the school have to be properly audited. Grant-aided secondary schools which are not self-governing are administered through the Educational Secretary-General for the Protestant or Catholic Missions.

Officers of the Education Department headquarters inspect the schools for which the central office is directly responsible, viz., senior secondary, technical and teacher training institutions. Inspection of the latter is carried out under the Assistant Director of Education (teacher training) and the Assistant Director of Education (women and girls), who is also a member of the Inspectorate; principals and staff have, however, a large measure of autonomy in organizing their work and assessing students. The central teacher training committees and the provincial committees furnish opportunities for professional co-operation and the exchange of ideas. Junior secondary, rural trade and housecraft schools are inspected by provincial and district education officers. The newly established Inspectorate is at present concentrating on junior secondary schools but will in due course extend its activities into schools at other levels.

The annual income of all government or grant-aided schools at secondary level is made up of capitation grants and school fees. The capitation grants range from £25 per annum for senior secondary boarding schools and training colleges to £2 per annum for a junior secondary day school. School fees are payable in all types of institution except training colleges. In African junior secondary day schools, the fees are about Shs.100/- per annum and in a boarding school Shs.350/- to Shs.400/-; in African senior secondary boarding schools, the fees are between Shs.400/- and Shs.600/-. All Asian secondary schools are day schools; the fees are Shs.252/- for junior and Shs.342/- for senior secondary classes. The Education Department disburses direct the funds available for them to senior secondary and technical schools and to training colleges. For other post-primary schools block subventions are paid to the provincial or local authorities who make the detailed disbursements.

All teachers, whether in government or grant-aided schools, are paid on the same scales and the full salary is paid from public funds, except in Asian grant-aided schools where the grant covers two-thirds of the salary. Regulations governing the employment of teachers have been codified and printed in the form of Teachers' Conditions of Service, together with a teacher's contract.

African secondary schools, training colleges and technical schools are usually built of permanent materials and the cost defrayed from public funds.

As boarding schools play a large role in secondary education, the provision of adequate meals has been a problem, the boarding fees being low in relation to costs. Through the work of the Education Department's adviser on school meals, standards in secondary schools and training colleges have been raised both as regards calorie content and variety of the diet.

TYPES OF SECONDARY EDUCATION

General secondary schools

Junior secondary schools. Children admitted to African junior secondary schools must have completed the 6-year primary course and passed the primary leaving examination. Admission to junior secondary schools is selective.

The junior secondary course aims at bringing as many pupils as possible up to the standard required for entry to teacher training colleges, technical schools and senior secondary schools, and at providing a sound and varied general education for those who will find jobs in industry, business or on the land.

The subjects in the curriculum are religious knowledge, English, mathematics, vernacular language, history, geography, general science, rural science, physical education, art, handicrafts, needlework, home economics, civics, music.

The length of the course is 2 years, though there is provision at some schools for an extra year. At the end of the second year the pupils take the senior secondary entrance examination and junior schools leaving examination. This certificate is a qualification for entry to training colleges, technical schools and the specialized courses run by the government departments.

Normally, the teachers in junior secondary schools have taken the grade 2 training course (see below).

The junior secondary course in the Asian school system was reorganized in 1956 and transferred to primary schools. It is a 2-year course and the aims and curriculum are virtually the same as those in African schools.

Senior secondary schools. Entrance to senior secondary schools is highly selective, and is based not only on the results of the senior secondary entrance examination but on a careful inquiry into the school records, character and academic potentiality of each child. The entrance examination, consisting of papers in English and mathematics, is marked by the staffs of senior secondary schools. A list of marks obtained by the candidates is sent confidentially to the senior secondary schools and final selection is made at a meeting of all senior school principals.

Senior secondary schools offer a 4-year course leading to the Cambridge Oversea School Certificate examination. The curriculum comprises English language, English literature, mathematics, general science, physics with chemistry, biology, history, geography, vernacular language, Latin, art, physical education, music.

The course aims at preparing students for the academic standard required for entrance to university or teacher training college or posts in the civil service, industry and commerce. According to the results obtained in the final examination successful students are awarded a grade 1, grade 2 or grade 3 certificate. Admission to the Makerere University College and the Higher School Certificate courses at selected schools is made on the results of this examination. Successful candidates for these institutions would normally have a grade 1 certificate and a high standard in the relevant faculty subjects. At the end of two years the Makerere students take the University of London Preliminary Examinations, and the school students the Cambridge

Higher School Certificate. Students can qualify for entrance to degree courses at Makerere on either of these examinations.

The aims and curriculum of the senior secondary course in Asian schools are virtually the same as those in African schools. African secondary schools are boarding schools and Asian secondary schools are day schools.

Most of the teachers in senior secondary schools have a university degree or equivalent diploma and professional training. Nearly all of them are from abroad—from the United Kingdom, India or Pakistan.

Vocational and technical schools

Rural trade schools. These provide a 3-year course of post-primary training in simple village crafts or agriculture. A maximum of 25 per cent of school time is spent on classroom instruction in English, arithmetic, drawing, and either the care and use for tools or aspects of crop and animal husbandry depending on the type of school. The village crafts schools concentrate on house building and furniture making, the agricultural schools on the cultivation of small-holdings, the rearing of poultry and cattle, etc. Up to now teachers have been recruited direct from trade courses in the technical schools and given vacation courses in the principles of teaching.

Homecraft centres and vocational centres for girls. Homecraft centres offer a basic 2-year course for girls leaving primary school. The curriculum emphasizes practical training in household management, child care, needlework, dressmaking, etc., but also includes English, arithmetic, religion and physical training. Two of these centres have been expanded into three-year vocational centres which train for the work of school matron and caterer and give more advanced courses in handicrafts and dressmaking.

Technical schools. These schools and the corresponding section of the Kampala Technical Institute offer 3-year courses in the following trades: brickwork, woodwork, motor vehicle maintenance, machine shop engineering, foundry work, plumbing and pipe fitting, electrical installation, boat-building, painting and decorating, shoemaking and tailoring. The educational requirement for entry to a trade course is three years of junior secondary schooling. Boys who have completed only six or seven years of schooling attend a 2-year pre-technical course provided at most of the technical schools; this comprises English, arithmetic, science, history and geography, arts and handicrafts. At the end of the three years' trade training, students sit for the Uganda Junior Technical Certificate, an examination conducted by a Technical Examinations Committee on which are represented the Missions, the Education Department, the Labour Department, the Assistant Establishment Secretary (Training) and the staff of the Technical Institute. Panels of teachers and trade testing officers conduct the practical examinations and also act as assessors. The Uganda Junior Technical Certificate is a school leaving certificate which serves to indicate to future employers the pupil's standard in the various subjects and to help select candidates for senior trade courses or technical teacher training at the institute; it is not a professional diploma. The 3-year trade course is normally followed by two years' apprenticeship, during which employers are required to allow apprentices time off for further technical education.

Kampala Technical Institute. The institute is composed of several schools and sections offering courses of different types and levels. At present these include junior trade courses similar to those described above, but it is hoped that all junior courses will eventually be transferred to the technical schools, so that the institute may undertake senior and advanced trade courses leading to the respective intermediate examinations of the City and Guilds of London Institutes. The following is a résumé of the various branches of the institute and their activities.

The School of Building and Civil Engineering. In addition to junior trade courses in woodworking, bricklaying, plumbing, etc., this school will offer in 1960 a 4- to 5-year course for building technicians. The course will be the 'sandwich' type, i.e., with alternative periods at the institute and in industry.

The Muljibhai Madhvani School of Commerce and Art offers several courses: one leading to the Intermediate Chartered Secretaries' or Cooperation of Secretaries' examinations; one in junior clerical training; courses in commercial arts and crafts, including painting and decorating. The school is also responsbile for the teaching of all the English and other liberal subjects throughout the institute.

The School of Mechanical, Electrical and Automobile Engineering provides 3-year courses in fitting, electrical work, and motor vehicle maintenance and provides training in welding, smithing, sheet metal work, foundry work and pattern making. In addition, it offers a 5-year sandwich course for electrical technicians.

The Science and Mathematics Section handles the teaching of these subjects in all courses. It also provides a 4-year senior secondary technical course leading to the General Certificate of Education at 'ordinary' level in science and technical options. A course for laboratory assistants is planned for 1960.

The Women's Studies Section is at present limited to a 2-year course in dressmaking.

The Technical Teacher Training Section admits students who have completed a junior trade course successfully. The students do one additional year of trade work, followed by nine to twelve months in industry and a final third year of teacher training.

Evening and part-time classes, both at the institute and elsewhere, offer recreational subjects as well as commercial and technical subjects. This branch is steadily expanding and in 1958 there were over 1,000 students attending some 83 classes at the institute alone.

Departmental training schools. Courses at secondary or secondary continuation level include the following:

Forest Department—Nyabyeya Forest School. A 2-year course for School Certificate students, including academic studies as well as practical and research work.

Department of Survey, Lands and Mines. (a) A 5-year course for School Certificate students leading to qualification as Assistant Surveyor or Surveyor. (b) Plane Tabler courses

for Junior Secondary III Certificate students; one year of class instruction leads to a first examination which is followed by two years' practical instruction in the field and a final examination.

Medical Department. (a) Medical assistants' course for Junior Secondary III Certificate students. The full course lasts 3 years; at the end of the second year students qualify as nursing orderlies and the best are selected for further training. Those successful in the final examination qualify as medical assistants. (b) A course for female nurses; three months' preliminary instruction (including English) is followed by three years' professional training. (c) Three-year courses for auxiliary staff—laboratory assistants, dispensers, assistant radiographers, health inspectors; School Certificate is required in all cases. (d) A 2-year course, based on Junior Secondary III Certificate, for hygiene orderlies.

Teacher training schools

Candidates are at present admitted to the teacher training colleges from primary class 6 for a 2-year pre-professional course, followed by professional training lasting two years, which prepares them to teach in primary schools. In one Province in 1958 all students, after eight years' schooling, were admitted for a 4-year course, and the raising of the minimum requirements for admission and the lengthening of the course will extend to other parts of the Protectorate in 1960. There are facilities for producing an annual output of 1,100 primary school teachers a year, and recent outputs have been about 1,000. Two domestic science training colleges, which admit students from junior secondary schools, run a 3-year course for the training of specialist teachers.

Students for the grade 3 course, which trains junior secondary school teachers, are required to pass the School Certificate examination. Most of this training is done at the Government Kyambogo Teacher Training College. The total output of grade 3 teachers is about 120 per year.

The Shimoni Training College prepares teachers for the six classes of the Asian primary school and the two junior secondary classes.

Diploma courses lasting 2 years are conducted at Makerere College for students who have completed two years' preliminary studies after School Certificate.

Senior tutors in training colleges are from abroad. They are on the Education Department establishment and have the rank of education officers; junior tutors are mostly grade 3 teachers. Teachers can rise from one grade to another, and the Department organizes courses and assists teachers to this end.

TRENDS AND PROBLEMS

The expansion of primary classes, with the resultant pressure upon junior secondary schools, has increased the need to provide more facilities at the post-primary stage for pupils who are unsuited for further academic or technical education. The main problem is the expansion and improvement of junior secondary education. The devolution of responsibility for these schools to provincial authorities and the improved quality of teacher training have enabled some progress to be made. At senior secondary level it is hoped to introduce shortly post-School Certificate studies which will dispense with the need for the pre-university course at Makerere College.

On the technical side, the main trends will be development of new technician and trade courses, a reorganization of commercial education, expansion of technical courses for female students, and the development of part-time education.

[*Text revised by the Acting Director of Education, Entebbe, in October 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 5,779,000.
Area: 93,981 square miles; 243,410 square kilometres.
Population density: 61 per square mile; 24 per square kilometre.

Summary of school statistics, 1953–57. Excluding adult education classes and enrolment in Makerere College, enrolment in educational institutions in 1957 was about 468,000 pupils, representing approximately 8 per cent of the total population. Of the school-going population, 93 per cent were in primary schools, 6 per cent in general secondary schools and just under 1 per cent in vocational and teacher training schools. In addition there were over 900 students attending institutes at a higher educational level (including teacher training colleges and Makerere College), while the number of students in universities abroad was 800 as compared with only 61 in 1953. The proportion of girls in primary schools was 27 per cent in 1957 against 25 per cent in 1953; in general secondary schools 15 per cent against 19 per cent in 1953; in teacher training schools 35 per cent against 34 per cent in 1953. The teaching staff in primary schools numbered over 14,000 in 1957, of whom 21 per cent were women, while in general, vocational and teacher training secondary schools there were nearly 1,700 teachers of whom 17 per cent were women. The average pupil-teacher ratio in primary schools was 31 in 1957

compared with 29 in 1953. Compared with 1953 total enrolment in primary schools had increased by 50 per cent and the enrolment of girls by 60 per cent. Total enrolment in general secondary schools increased by 172 per cent between 1953 and 1957 and enrolment of girls by 115 per cent over the same period. Enrolment in teacher training (secondary level) increased by 42 per cent between 1953 and 1957. The average pupil-teacher ratio in all types of secondary school and including higher teacher training was 22 in 1957 against 16 in 1953. (See Table 2.)

Educational finance, 1956/57. Total public education expenditure in the fiscal year beginning 1 July 1956 was 4,928,404 pounds sterling, or approximately £0.9 per inhabitant. Of the total receipts 60 per cent came from the Central Government, 6 per cent from local authorities, 27 per cent from voluntary agencies and about 6 per cent was contributed by school fees. Capital expenditure amounted to 24 per cent of the total. Excluding expenditure for the central administration (£176,786) 80 per cent of recurring expenditure was spent on African education, 13 per cent on Asian, 6 per cent on European and about 0.55 per cent on Goan. (See Table 1.)

Sources. Uganda: Education Department, annual reports.

1. EDUCATIONAL FINANCE, 1956/57 (in pounds sterling)[1]

A. RECEIPTS BY SOURCE

	Amount	
Total receipts		**4 928 404**
Central Government		2 954 181
Territorial revenue	2 554 273	
African Development Fund	399 908	
Local authorities		320 000
Voluntary agencies, etc.		1 325 223
School fees		329 000

B. EXPENDITURE BY PURPOSE

	Amount
Total expenditure	**4 928 404**
Recurring expenditure	3 983 760
Capital expenditure	944 644

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent
Total recurring expenditure		**3 983 760**	**100.0**
Central administration		176 786	4.4
Primary education		2 307 987	57.9
African	1 802 616		45.2
Goan	18 408		0.5
European	131 112		3.3
Asian	354 178		8.9
All races (common schools)	1 673		0.04
Secondary education		1 032 417	25.9
African	812 752		20.4
General	590 047		
Vocational	222 705		
European	104 088		2.6
Asian	115 577		2.9
Vocational education		34 872	0.9
African	34 872		
Teacher training		326 233	8.2
African	316 458		7.9
Asian	9 775		0.3
Other education[2]		105 465	2.7
African	90 638		2.3
European	4 851		0.1
Asian	9 976		0.3

1. Official rate of exchange: 1 pound sterling = 2.80 U.S. dollars.

2. Includes post-secondary education.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	African primary schools, public	1957	25	142	52	4 499	1 329
	Asian primary schools, public	1957	10	130	46	5 806	2 560
	European primary schools, public	1957	3	33	29	825	426
	African primary schools, aided private	1957	1 985	9 222	2 099	293 270	80 525
	Asian primary schools, aided private	1957	92	323	107	8 804	4 338
	European primary schools, aided private	1957	8	10	10	187	95
	African primary schools, unaided private	1957	2 347	4 260	601	120 410	27 388
	Asian primary schools, unaided private	1957	8	11	4	322	138
	Total	**1957**	**4 478**	**14 131**	**2 948**	**434 123**	**116 799**
	,,	1956	4 458	[1]12 314	[1]2 733	399 612	109 866
	,,	1955	4 150	11 368	2 690	355 150	94 268
	,,	1954	3 763	10 712	2 027	320 616	83 290
	,,	1953	3 496	9 856	1 655	288 799	72 810
Secondary							
General	African junior secondary schools, public	1957	9	38	1	1 358	121
	Asian junior secondary schools, public	1957	11	41	14	1 180	452
	African senior secondary schools, public	1957	5	38	7	673	–
	Asian senior secondary schools, public	1957	6	137	23	1 712	560
	African junior schools, aided private	1957	100	415	101	10 186	1 835
	Asian junior schools, aided private	1957	15	47	12	1 097	471
	African senior schools, aided private	1957	13	123	25	2 238	299
	African junior schools, unaided private	1957	65	206	1	7 144	166
	Total	**1957**	**224**	**1 045**	**184**	**25 588**	**3 904**
	,,	1956	175	[2]362	[2]90	20 716	3 189
	,,	1955	137	703	133	16 653	2 578
	,,	1954	95	[3]1 051	[3]242	12 644	2 137
	,,	1953	68	[3]987	[3]263	9 392	1 820
Vocational	Kampala Technical Institute, public	1957	1	54	1	457	15
	African junior technical schools, public	1957	6	91	2	465	–
	African rural trade schools, public	1957	1	.	.	46	–
	African junior technical schools, aided private	1957	5	75	1	632	–
	African rural trade schools, aided private	1957	62	153	–	2 207	285
	Total	**1957**	**75**	**373**	**4**	**3 807**	**300**
	,,	1956	58	378	13	3 338	104
	,,	1955	48	299	3	3 239	16
	,,	1954	62	[4]...	[4]...	3 915	749
	,,	1953	48	[4]...	[4]...	3 866	1 047
Teacher training	African teacher training courses, public						
	Total	**1957**	**[5]38**	**[5]272**	**[5]107**	**3 963**	**1 370**
	,,	1956	[5]38	[5]268	[5]108	3 812	1 334
	,,	1955	[5]41	[5]233	[5]81	3 171	1 104
	,,	1954	44	[4]...	[4]...	2 945	1 052
	,,	1953	41	[4]...	[4]...	2 791	934
Higher							
Teacher training	African grade 2 teacher training	1957	[6]...	[6]...	[6]...	145	20
	Asian grade 2 teacher training	1957	1	7	3	73	49
	Diplomas in education and art	1957	1	...	...	76	10
	Total	**1957**	**...**	**...**	**...**	**294**	**79**
	,,	1956	[7]...	[7]...	[7]...	[7]145	[7]53
	,,	1955	[7]...	[7]...	[7]...	[7]139	[7]32
	,,	1954	6	[8]14	[8]3	[9]130	[9]35
	,,	1953	4	5	2	[9]64	[9]18
General and Vocational	Makerere College						
	Total	**1957/58**	**1**	**...**	**...**	**620**	**35**
	,,	1956/57	1	...	...	[10]625	...
	,,	1955/56	1	...	...	[10]562	...
	,,	1954/55	[11]5	...	...	[11 10]579	[10]17
	,,	1953/54	1	...	...	[10]367	...

1. Including teachers of junior secondary schools with 16,849 (F. 2,755) pupils.
2. Teachers of senior secondary schools only with 3,867 (F. 434) pupils. Teachers of junior secondary schools are included in primary education.
3. Including teachers of secondary vocational and teacher training institutions.
4. Included in secondary general education.
5. Including schools and teachers for African higher teacher training.
6. Included in secondary teacher training.
7. Africans enrolled in Makerere College are included with secondary teacher training. There is also an Asian Secondary Teacher Training School; the number of teachers was 7 (F. 3) in 1956 and 4 (F. 2) in 1955; the number of pupils was 65 (F. 40) in 1956 and 34 (F. 15) in 1955.
8. Including teachers in post-secondary professional schools.
9. Not including Makerere College.
10. Including higher teacher training students.
11. Including 4 post-secondary professional schools with 92 male students.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Cambridge Oversea School Certificate										
African	192	6	253	21	[1]296	[1]20	[2]394	23	[1]491	[1]35
Asian	53	13	132	27	[1]97	28	130	21	[1]159	[1]40
Intermediate City and Guilds Examination	–	–	–	–	–	–	6	...	34	...
Teacher Training Certificate Grade I	780	...	848	...	[3]284	...	780	...	852	...

1. Excluding private candidates.
2. Including 38 private candidates (F. ...).
3. The output of teacher training colleges was reduced by reorganization of courses in 1955.

ZANZIBAR AND PEMBA

Zanzibar is a British-protected State under an Arab ruler. Arabs and Africans, amongst whom there has been much intermarriage, make up the bulk of the population; they were estimated at 280,000 out of a total of 299,000 in 1958. The remainder comprises mainly the Indian community, engaged chiefly in trade and commerce. There are also small communities of Goans, Parsees and Comorians.

THE EDUCATIONAL SYSTEM

Education in Zanzibar is largely the responsibility of the Central Government. The Arab and African communities were not attracted to the 'Western' type of education until the beginning of this century, being content with the traditional Koranic education. Christian and Indian communities, who started their own schools, remained outside the government school system and retained their independence to a very great extent. In recent years, however, because of increasing costs, all these schools have become grant-aided and in consequence now run on lines much closer to government schools.

There are few private (as distinct from grant-aided) schools in Zanzibar, the biggest of them being the Comorian School which is run with the help of funds supplied by the French Government. The others are mainly Koranic schools and nursery schools for children under the age of 6 who are too young to attend the government or grant-aided schools. A few secondary classes have been opened by private agencies recently to meet the unsatisfied demand for more secondary education.

The primary school course covers 8 years (standards 1 to 8). Children are admitted to standard 1 at the age of 6. It is therefore possible for the majority of children to finish primary and start secondary education by the age of 14. The various possibilities for secondary education are described below.

Kiswahili is spoken and understood by nearly all the people of the islands; it is the usual language of instruction in the lower classes of non-Indian primary schools. Arabic is spoken by relatively few people, even amongst the Arabs themselves, but it is the language of Islam and hence there is a strong demand, particularly from the Arabs, for the knowledge and use of Arabic to be increased. In order to satisfy this wish, Arabic is taught as a foreign language, with English, in all government non-Indian schools. The Indians speak mainly Gujerati among themselves and this language is used as the medium of instruction in most Indian community schools. English is the medium of instruction in the upper primary classes of all schools, and its use as such in all primary schools, both government and grant-aided, is increasing. All secondary education has always been conducted in English.

THE DEVELOPMENT OF SECONDARY EDUCATION

In 1920 there was one government school, Town Boys' School, which offered an 8-year primary course, with English as the medium of instruction in the last three years. It was considered then that several of the boys from the top standard of this school were suitable candidates for further education.

An education commission was appointed in 1920 to

revise the educational policy. The majority of members considered it too early to attempt any formal secondary education and plans were made instead to start a men's teacher training school, a commercial school and an industrial school for boys.

In 1924 the industrial school was started to provide training for carpenters, mechanics, tailors and bootmakers. Unfortunately the demand for these skills proved to be less than was estimated and the school closed down in 1932. The Public Works Department had already started apprenticeship training for carpenters and mechanics, and as it offered employment to its own apprentices after training boys leaving school were attracted to this scheme.

It was decided to open a secondary school for boys in 1935, replacing the commercial school; the new school provided a 4-year course, leading to the Cambridge Oversea School Certificate. In 1956 a secondary technical school was started to broaden the basis of the secondary education offered.

Girls' education lagged behind that of the boys. The first government girls' primary school was opened in 1927, and though wastage was too high at first to open classes beyond standard 5, an indenture system to train teachers was started in 1933. In 1944 a women's teacher training school was opened to provide a 2-year training course. In 1947 the Government Secondary School for Girls was opened.

The mission schools started post-primary education to suit their own requirements. St. Joseph's Convent School became a full-time co-educational private secondary school in 1947, and started to receive a grant-in-aid in 1954.

The Ismaili Khoja community started private secondary classes in 1940, and these became a full-time private secondary school for boys in 1947. This school (Aga Khan Secondary School) was also given a grant-in-aid from 1954 onwards, and became a co-educational school in 1959.

The provision of Higher School Certificate classes was the next advance. In 1959 classes at this level were opened for boys and girls in the Government Secondary School for Boys. The school moved into new and more commodious buildings in August 1958 and changed its name to the King George VI School in 1959.

Facilities for technical vocational training for boys were again made available when the Institute of Muslim Education was opened in 1950 at Mombasa. However, the cost became prohibitive and the Zanzibar Government decided to decrease the number of students going to Mombasa and to open its own trade school to provide training in the building trades. This school was started in 1956.

A dressmaking course for girls was started in 1953 and this was broadened in 1959 to include other domestic training.

Legal basis

An Education Decree was passed by the Legislative Council in December 1958 but it has not yet been put into force. Control of education, therefore, is by regulation only. Regulations controlling grant-in-aid to schools, primary and secondary, are contained in Sessional Paper No. 4 of 1955.

The Employment of Children, Young Persons and Adolescents Decree, 1958, allows part-time work under certain safeguards from the age of 12; full-time work, also subject to safeguards, from the age of 16. For the purpose of employment a young person becomes an adult at the age of 18 and can then be appointed on permanent pensionable terms.

The Apprentices Decree, 1926, makes provision for a child, with his parents' consent, to be apprenticed to a trade at the age of 9 for a period not exceeding seven years. This has not been a practice, however, for many years; the only boys who have taken out indentures have been over 16 and they have signed on as apprentices for a term not exceeding five years.

Compulsory education is not in force in Zanzibar. The suggestion for compulsory primary education was mooted recently for Zanzibar Town itself but the consequent cost precluded the possibility of that being enacted, even for such a limited area.

Administration

Education planning and policy is the responsibility of the Director of Education. In this he has the help of the Education Advisory Committee, a body composed of senior officers, and members of the public selected not only on their own qualifications but as representing the various interests involved.

Time-tables, syllabuses and choice of textbooks are the responsibility of principals of schools and individual teachers in charge of subjects. The block time-tables are examined by the Department to see that sufficient time is given to subjects not required for examination purposes to ensure that the pupils receive a broad cultural education.

Inspection of all secondary schools is the responsibility of the Assistant Director of Education and the Superintendent of Education for Women and Girls.

Finance. There are no local authority schools. Capital and recurrent expenditure for government secondary schools comes from central government funds, and is operated by the head office of the Department, which therefore is responsible for all accounting. Capital expenditure is derived mainly from both Central Government and Colonial Development and Welfare funds. For some of the larger projects generous public subscription has supplemented these sources.

Grants-in-aid to non-government schools are given in respect of two thirds of teachers' approved salaries, half the cost of passages of expatriate staff, and half the cost of approved alterations and additions to school buildings.

Fees are charged in all secondary schools but are equivalent to only a very small proportion of the total cost. In government schools, the present fees are Shs.300/- per annum, but in proven cases of hardship they are decreased. Boarding fees are charged but they are so low (Shs.120/- per annum) that they are held to be within the means of all but the most indigent and no remission is granted. The Social Welfare Department assists very poor parents with boarding fees if necessary. Fees are higher in the grant-aided schools, and remission may be derived from communal welfare funds.

Buildings and equipment. The standard of the building and equipment of government secondary schools in Zanzibar is high, and satisfies all regulations laid down as regards space, lighting, and sanitation. The classrooms are spacious and well designed for the hot climate, generally opening on to verandahs and balconies. The schools have well-equipped laboratories, well-stocked libraries, and various audio-visual aids.

The grant-aided schools are not so fortunate as regards accommodation; the greatest need is for good laboratories.

School welfare services. Arrangements are made for children in government schools to be medically examined and they are given free medical treatment at the government hospitals or clinics. Dentists visit the schools regularly and give free dental treatment. No special arrangements are made for grant-aided schools. The Welfare Department helps very poor children with uniforms, boarding fees and bus fares, but the numbers it is asked to help are small.

TYPES OF SECONDARY EDUCATION

The post-primary educational facilities can be summarized briefly: general secondary education; trade training in building (masonry and joinery/carpentry); domestic science courses for girls; primary teacher training for men and women; courses in Arabic and religious studies at the Muslim Academy. There are also private institutions which run commercial courses in English, book-keeping, shorthand and typing.

Entrants to all these courses except teacher training are selected from primary school leavers largely on the result of a general competitive examination held towards the end of the year. The examination subjects are English and arithmetic, and the head teachers' assessments and the pupils' school records are also taken into account. Pupils who qualify for places are asked to state their preference, and it is noticeable that secondary education is invariably the first choice; entrants to the vocational courses or to the Muslim Academy, therefore, do not come from the first flight of candidates.

The school year is divided into three terms, averaging 13–14 weeks in length. The daily session is from 7.30 a.m. to 12.45 p.m. on every day of the week except on Friday, the Muslim day of prayer, when classes finish at 12 noon, and on Saturday, when only a half-session is held. Pupils return to school in the afternoons for games and other school activities, and for special lessons when staffing and other factors so dictate.

The closing date of the secondary school year is dependent on the School Certificate examination dates. In arranging the preceding period of approximately 40 teaching weeks, the occurrence of the holy month of Ramadhan has to be taken into account. This moves forward about 10 days each year, and in consequence affects the relative lengths of the school terms. The other conventional vacations are in August and December.

General secondary schools

The government and grant-aided secondary schools all prepare for the Cambridge Oversea School Certificate examination at the end of a 4-year course. As has been mentioned previously, the boys' secondary technical school was established to widen the choice of subjects at secondary level, but although courses are conducted in woodwork, metalwork and technical drawing, the education is to be regarded as being of a general and not a vocational character.

Entry into the secondary schools depends mainly on the results of the competitive examination mentioned above, set by the Department of Education for all pupils who have reached standards 7 and 8 in either government or grant-aided schools. Entry to the examination from standard 7 is restricted to pupils specially selected by the teachers on grounds either of age or achievement. Unsuccessful entrants from standard 8 are allowed to repeat the year's work and make a second attempt provided they are young enough, but are handicapped on their second attempt to the extent of 15 per cent of the total marks. The handicapping is done in this way because children from the rural areas tend to start their formal education later than those in the towns, and because Arabs and Africans are usually at least one year older than the Indians in equivalent standards, having had to attend Koranic classes before starting the primary school course. Entry into the secondary course is restricted in all but very exceptional cases to those who will not have reached the age of 17 on 1 January of their year of entry. In awarding places, notice is also taken of head teachers' reports and pupils' records, and border-line cases are interviewed if it is considered necessary.

At present, about 20 per cent of the students leaving standard 8 annually are selected for secondary education but an increasing number of the specially selected standard 7 students are obtaining places and it is unlikely that the system of allowing second attempts in standard 8 will be continued much longer.

Secondary education in Zanzibar is inter-racial but there is a preponderance of Indians in all schools. In the grant-aided schools 95 per cent of the entry is Indian (including Goans) and in the government schools 47 per cent of the entry. The proportion of Arabs and Africans in all secondary schools amounts to 38 per cent (February 1959).

Curriculum. English, history, geography and mathematics are taught in all schools. Biology and physics-with-chemistry are taught in the two government grammar schools for boys and girls. General science and health science are the two subjects taught in the grant-aided schools, and physics-with-chemistry, but not biology, is offered in the government boys' secondary technical school. Language teaching differs from school to school. The Ismaili community, being a business community, provides teaching in commercial subjects, i.e., shorthand and book-keeping, in their secondary school. Technical drawing, woodwork and metalwork are essential subjects in the curriculum of the secondary technical school. All the schools except the Aga Khan School teach art. The girls' secondary school and the convent school provide domestic science classes.

A great deal of work has been done by the subject teachers of biology and geography to acquaint their pupils with the characteristics of their own local environment. The history syllabus includes a considerable amount of

local history, and historians living in East Africa, with the help of their university colleagues in the United Kingdom, are producing textbooks suitable for the Cambridge Oversea School Certificate course. A great deal of research is also being done on the teaching of English, and educationists in East Africa are working together to produce textbooks suited to East African conditions.

Teaching staff. The staffing of secondary schools is an ever-present problem. The supply of locally-domiciled graduate teachers is increasing slowly, but reliance has to be placed in the meantime on recruitment from the United Kingdom and India. It has not been possible to restrict staffs to graduates only; non-graduates have to be employed to fill certain vacancies. No training of secondary school teachers is carried on in Zanzibar; that is done at Makerere University College, Kampala (Uganda), or in the United Kingdom.

The Muslim Academy

This is a post-primary institution which offers tuition in Arabic and religious studies. It is not vocational, neither can it be termed a secondary school with all that that name implies. It was founded in 1952 in order to give opportunity for further education in Islamic studies to students who had had at least the background of a general primary education, and thus to produce young Muslims who would probably become teachers of and leaders in religion in the Protectorate. From that beginning has grown the proposal to expand the curriculum of the Academy to include more secular subjects such as English, Islamic history, geography, mathematics, so that the students may benefit from a blend of the traditionally Muslim and the more modern ('Western') concept of secondary education. Its courses may eventually be extended to higher studies in Arabic, history, and religion.

Vocational and technical schools

There is no technical school in the Protectorate. The boys' secondary technical school referred to above under 'General secondary schools' offers a course of general education rather than a course of vocational training. Some of those who have shown aptitude in their technical studies will be encouraged to go on to the Royal Technical College, Nairobi, for higher studies, but at the same time they will be eligible, with pupils from the other Protectorate secondary schools, to pursue the Higher School Certificate course in Zanzibar in either arts or science.

The Trade School. Now in its fifth year, the school provides training for the building trades only, and at present the teaching is confined to masonry and joinery. Pupils are selected from standard 8 and follow a 5-year course, which includes two years of training on the job. The course includes English and mathematics as well as the practical and theoretical work of the building instruction. After completing the course students will be employed by either the Public Works Department or by local contractors, or will be helped to set up on their own.

The Domestic Science School. The Domestic Science School has revived the art of joho- and bushti-making. These are very elaborate robes worn by Arabs over a plain white kanzu, and require a great deal of difficult embroidery in pure gold thread. In recent years the demand for these costumes has increased and they are now obtainable from the Domestic Science School only. Since 1959 the school has widened its course to include cookery, housewifery and laundry, and has included child-care and mother-craft as a preparation for marriage.

Technical training outside the Protectorate. For technical training in trades other than building, such as motor and radio mechanics, electricians' courses and welding, students go to technical institutes on the mainland, particularly to the Mombasa Institute of Muslim Education. The students are from standard 8 of the primary course, and normally follow a 4-year course in their respective trade which takes them up to about the level of the City and Guilds of London Institute intermediate examination.

Teacher training schools

There are two primary teaching training colleges, one for men and one for women. Each is admitting about 25 students a year; the students follow a 2-year professional course.

The men's college is residential and entry into the course is at two levels, from standard 10 (that is, after two years of general secondary education) or from standard 12, at the level of the School Certificate. A small but increasing number of students holding the Cambridge Oversea School Certificate is being admitted to the college.

The women's college is mainly a day training college and the entry is now confined to standard 12 students, most of whom have passed the Cambridge Oversea School Certificate. The students are trained to teach throughout the eight classes in the primary schools. They are divided into groups which specialize in either infant and junior teaching or the teaching of older children. The course is made as practical as possible. One day a week is devoted to domestic science training, which includes needlework teaching.

In both colleges all students learn how to make the main kinds of teaching aids. The students spend about six weeks a year on teaching practice.

Out-of-class activities

All secondary schools have a prefect system. Prefects assist with the discipline of the schools and undertake supervisory duties. There are also class monitors. In the boys' schools the house system is in vogue.

The boys' schools play a wide variety of games, and inter-school matches and athletic competitions are arranged.

Girls are handicapped by the purdah system but athletic sports and games are becoming more popular.

The Boy Scout and Girl Guide movements are active in Zanzibar and several companies are attached to schools.

In all schools and colleges there are flourishing debating societies, and clubs for those interested in art, geography, history, science, and natural history. Dramatic work is coming to the fore rapidly.

TRENDS AND PROBLEMS

The outstanding problem in Zanzibar is the usual one in underdeveloped territories of the lack of money to meet the increasing demand for more education. The main pressure at the moment is for secondary education.

The secondary education offered in the Protectorate is mainly of an academic pattern, and a fair proportion of the students admitted find the course quite beyond their ability. What is wanted is a wider selection of courses. Steps in this direction have been the development of the secondary technical school for boys, of domestic science teaching in the girls' secondary school, and the development of the Muslim Academy. One difficult obstacle is the relatively late start in formal education of certain students; many African and Arab students are 16 years old before they can compete for a place in a secondary school. By that time their minds are not as receptive as they were and there is a steady decline in their achievements as they proceed up the school. The Africans are in the minority to a marked degree.

This latter state of affairs was the subject of investigation by a special committee which produced a report in 1955 on the position of Africans in the education system of the Protectorate. The main conclusion of the report was that the dearth of Africans in secondary schools was evidently due to a combination of factors, mainly economic in character, which mitigated against the majority's staying the course in the primary school and, in the case of those who had done so, against their being able to compete on equal terms with others. This was held in some quarters to call for special concessions for Africans' education but this proposal was not accepted; it was not favoured by the Africans themselves. The eventual solution was considered to be the steady improvement of the Africans' standard of living and economic status, the basis of the physical and mental well-being of any community.

The expansion of the educational system during the last decade has been rapid, but unfortunately the rising costs thereby incurred have not been supported by a correspondingly buoyant economy. The revenue of the Protectorate, depending so much on the sale of the two native crops, cloves and coconut products, and on indirect taxation, is sensitive to a marked degree to the vagaries of world markets for these commodities. In 1958 a Committee of Education was set up under the chairmanship of the Chief Secretary to investigate the present position of the education services and to report on ways and means of financing them to the best advantage in the future. This resulted in a widespread realization on the part of the public that a more stable foundation to the revenue must be established, which would require wise long-term planning to diversify the economy and increase the output of the population as a whole.

The competition for secondary education has become fierce, for to many it appears the only road to employment with any worth-while remuneration. But secondary education for all who finish the primary course is an impossibility in the foreseeable future unless a drastic change comes over the country's economy. That is realized by all, but that realization does not still the demand for something beyond primary education which, whilst still non-vocational, would afford children unable to attend secondary school the opportunity to apply their newly acquired skills and knowledge and their developed intelligence to problems closely connected with their future lives. To achieve this, it is proposed to strive towards a shortening of the primary course proper, and to give two years of post-primary education of a more practical nature to those not proceeding to any form of secondary education.

From the 1958 census it is calculated that about 26 per cent of the potential primary school population is receiving some form of formal primary education. The percentage is higher, of course, in urban than in rural areas, where a tremendous amount of leeway has to be made up, particularly amongst the girls. Yet faced with the alternative possibilities of a few more primary schools or a small increase in secondary accommodation, public choice, at the present difficult juncture, has fallen on the latter, and the present proposals, over the next quinquennium, are for consolidation of the primary system as it now stands and the establishment of a boarding secondary school, to be run on co-educational lines, in Pemba. This school will probably develop rural science as a special study.

In addition, there has been rapid reaction on the part of the Indian communities to the fact that the secondary school door is not to be opened wider. They are determined that a greater proportion of their children shall have the opportunity of secondary education, and in Zanzibar Town three movements are afoot to establish private secondary classes. Their curriculum will of necessity be relatively limited, but they are endeavouring to provide curricula on as broad a basis as is possible within their limited means. These schools have commercial subjects as their 'pre-vocational studies' in place of the more expensive science studies offered at the government and grant-aided schools.

In the last year or so there has been a noticeable increase in the facilities for teaching in domestic science subjects. As one of the projects of the current education programme, the well-equipped Lady Rankine Domestic Science Centre will be opened this year in Zanzibar. It will not only serve the government girls' secondary school, but will provide classes for adults.

At the Conference on Muslim Education in East Africa, held in Dar-es-Salaam (Tanganyika) in November 1958, there was general agreement that the Muslim Academy should be expanded as an inter-territorial institution, to which students from the East Africa territories could be sent to receive a post-primary education on orthodox Muslim lines, that is, with the emphasis on religion and Arabic. Its students, after their 5-year course, could be a source of teachers-in-training who would subsequently be employed in the Muslim schools of the territories.

Lastly, as regards technical education and trade training, the Protectorate is too small to warrant the setting-up of its own technical institute, and for such training it must continue to look to the mainland centres. The Karimjee Trade School may be expanded to cater for trades other than building, but such developments must await firmer conclusions on the absorptive capacity of the Protectorate and the means of financing such expansion.

[*Text prepared by the Education Department, Zanzibar, in June 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 304,000.
Area: 1,020 square miles; 2,643 square kilometres.
Population density: 298 per square mile; 115 per square kilometre.

Summary of school statistics, 1953–57. In 1957 about 34,700 children and young people or approximately 12 per cent of the total population were receiving some kind of instruction. Of the total enrolment over 96 per cent was in primary schools, including Koranic schools, 2.5 per cent in general secondary schools and about 1 per cent in vocational secondary and teacher training schools, including 36 students at the Mombasa Technical Institute, Kenya.

The proportion of girls to total enrolment was 37 per cent in all primary schools, including Koranic schools, compared with 32 per cent in 1953, and in all secondary schools 29 per cent in 1957 against about 23 per cent in 1953.

There was an increase in enrolment in all primary schools, excluding unaided Koranic schools, of 56 per cent between 1953 and 1957. Teachers in recognized primary (excluding unaided Koranic) schools in 1957 numbered 576, of whom 32 per cent were women. The average pupil-teacher ratio in primary schools was 28 in 1957.

Total enrolment in general secondary schools increased by 70 per cent between 1953 and 1957 and enrolment of girls by 69 per cent over the same period. In teacher training schools in Zanzibar enrolment increased by over 80 per cent between 1953 and 1957 and the number of women students from 12 to 54 (350 per cent). There were in addition 11 teacher trainees, including 5 women, in institutions outside Zanzibar in 1957. The number of teachers in general secondary and teacher training schools was 71 in 1957 and the average pupil-teacher ratio 14. (See Table 3.)

Educational finance, 1957. Total expenditure on education in the fiscal year beginning January 1957 amounted to 415,777 pounds sterling, representing approximately £1.5 per inhabitant. Of this sum 83 per cent (£344,963) came from territorial revenues, 7 per cent (£27,846) from United Kingdom funds and the remaining 10 per cent (£42,968) from voluntary agencies. Capital expenditure was about 15 per cent (£62,883) of the total. The distribution of recurring expenditure by level and type of education is given in Table 1.

Source. Zanzibar Protectorate: Education Department, annual reports.

1. EDUCATIONAL FINANCE, 1957 (in pounds sterling)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure	**352 894**	**100.0**
Central administration	20 317	5.8
Instructional	325 610	92.3
Primary education	210 210	59.6
Secondary education	53 238	15.1
Vocational education	26 760	7.6
Teacher training	17 403	4.9
Scholarships for study abroad	17 999	5.1
Other recurring expenditure	6 967	2.0
Assistance towards school fees	6 867	1.94
Grant to Arab Association Library	100	0.03

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.

2. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Cambridge Oversea School Certificate	[1]32	8	60	...	84	19	49	16	100	32
General Certificate of Education	...	...	...	...	12	–	7	1	12	1
Teacher Training Certificate	...	...	...	...	45	14	34	14	35	14

1. In addition 14 private candidates passed the Cambridge Oversea School Certificate.

3. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	62	475	111	13 397	3 800
	Primary schools, aided private	1957	11	90	70	2 617	1 711
	Primary schools, unaided private	1957	3	11	3	174	33
	Total	**1957**	**76**	**576**	**184**	[1]**16 188**	[1]**5 544**
	„	1956	72	482	167	[1]14 839	[1]4 932
	„	1955	67	484	185	[1]13 428	[1]4 310
	„	1954	61	419	147	11 585	3 645
	„	1953	59	393	...	10 380	3 283
Secondary							
General	Secondary schools, public	1957	[2]4	45	18	[2]573	168
	Secondary schools, aided private	1957	2	13	7	286	77
	Total	**1957**	[2]**6**	**58**	**25**	[2]**859**	**245**
	„	1956	[2]6	[3]42	[3]14	[2]740	228
	„	1955	4	41	17	627	185
	„	1954	4	33	13	593	178
	„	1953	4	38	16	505	145
Vocational[4]	Trade school, public	1957	1	1	–	33	–
	Typing class, public	1957	1	1	–	22	22
	Dressmaking school, public	1957	1	1	–	30	–
	Commercial institute, unaided private	1957	1	...	...	103	43
	Total	**1957**	**4**	**...**	**...**	**188**	**65**
	„	1956	2	...	...	36	12
	„	1955	2	...	...	109	91
	„	1954	...	...	...	...	...
	„	1953	...	...	...	...	...
Teacher training	Teacher training schools, public						
	Total	**1957**	**2**	**13**	**6**	[5]**166**	[5]**54**
	„	1956	2	12	5	126	32
	„	1955	2	12	4	[6]122	[6]30
	„	1954	2	...	...	118	26
	„	1953	2	...	...	90	12

1. Including public and aided private Koranic classes with the following enrolment: 2,400 (F. 867) in 1957; 2,502 (F. 915) in 1956 and 2,161 (F. 762) in 1955. Not including unaided Koranic schools with estimated enrolment as follows: 17,342 (F. 6,701) in 1957; 13,780 (F. 4,662) in 1956; 15,700 (F. 5,700) in 1955; 13,889 (F. 4,409) in 1954 and 11,017 (F. 3,563) in 1953.
2. Including the Muslim Academy, with 53 male students in 1957 and 39 in 1956.
3. Not including teachers of the Muslim Academy.
4. In addition the number of male students enrolled in the Mombasa Technical Institute in Kenya was 36 in 1957, 48 in 1956, 74 in 1955, 93 in 1954 and 71 in 1953.
5. In addition 11 (F. 5) students abroad.
6. In addition 4 (F. 1) students abroad.

BASUTOLAND

THE EDUCATIONAL SYSTEM

The school system is based essentially on partnership between the Department of Education and the various voluntary agencies, the Department having the role of co-ordination, fixing standards and supervising the schools. The Department is headed by a director and his deputy, with education officers responsible for each of the four circuits into which the territory is divided; inspection is assured at district level by assistant education officers or school supervisors.

Education is legally controlled by the Education Proclamation and by rules and regulations issued under it. The Government maintains few schools, the principal one being a technical school. A certain number of schools are managed by committees, but the great majority are run by missions. Grants-in-aid are paid to the voluntary agency schools subject to the conditions and standards officially prescribed.

Co-ordination of educational effort is achieved by advisory bodies at various levels. Each district has an advisory committee for dealing with applications for the registration of schools and with plans for future development. The Central Advisory Board on African Education acts in a similar way.

TYPES OF SECONDARY EDUCATION

The primary school course lasts 8 years, and leads to a departmental examination.

Secondary education covers five years, in two cycles 3+2, the lower cycle terminating in the junior certificate examination, and the upper in the matriculation or senior certificate examinations which are set by examining bodies in the Union of South Africa.

General secondary education is provided by junior secondary schools and by high schools with the full course. The curricula are determined to a large extent by examination requirements. The medium of instruction is English, with Sotho taken as a subject. Upon completing the secondary course, students may enrol for higher education at the Pius XII University College at Roma in the Territory.

Technical education is provided in technical and trade schools, where the course parallels the junior secondary; an effort is being made to raise the entrance level to junior certificate. A certain number of vocational subjects, such as commercial courses, are also offered in the high schools. The teacher training centres have courses of two years each at two levels: the primary teachers' course, immediately after primary school, and the primary higher teachers' course, for students who have completed the junior certificate.

[*Text prepared by Unesco Secretariat from official sources in November 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 658,000.
Area: 11,716 square miles; 30,344 square kilometres.
Population density: 56 per square mile; 22 per square kilometre.

Summary of school statistics, 1953–57. In the school year 1957 there were 117,165 pupils enrolled in schools for Africans and Europeans, representing about 18 per cent of the total population; 97 per cent of enrolment was in primary schools where girls made up 63 per cent of the total. In general secondary schools, girls were about 37 per cent of total enrolment; in vocational and teacher training schools, however, they formed over 68 per cent. There were nearly 2,500 teachers in all schools and the pupil-teacher ratio was 49 in primary schools and about 13 in secondary general, vocational and teacher training schools. Compared with 1953 enrolment had increased by 20 per cent in primary, 31 per cent in general secondary and 97 per cent in teacher training schools. (See Table 2.)

Examination results in secondary education, 1955. In the year 1955, the latest year for which data are available, 80 students were awarded teacher training certificates at different grades, 67 students passed the junior secondary certificate and 7 the senior secondary certificate.

Educational finance, 1957/58. Total expenditure on education in the fiscal year beginning April 1957 was 541,055 pounds sterling, or approximately £0.8 per inhabitant. Of this total 7 per cent (£37,406) came from United Kingdom funds, 53 per cent (£284,273) from territorial revenue to the Central Government, 1 per cent (£4,111) from the Basotho Treasury and the remaining 39 per cent (£215,265) from voluntary agencies. Capital expenditure (£172,290) was 32 per cent of the total spent. The distribution of recurring expenditure by level and type of education is given in Table 1.

Sources. Basutoland: Education Department, annual reports. United Nations: Report on education in Non-Self-Governing Territories (UN/A/4131).

1. EDUCATIONAL FINANCE, 1957/58 (in pounds sterling)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure	***368 765**	**100.0**
Central administration	20 452	5.5
Primary education	221 786	60.1
Secondary education	30 140	8.2
Vocational education	26 906	7.3
Teacher training	19 101	5.2
Other education	50 380	13.7

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools						
	Total	**1957**	**983**	**2 314**	**1 050**	**114 434**	**72 314**
	,,	1956	964	2 191	918	108 900	69 194
	,,	1955	936	2 013	774	102 758	65 916
	,,	1954	931	1 997	760	102 025	65 820
	,,	1953	921	1 954	735	95 628	62 619
Secondary *General*	Secondary schools, private						
	Total	**1957**	**17**	**77**	**28**	**1 326**	**484**
	,,	1956	17	63	21	1 278	454
	,,	1955	12	56	19	1 175	436
	,,	1954	7	35	13	999	388
	,,	1953	5	29	12	1 010	345
Vocational	Vocational school, public	1957	1	22	–	117	8
	Vocational schools, private	1957	23	51	41	645	485
	Total	**1957**	**24**	**73**	**41**	**762**	**493**
	,,	1956	9	43	12	557	333
	,,	1955	8	34	8	371	240
	,,	1954	2	22	–	105	16
	,,	1953	2	21	–	118	35
Teacher training	Teacher training schools, private						
	Total	**1957**	**7**	**48**	**31**	**553**	**333**
	,,	1956	7	46	31	422	289
	,,	1955	6	55	29	319	185
	,,	1954	10	35	15	289	161
	,,	1953	7	31	13	281	154
Higher	University College, unaided private						
	Total	**1957**	**1**	**...**	**...**	**90**	**11**
	,,	1956	1	...	...	69	13
	,,	1955	1	17	2	42	11
	,,	1954	1	16	1	37	8
	,,	1953	1	9	...	32	5

BECHUANALAND

The Bechuanaland Protectorate is a large, sparsely-populated territory, two-thirds of its area lying within the Kalahari Desert. The Bechuana proper are divided into eight main tribes, each with its own native authority, treasury and tribal boundaries. Other groups, such as the Damara, Makalaka, Mampukushu and Hottentots are either included within the tribal boundaries and are subject to tribal authorities or live in areas specially allocated to them. These groups differ from the Bechuana and from one another in language and customs, but there is only one official vernacular for the Territory, namely Tswana. The European residents number approximately 3,000. There is also a comparatively small Coloured population, a term loosely used to include Eurafricans and people of mixed descent, and an Indian community.

THE EDUCATIONAL SYSTEM

The great majority of the schools are African primary schools provided by the tribal authorities. These schools are financed by the native treasuries and in all matters not strictly professional are controlled by tribal school committees. There are also a few schools run by missions. The Government directly maintains and manages a small number of institutions, including all schools for European

children, and grants financial aid to the mission schools and to Moeng College, a secondary school operating under a special constitution.

The educational system as a whole is regulated by the Education Proclamation of 1938, under which the Resident Commissioner is empowered to frame rules for the establishment and conduct of schools in the Protectorate. There is as yet no question of introducing regulations requiring compulsory school attendance. The Education Department is responsible for administering the system, by preparing legislation and long-term plans, supervising the use of public funds for education and inspecting the work of the schools. It comprises the Director of Education, the Deputy Director, a number of education officers and supervisors, and a translator. The Education Department also maintains contact with the African and European Advisory Councils and is assisted by certain advisory bodies such as the Board of Advice on African Education, the Bechuanaland Protectorate African Teachers' Association, and the Protectorate Languages Board. All other Government Departments co-operative fully when common problems arise, e.g. in consideration of educational needs in relation to territorial development. Money spent on educational services derives from four sources—tribal treasuries, general revenue, the Colonial Development and Welfare Scheme, and mission funds.

African schools. The African primary schools offer a 4-year, 6-year or a full 8-year course (sub-standards A and B and standards 1 to 6). Education to secondary level is provided inside the Protectorate in two secondary schools, three junior secondary schools, the teacher training college and a homecrafts training centre. All schools are co-educational except the homecrafts centre. For other types of education, students attend institutions outside the Protectorate.

Coloured schools are all at primary level.

European schools also remain almost entirely primary. Since 1957 there have been junior secondary classes at the Francistown and Lobatsi schools, but the majority of the children leave at the end of the primary course and attend private or government schools in the Union of South Africa or in Rhodesia. Parents of promising children are encouraged to send them outside the Territory for their secondary education, and those requiring financial assistance are given bursaries. At present the European population is not large enough to warrant the introduction of full differentiated secondary courses.

The rest of this chapter will be concerned with African education only.

THE DEVELOPMENT OF SECONDARY EDUCATION

Before 1948 the only non-primary education in the Protectorate comprised junior secondary classes forming part of the Catholic St. Joseph's College near Gaberones, a homecrafts course conducted by the Dutch Reformed Church at Mochudi, and a small elementary teachers' course run by the Education Department at Kanye. For almost all secondary, vocational and higher education selected pupils attended institutions outside the Territory, notably the London Missionary Society's Institution at Tiger Kloof in the Cape Province (Union of South Africa). In 1948 a free grant was made available from Colonial Development and Welfare Funds for an 8-year educational programme including the erection and equipment of a teacher training college, the development of homecraft and agricultural education, and an increase in bursaries available for study abroad.

Another important event in that year was the beginning of the building of the Bamangwato College, planned as a full secondary boarding school on an agricultural basis. To finance the venture the then acting Chief Tshekedi Khama proposed a special levy on the Bamangwato tribe, and over £100,000 was raised by that means. In 1955 Colonial Development and Welfare Funds contributed funds for a classroom and office block and in 1956, on the unanimous recommendation of the African Advisory Council and with the consent of the Bamangwato, the college became a grant-aided institution serving the whole territory. At the same time it was re-named Moeng College. For parents unable to afford the boarding fees at Moeng College and St. Joseph's College junior secondary day schools were opened by the tribal authorities.

Since 1954, when the Union of South Africa ceased to admit non-European extra-territorial pupils to its secondary and vocational institutions, matriculation classes have been introduced at the two principal schools and arrangements made for admission of Bechuana pupils to trade courses and higher primary teacher training in Basutoland.

In 1956 the government teacher training college was opened at Lobatsi, replacing the former establishment at Kanye. It has accommodation for 120 students.

Administration. Moeng College is governed by a council under the chairmanship of the Deputy Director of Education. In 1956 the Government assumed the responsibility of meeting recurrent financial obligations and the cost of later developments of a capital nature. St. Joseph's College is managed by the Roman Catholic mission and receives grants-in-aid. Both these boarding schools charge fees, but generous bursary (scholarship) assistance is available for needy pupils and no deserving applicants have been refused. The whole bursaries system, including awards for post-secondary and other studies outside the Protectorate, is administered by a bursaries committee which comprises the Deputy Director of Education and two African representatives. The tribal junior secondary day schools are administered direct by district school communities; officers of the Education Department attend meetings of theses committees and their advice is invariably acted upon, subject only to the availability of funds. Each committee administering a tribal junior secondary school received a building grant-in-aid of £2,500 but otherwise the schools are financed by the tribal treasuries. The homecrafts centre run by the Dutch Reformed Church is grant-aided. The teacher training college is entirely maintained by government funds. All schools are inspected by the Department.

TYPES OF SECONDARY EDUCATION

Candidates for admission to the various types of schools at secondary level must have completed the 8-year primary

course and obtained a satisfactory pass in the external standard 6 examination set by the Education Department. The language of instruction at secondary level is English. All schools include religious instruction in the curriculum.

General secondary schools. Moeng College and St. Joseph's College offer academic-type courses leading in three years to the Junior Certificate examination of the University of South Africa and in five years to the South African Matriculation. The syllabus, and to a large extent the choice of textbooks, is determined by requirements of these two examinations. Subjects taught are English, Tswana, mathematics, general science, agriculture, history, geography, Latin and as non-examination subjects religious instruction, physical culture, health and domestic science.

Secondary leavers wishing to continue their studies go either to Pius XII University College in Basutoland, to the University College of Rhodesia and Nyasaland in Salisbury, or to the United Kingdom. For the first the entrance qualification is a good pass in the Matriculation examination of the South African Joint Matriculation Board. Entrance requirements at the University of Rhodesia and Nyasaland are considerably higher, but students wishing to attend there are admitted to a 2-year post-matriculation preparatory course at a government school in Southern Rhodesia. The provision of bursaries is generous. Bechuanaland students will be eligible for admission to the Medical School at the University of Natal up to and including 1961.

The tribal junior secondary day schools provide 3-year courses up to the Junior Certificate level. They offer training for admission to various forms of vocational training including nursing, primary higher teacher training and various trades. Subjects taught are English, Tswana, general science, domestic science, agriculture, arithmetic, history, geography and religious instruction.

Vocational and technical schools. Plans for a trades school, which will at first teach carpentry, building and motor mechanics, have been approved. Commercial courses at St. Joseph's College offer training in book-keeping, commercial arithmetic, typewriting, business methods and English. The homecrafts centre has two courses—a 2-year course for adolescents and a 1-year course for teachers already qualified who wish to specialize in the teaching of homecraft subjects. The 2-year post-primary course gives general training in practical home management and is designed to improve living standards in the villages.

Apart from institutions under the general control of the Education Department, vocational training for apprentices is provided at the Public Works Department Workshops in Gaberones, while the Veterinary Department trains its own employees. Vocational training for Bechuanaland students in schools and institutions in Basutoland and Southern Rhodesia has included agriculture, building, carpentry, commerce, domestic science, dressmaking, nursing and motor mechanics.

Teacher training. The Primary Lower Course, with entry from standard 6 (i.e. complete primary school), is of 3 years' duration. It includes professional and academic work and emphasizes teaching practice. Teachers are trained for work in the lower classes of the primary school. The Primary Higher Course trains teachers, mainly men, for work in standards 3 to 6. The course lasts 2 years, and the entrance qualification is a good pass in the Junior Certificate examination. The syllabus is the same as that followed in institutions in Basutoland.

Teachers. Graduate staff is recruited mainly from the Union of South Africa as not enough professionally qualified graduates are available. The junior secondary day schools employ graduate headmasters with local matriculated and professionally qualified non-graduate teachers. St. Joseph's College employs chiefly European missionary staff.

Out-of-class activities. There are games and athletic sports meetings, and concerts are a regular school activity. In the general secondary schools and the teacher training college corporate life is fostered by the wearing of uniforms and badges. In the secondary boarding schools at the teacher training college the staff is assisted in administration and discipline by a system of prefects whose powers are being gradually extended as experience is acquired and a sense of responsibility developed.

TRENDS AND PROBLEMS

Plans for the development of African education in the Protectorate are limited by the financial and economic resources available, and primary education takes first priority. Nevertheless, the steady improvement of facilities at secondary level is reflected in the rapid decrease in the number of Bechuanaland students attending extra-territorial institutions. Among the more immediate aims is that of establishing full differentiated courses at Moeng College and St. Joseph's College, under suitably qualified staff.

[*Text revised by the Commonwealth Relations Office, London, in November 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 334,000.
Area: 275,000 square miles; 712,249 square kilometres.
Population density: 1 per square mile; 0.5 per square kilometre.

Summary of school statistics, 1953–57. In 1957 total enrolment was 29,500, representing approximately 9 per cent of the population. Of these pupils nearly 99 per cent were in primary schools. The proportion of girls enrolled was

about 60 per cent in primary schools, and over 40 per cent in general secondary schools; 49 per cent of the teachers in primary schools were women. The average pupil-teacher ratio was 37 in primary schools and 11 in general secondary schools. Compared with 1953, enrolment had increased by 56 per cent in primary schools and by 120 per cent in general secondary schools. In the teacher training college, the number of students increased from 50 in 1953 to 69 in 1957 of whom 37 were women. Girls enrolled in the homecrafts centre numbered 23 in 1957 compared with 9 in 1953.

European pupils generally leave Bechuanaland to pursue their secondary education in the Union of South Africa or in Southern Rhodesia. About 220 European children were being educated abroad in 1956. The number of African students attending extra-territorial secondary general and technical institutions is decreasing rapidly as facilities in Bechuanaland improve. (See Table 2.)

Examination results in secondary education, 1953–57. The number of African pupils reaching the Junior Certificate level was 47 in 1957 compared with 20 in 1953. There were two matriculation passes in 1956, this being the first occasion on which Bechuana students were successful in this examination. Thirteen Africans passed the final teacher training examination in 1957 compared with 11 in 1953 and 19 in 1956.

Educational finance, 1957. Total expenditure on education in the fiscal year beginning in January 1957 amounted to 246,900 pounds sterling or approximately £0.7 per inhabitant. Of the amount spent, 36 per cent (£88,147) was contributed by the Central Government from territorial revenue, 16 per cent (£38,959) came from United Kingdom funds, 40 per cent (£99,794) from local authorities, and 8 per cent (£20,000) from voluntary agencies. African schools accounted for 76 per cent of total expenditure on primary education and at the secondary level for more than 90 per cent. Expenditure on vocational education and teacher training was exclusively for Africans. Capital expenditure (£73,911) was nearly 30 per cent of the total. The distribution of recurring expenditure by level and type of education is given in Table 1.

Source. Bechuanaland: Education Department, annual reports.

1. EDUCATIONAL FINANCE, 1957 (in pounds sterling)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure	**172 989**	**100.0**
Central administration	21 885	12.7
African schools	20 691	12.0
European schools	1 094	0.6
Coloured schools	100	0.1
Primary education	110 476	63.9
African	84 140	48.64
European	24 230	14.00
Coloured	2 106	1.22
Secondary education	29 050	16.8
African	26 202	15.1
European	2 848	1.7
Vocational education	2 571	1.5
African	2 571	
Teacher training	7 643	4.4
African	7 643	
Other education	1 364	0.8
African	764	0.44
European	600	0.35

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	African primary schools, public	1957	159	745	357	27 468	16 665
	European primary schools, public	1957	9	21	16	351	165
	Coloured primary schools, public	1957	5	10	5	259	151
	African primary schools, aided private	1957	7	20	13	1 045	629
	Total	**1957**	**180**	**796**	**391**	**29 123**	**17 610**
	"	1956	173	655	314	24 720	15 117
	"	1955	166	641	302	21 015	12 968
	"	1954	161	611	293	20 434	12 737
	"	1953	152	577	268	18 664	11 667
Secondary *General*	African secondary schools, public	1957	3	16	–	113	67
	African secondary schools, aided private	1957	2	14	4	222	70
	Total	**1957**	**5**	**30**	**4**	**335**	**137**
	"	1956	5	28	5	325	123
	"	1955	4	28	4	242	89
	"	1954	4	26	2	169	58
	"	1953	4	24	6	152	60

Note. There were in addition seven students attending university courses outside the Protectorate in 1956.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Vocational	African homecrafts centre, aided private						
	Total	**1957**	**1**	**3**	**3**	**23**	**23**
	,,	1956	1	3	3	30	30
	,,	1955	1	3	3	22	22
	,,	1954	1	2	2	13	13
	,,	1953	1	2	2	9	9
Teacher training	African teacher training college, public						
	Total	**1957**	**1**	**7**	**3**	**69**	**37**
	,,	1956	1	5	2	53	26
	,,	1955	1	5	2	53	27
	,,	1954	1	7	3	53	27
	,,	1953	1	7	3	50	28

FEDERATION OF RHODESIA AND NYASALAND

The Federation was brought into existence on 4 September 1953. It consists of the self-governing territory of Southern Rhodesia and the protectorates of Northern Rhodesia and Nyasaland, all of which retain the constitutional status they had before federation. The Constitution vests responsibility for non-African education and higher education in the Federal Government; primary and secondary education of African children remain functions of the separate Territorial Governments.

NON-AFRICAN EDUCATION

THE EDUCATIONAL SYSTEM

The Federal Ministry of Education was established on 1 July 1954 when the Federal Government took over responsibility for non-African primary and secondary education. Until 31 December 1956 the Ministry operated by virtue of the three territorial education laws, modified, where necessary, under the Territorial Laws Amendment Act.

A draft Federal Education Bill was prepared and published towards the end of 1955. This draft Bill was studied by school councils, the non-statutory Education Advisory Board, and various interested bodies, and in the light of representations which were made, a second draft Bill was published on 15 June 1956. This Bill was presented to the Federal Assembly and was passed with minor amendments, and the act was promulgated on 1 January 1957.

The new Education Act drew mainly upon the legislative experience of the Territorial Governments which preceded it.

The Act gives authority for the establishment of schools, educational institutions and classes, and lays down that tuition at all government schools shall be free to children whose parents are resident in the Federation. The conditions under which a general purpose fund may be established by a headmaster are laid down. General purpose funds are to finance extra-curricular activities which have as their object the spiritual, physical and intellectual welfare of the pupils.

The Act provides for the registration of privately-run schools, and thus assures that proper standards of accommodation, staffing, curricula, and teaching practice are adopted initially, and maintained.

All schools, whether government or private, are required to conform with, and observe, the requirements of the Ministry of Health, and the Act provides for medical and dental inspection of all pupils, in addition to the usual requirements for the control of communicable disease.

The English language is to be used as the medium of instruction in all schools, but at the same time it is recognized that where there is an inadequate knowledge of English, instruction in the vernacular language may be given for a limited period in order to facilitate and expedite the use of English. Where a language other than English is necessary for the purposes of religious instruction, the Act authorises the use of such language by clergymen.

A principle, hitherto peculiar to Southern Rhodesia, by which ministers of recognized religious denominations are

entitled to enter government schools for the purpose of giving religious instruction to the pupil adherents of their denominations, has been extended to the entire Federation. The exercise of this privilege is subject to safeguards relating to conscientious objection by parents of pupils. If the ministers are unable to undertake the work, the principal of a school must arrange for the religious instruction of the pupils, but a teacher who has religious objections may not be called upon to participate.

Pupils who are unable, by reason of distance, to attend school as day-scholars are accommodated in government hostels for which parents pay a sub-economic boarding fee. In addition, transport, maintenance and other grants are available to indigent parents.

The Act embodies the principle of compulsory education for all non-African children from the age of 7 years until the pupil has reached the age of 15 years, but includes provision for a member of a class or groups of persons to be declared exempt from the ruling regarding compulsory attendance at school. All European children and all non-European children who live within three miles of a school are compelled to attend school.

The establishment of an Education Advisory Board, whose function will be to advise the Minister on matters of importance in the field of education has been provided for, and provision has also been made for Regional Advisory Boards. Recognition is given to teacher and parent-teacher associations and to school councils.

The pupil who, because of mental or physical disability, is unable to participate in, or benefit from, normal educational classes is provided for in the Education Act. Provision is made for the establishment and maintenance of special schools, educational institutions or classes and, in addition, for the making of grants or loans to enable such handicapped children to attend non-government institutions whether within or outside the Federation. In pursuance of these provisions, the Government has established certain special schools and institutions, and has established special classes for the teaching of educationally sub-normal pupils.

THE DEVELOPMENT OF SECONDARY EDUCATION

Southern Rhodesia

In Southern Rhodesia the first steps in the establishment of schools were taken by the churches. In October 1892 the first European school in the country was opened in Salisbury by the Dominican Sisters, and this was soon followed by other church schools. The first undenominational school was opened in Salisbury in 1898 by the Salisbury Public Undenominational School Committee.

In 1899 the first Education Ordinance was promulgated. This established an Education Department which took over the supervision of government aid and in due course began to control some existing aided schools and to establish new government schools. In 1910 the first two grants were made by the Beit Trustees to enable two women teachers to be trained at Grahamstown. By this time the country was becoming more settled and new schools were being opened at the rate of 10 or 12 a year.

In 1923 the establishment of responsible government saw a great increase in provisions for new schools and hostels. Commissions were appointed, one in 1929 and one in 1935, to inquire into the educational system of the Colony. In 1938 the Education Act was promulgated. This tightened up the law with respect to the compulsory education of Europeans and introduced a certain amount of compulsory education for non-Europeans.

Northern Rhodesia

The British South Africa Company opened its first school for European children in 1912. From 1914 to 1919 the Education Department of Southern Rhodesia advised on education in Northern Rhodesia and conducted annual inspections. Formal ties then ceased, but the Department in Salisbury continued to manifest a sympathetic interest in European education in Northern Rhodesia.

In 1925 an Education Department was created, and in 1942 the European Education Ordinance came into force, providing for the compulsory education of all European children between the ages of 7 and 15 living not more than three miles from a government school.

Nyasaland

The early history of education in Nyasaland was necessarily concerned mainly with the development of education for Africans, and this remained the major part of the work of the Education Department.

For many years children of mixed blood were educated in mission schools, but 1947 saw the opening of the first government school for Eurafricans. Private Indian schools were maintained at various centres and managed by Indian school committees; salary grants for properly trained teachers were made by the Government. By 1953 there were, for European children, three full-range government primary schools.

Federation

In July 1954, after the Federation of the three Territories, the Federal Government assumed responsibility for the education of non-African children and for the higher education of all students resident in the Federation. In so far as these responsibilities were concerned, the duties of the three Education Departments were taken over by the Federal Ministry of Education.

Administration

The Ministry of Education is controlled by a Secretary for Education. Under the Secretary are five officers, the Chief Inspector, the Chief Education Officer, the Under Secretary, the Assistant Secretary (Administration) and the Assistant Secretary (Finance).

The Chief Inspector is in charge of a staff of 14 inspectors who are responsible to him for the inspection of the work of the schools. The inspectors are recruited from the teaching service, and are selected on the basis of suitability in regard to human relationships, and ability to carry out inspection of subjects so that the whole field of the primary

and secondary curriculum is covered. The Inspectorate is distributed in Salisbury, the main centre of the Federation, Bulawayo, Lusaka, Ndola and Blantyre. There is a Senior Inspector at each centre who works in close liaison with the respective Regional Director, so that he is in a position to deputize when the need arises.

The Chief Education Officer and the Under Secretary share the administrative duties which arise in connexion with the teachers, pupils, school buildings and general provision for education.

The Assistant Secretary (Administration) is generally responsible for the proper functioning of the ministry's office staff, and is responsible for legal interpretations of regulations.

The Assistant Secretary (Finance) keeps account of the revenue and expenditure of the Ministry.

The Federation is divided into five regions each in charge of a Regional Director, who is responsible for the detailed administration within his region.

Planning and policy. The Secretary and his senior officers undertake the planning in regard to staffing, curricula, equipment, school buildings, attendance of pupils, hostel accommodation, internal and external examinations, and technical education in terms of the policy laid down by the Minister.

The Federal Education Advisory Board, which is comprised of professional officers as well as laymen, functions in an advisory capacity to the Secretary, while the five regional advisory boards assist in a similar manner.

Finance. Educational expenditure is financed out of national taxes devised by the Federal Government.

The main heads of expenditure are salaries, wages and allowances, school buildings, hostel accommodation, grants for teacher training, textbooks and equipment, and water, light and sanitary charges. The total bill in 1958 was nearly £8 million.

No tuition fees are charged for the secondary stage of education in government schools, and textbooks and stationery are supplied free of charge.

Private schools are assisted by a grant of £20 per annum per pupil in attendance at the school.

Hostel accommodation is provided at nearly all secondary schools. Eligibility for admission as boarders is restricted to those pupils whose parents are resident nine miles or more from a school providing suitable educational facilities. The fees are £81 per annum.

Parents who are unable to meet the cost of boarding may be awarded grants on a means test.

Buildings and equipment. A Schools Building Planning Group, composed of officers of the Ministry of Education and the Department of Public Works, meets regularly to discuss all matters connected with buildings, playing-fields and sites.

Standards in such matters as size of rooms, playing-field areas, sanitation, lighting, ventilation, etc., have been laid down. Plans of new buildings are scrutinized before being accepted by the Ministry.

School welfare services. The Ministry of Health provides a service by which every child is medically examined, and a dental service which inspects children's teeth but provides treatment only for those who can prove whole, or partial, indigency.

The Department of Social Welfare provides clothing grants for children of destitute parents.

TYPES OF SECONDARY EDUCATION

General secondary schools

Children normally pass from primary to secondary schools at the age of 12 +.

With the exception of two technical high schools, the government secondary schools of the Federation may be regarded as multilateral. They each accept all comers (from a declared zone) and offer a variety of courses to suit pupils of varying interests and levels of ability. The courses available in each normal secondary school may be described briefly as follows.

Academic. The most able pupils follow an academic course, similar to that of grammar schools in the United Kingdom, which leads to external public examinations organized from overseas. The first examination—Cambridge Oversea School Certificate—is taken at the end of four years, after which a large proportion of the pupils proceed to the 2-year Sixth Form course leading to the Higher School Certificate of the Cambridge Syndicate. Success in this examination provides the qualifications necessary for admission to universities and the higher professions. As a matter of interest, it may be noted that a credit in the Cambridge Oversea School Certificate and a pass in the Higher School Certificate are regarded as equivalent to Ordinary and Advanced level passes, respectively, in the General Certificate of Education.

Slow academic. The slower academic course is followed by pupils who take the Cambridge Oversea School Certificate in their fifth year, probably, but not necessarily, having taken the College of Preceptors Certificate in their fourth year. In this course schools make provision for such subjects as commerce, typing, housecraft, woodwork, metalwork, technical drawing, etc. These practical subjects may be offered for both the College of Preceptors and the Cambridge Oversea School Certificate examinations.

General. Pupils following a general course are those whose requirements will be met by a full, or partial, College of Preceptors Certificate. Again, the choice of subjects permits pupils to take a variety of practical subjects in addition to the normal English, mathematics and science.

This system of examination affords pupils every opportunity to follow courses of their choice as far as their ability enables them to go. It is, for instance, unlikely that many pupils from the slow academic stream will wish to proceed to the 2-year Higher School Certificate course, but there is nothing to prevent their doing so, if they have shown that they have the capacity for study at this level.

Technical high schools. These two schools provide education with a technical bias for boys (not girls) of good ability whose bent is towards mathematics, science and technology rather than towards arts subjects. Despite the different emphasis in the curriculum, the examinations taken are

the same as those listed above for other high schools, and at the top level (Higher School Certificate) boys are prepared for admission to universities, or to courses of the Institutions of Engineering. The intention of these schools, like the others, is to provide a good all-round education, but commercial subjects are not catered for and subjects such as Latin are not included in the curriculum. Although the bias in these schools is technical, their purpose is not to train boys for any particular occupation: this is regarded as the function of industry and the technical college, after secondary schooling has been completed. As these two schools can offer only a limited number of day and hostel places, admission is gained on the results of an entrance examination. A pupil who fails to gain admission to a technical high school is not debarred from obtaining technical education; he may take a course including a number of practical/technical subjects at the normal secondary school to which he is admitted.

A note on curricula generally. Lest it should appear that the courses offered are determined solely by examination requirements it should be pointed out that cultural subjects and activities are a feature of the curriculum in all schools. Religious instruction, music and physical education form part of the curriculum for all pupils, and art and the light crafts have a prominent place particularly in the courses offered to the general stream. When pupils study a second language they are usually offered the choice of French or Afrikaans. One or two schools in recent years have offered German as an alternative to French.

Placing of pupils in appropriate courses. The choice of course to be followed by any child rests with the parents, but ability is obviously a limiting factor, and parents are warned that the selection of a course against the advice of the heads of primary and secondary schools may have a harmful effect on the child and may endanger his, or her, educational future.

The normal procedure adopted by secondary schools is to examine all entrants to form 1 shortly after their admission. For this purpose, standardized tests in the key subjects of English and arithmetic, and in general intelligence, are usually employed. On the combined results of these tests and taking into account information received from the primary school, principals inform parents of the course for which their child appears to be best suited, and of the division of form 1 in which he or she has been placed. The dividing lines between the various form 1 classes in any school are generally indistinct and the classification at this stage is not final. In fact, the form 1 year is regarded as a period of observation during which all pupils may be following approximately similar courses, but at different rates, so that they have an opportunity of showing their capabilities. The placing of pupils is reviewed at some stage during the first year by means of tests and the work actually done. Even in later stages of the secondary school changes of course are possible, but wide moves are rendered difficult by variations in the curricula which are followed by the different streams.

The school year. The school year, which starts in late January and ends in mid-December, is divided as nearly as possible into three terms of equal duration. The working week is from Monday to Friday and the school calendar is devised so as to provide approximately 195 school days each year.

School hours are normally from 8 a.m. to 1 p.m. with a half-hour interval, thus providing 4½ hours of actual teaching time daily. In most secondary schools the morning programme is supplemented by periods of afternoon study, particularly for senior students engaged in practical work in the laboratories. Attendance at these afternoon sessions is voluntary, but generally only older pupils are affected and the percentage of absentees is negligible.

Teaching staff. The secondary schools are staffed mainly by graduates trained at South African or overseas universities, with, in recent years, a small but increasing number of recruits from the University College of Rhodesia and Nyasaland. A relatively small proportion of the body of teachers in secondary schools consists of non-graduates, most of them appointed after experience in secondary modern schools in Britain. The Federation's own Teacher Training College is now training a small number of non-graduate teachers for work in the lower forms of the secondary schools. Married women are employed in considerable numbers particularly in co-educational or girls' schools. They are usually appointed on a temporary basis although they are eligible in certain circumstances for appointment on pensionable terms.

Posts of special responsibility are allowed to secondary schools on a basis of enrolment. Most of the posts are occupied by teachers in charge of subjects (or courses), who themselves teach up to sixth form level and accept responsibility, under the head, for the organization and supervision of their subject throughout the school.

Technical institutions

There are two technical institutions, the Salisbury Polytechnic and the Bulawayo Technical College, controlled and financed by the Ministry, which provide post-school education for persons over school age on a full-time and part-time basis as is required by local industry and commerce. Leisure time classes, of a cultural and practical value, are classified as adult education and are self-supporting.

Advisory bodies are nominated by societies, associations and bodies approved by the Government.

Craft courses form an integral part of the requirements of apprenticeship and attendance is compulsory as laid down by statutory law. Close liaison between industry and the college exists through the various local joint committees of the industrial councils for the building, motor and engineering industries. The system of implementing the statutory requirements will be superseded in January 1960 by an Apprenticeship Board which will take over all the functions appertaining to apprenticeships previously administered by the local committees.

Entry into the course may be preceded by a preliminary craft course of one year's duration or, under certain conditions, direct entry to the craft course is permitted. The minimum age is 16 years, and the educational entry qualification is a pass in English and mathematics or arithmetic at standard 7 level.

Engineering

Craft level (usually a full morning release with one evening lecture). Courses aiming at the City and Guilds of London examinations in such subjects as machine shop engineering and refrigeration, motor vehicle mechanics and electricians work, electrical fitting and fabrication of steelwork. Owing to small numbers, Union of South Africa examinations are taken (augmented with practical work) in sheet-metalwork, boiler-making and welding, and in Salisbury aircraft engineering.

Technicians (one complete day release with evening lectures). City and Guilds courses aiming at the overseas certificates in mechanical and electrical engineering; telecommunication engineering, radio and television servicing courses have also been initiated.

Engineering technology (and allied technologies). Courses leading to the examinations of the major professional engineering institutions, London, i.e., the Institutions of Mechanical, Civil and Electrical Engineers, together with the Institutions of Structural and Municipal Engineers, Chemical Engineers, the Institute of Brewing and Institutions of Rubber Industry.

Building

Craft level. Courses aiming at the City and Guilds examinations in carpentry and joinery, brickwork, plasterers' work, painters' and decorators' work, plumbers' work and electrical installations.

Technicians. A building course designed to meet the requirements of students who intend to occupy a technical or administrative position in the industry. Union of South Africa Technical Certificates and City and Guilds Overseas Certificates are the aim of this course.

Advanced building course. Course leading to the Advanced Technical Certificates of the Union of South Africa, the Diploma of Building of the Union of South Africa or the Institute of Builders (London) Licentiate Diploma; Association of Building Technicians, Clerk of Works Diploma examination; Institution of Municipal Engineers examination; Building Inspectors examinations; and the Institute of Quantity Surveyors, Intermediate examination.

Printing (in Salisbury only). Courses in lithography, letterpress machine minding, composing, binding, stereotyping and electrotyping and printing science. Workshop equipment is being rapidly installed.

Mining (in Bulawayo only). Courses for surveyors, assayers, samplers, etc.

Commerce

Full-time courses (1 year and 1½ years). These include courses for private secretaries or shorthand-typists, and various courses offering general commercial training. Students who have attended classes at a college may proceed to advanced training as second-year students. Students are also accepted for separate subjects in shorthand-typewriting, dictaphone-typewriting, and bookkeeping.

Evening classes. These include commercial courses—book-keeping to diploma grade, shorthand, typewriting to diploma grade and Civil Service Lower Law—and professional courses leading to the examinations of the following bodies: Chartered Institute of Secretaries, Corporation of Secretaries, British Institute of Transport, British Institute of Management, Institute of Cost and Works Accountants, Institute of Bankers, Institute of Book-keepers.

Adult education (part-time classes only). The subjects chosen in this Department mostly have a practical appeal.

Women's subjects. Cookery, cake icing, floral arrangements, dressmaking, millinery and pattern drafting.

General subjects. African languages of Shona, Nyanja, Sindebele and Basic Bantu; fine art, motorcar maintenance, woodwork, photography, printing, gardening, English for foreign students, Portuguese, salesmanship, oil technology, steel, fibres and dyeing.

Management studies. Various courses are conducted in this field from time to time, mainly aiming at the lower levels of management, under such sub-headings as basic organization, personnel management, sales function, production organization, managerial accounts, and management/labour relations.

The Copperbelt Technical Foundation

This foundation has assumed responsibility for technical education on the Copperbelt. Four colleges, one in each of the large Copperbelt towns, have been opened.

While the work of the institutions is mainly connected with the training of apprentices, classes have been opened for commercial subjects and adult education.

The Government assists the foundation with a grant to meet the cost of recurrent expenditure.

Technical centres

At 10 centres in the Federation classes are provided for commercial and technical students. The centres are staffed by teachers who are employed as part-time teachers. It is proposed to build accommodation for these centres at as early a date as possible.

Out-of-class activities

In the general secondary schools the combination of afternoons free from lessons and a favourable climate makes possible a wide range of out-of-class activities. Sport features widely. Most schools have extensive playing fields and offer sporting activities within the following range: rugby, cricket, soccer, hockey, tennis, netball, baseball, squash racquets, athletics, and swimming (many schools have their own swimming baths). Other activities include: cadets, dramatic societies, debating societies, science societies, chess clubs, hobbies' clubs, young farmers' clubs, Boy Scouts, Girl Guides, art societies, dancing (ballet and ballroom), school orchestras, angling societies, philately, music appreciation, photographic societies, etc.

The Teachers' Association and the Ministry organize overseas tours for senior pupils with parties of boys and

girls travelling alternate years. There is also a very flourishing Rhodesian Schools Exploration Society which undertakes work which would normally fall to the lot of the national museums or the National Monuments Commission, if these bodies had the necessary personnel and finance available. As it is, officers from the museum accompany the expeditions and act as group leaders. Specimens of plants have been sent as far afield as Kew Herbarium.

TRENDS AND PROBLEMS

The year 1959 has seen a change of focus from the Cambridge Oversea School Certificate to the Higher School Certificate with its sterner academic discipline and more exacting demands. From now on the only route to the university for students will be via a 2-year post-certificate Course. This higher entrance qualification is required even by the universities of the Union, whose requirements for South African pupils remains at the slightly lower matriculation level, as well as by the University College of Rhodesia and Nyasaland.

The change is welcomed by the Ministry who have for some time regretted the immaturity of many university entrants who left school with credits in the Cambridge Oversea School Certificate after only four years' secondary education. The repercussions upon the schools cannot fail to have a stimulating effect. More students are remaining at school for a full sixth form course and it is to the good that the school leaders are now, in the main, scholars as well as sportsmen. This trend has, of course, its concomitant difficulties reflected in the need for extra classrooms, for extra subject specialists and for extra boarding accommodation.

Within the technical schools there is a very definite change in character brought about by the continued implementation of a policy which demands selective entry. There has at times been a danger that these institutions might degenerate into quasi-trade schools for scholars who had admitted defeat in the academic field. Such a danger no longer exists for, consequent upon the elimination of pupils less well endowed intellectually, there has arisen an increasing consciousness that the function of these schools is to give their pupils a broad cultural education to which interest is added by a heightened awareness of the practical world around them. It is a natural development from this wider conception of technical education that there has been a move in these schools towards the Cambridge Oversea School Certificate and Cambridge Higher School Certificate examinations. These examinations are at present supplemented by the South African National Technical examinations but, from 1961 onwards, the pattern will change with the introduction of the College of Preceptors examinations and the progressive running down of the national technical and commercial courses.

The introduction of the College of Preceptors examinations raises the question of their evaluation as a qualification for admission to technical college courses and to apprenticeship at varying levels. These matters are now under consideration.

In general, it can be said that the main trend in secondary education has been an increased demand for higher education and a growing awareness of the need for a quickened tempo. Linked with this has been a review of the current examination system with the object of determining whether students are being stretched to their fullest capacity. The 'content' of secondary education grows almost monthly and necessitates a corresponding growth in effort.

AFRICAN EDUCATION

SOUTHERN RHODESIA

The educational system

In 1956 the Prime Minister assumed the responsibilities of Minister of Native Education, and the Director of Native Education, who heads the Department was also appointed Director of Native Development. These steps were taken because of the rapid growth of African education in Southern Rhodesia.

In the Department of Native Education the Director is assisted by a senior inspector and an administrative officer at headquarters. The country is divided into five divisions each controlled by a divisional inspector with several circuit inspectors on his staff. The inspectors are responsible for visiting both government and aided schools to ensure that standards are maintained.

The Government has progressively taken more direct action in providing schools—mainly secondary and large urban primary schools—which are financed fully by the Department.

Historically, the African school system was begun by missionary enterprise, and still today the great bulk of education is undertaken by missions which receive from the government teachers' salaries, and grants towards equipment and boarding establishments. Each of the main missions has an internal administrative system of its own, with superintendents of schools who visit all schools under their charge four times a year. Co-ordination of the work of the various educational agencies is obtained through the Education Advisory Board. This has mission representation and it discusses and advises the Government on all matters affecting the administration of native education. In salaries and salary grants there is complete parity between government and aided school teachers and no loss of service occurs when teachers move from one service to the other.

Education is controlled legally by Acts of the Legislative Assembly—the latest being that of 1959—and by regulations issued by the Department. A 5-year development plan for African education was started in July 1956. It set the main lines for expansion, with emphasis on the provision of secondary school and teacher training facilities.

With the rapid growth of secondary education in recent years, the chief inspector has assumed responsibility for carrying out team inspections assisted by a number of inspectors so that languages, sciences, and general subjects are fully covered.

Types of secondary school

The full primary course lasts 8 years, and leads to a public

examination which is controlled by the Department. Access to secondary schools is decided by the individual schools through a separate examination of applicants.

The secondary school course comprises six forms; after the second, students take the Southern Rhodesia Junior Certificate examination, after the fourth, the Cambridge Oversea School Certificate examination, and some few schools have the higher level course in forms 5 and 6.

Government secondary schools were originally boarding schools only, but lately a number of urban day commercial courses are offered. The majority of general secondary schools are aided schools with the 4-year course. The medium of instruction is English, and curricula and syllabuses are worked out by individual schools in the light of examination requirements.

The largest group of vocational schools are those training primary teachers. Both the Government and missions maintain teacher training schools which provide 2-year courses at two levels: the higher recruiting from students who have passed the junior certificate, and the lower following immediately on primary education. A number of centres also train domestic science teachers. Under the development plan teacher training is expanding rapidly, but the demand for new teachers is so great that it is not yet possible to convert the lower courses to the higher standard.

Industrial schools also provide a curriculum at secondary level. The government schools are residential and have courses in agriculture, building and carpentry lasting 4 years; a 3-year course for health demonstrators and another for leatherwork have recently been added. Aided industrial schools follow a similar pattern, submitting their students for the departmental elementary industrial examination. The missions have evolved also a number of homecraft schools, designed to meet the needs of women who have not been able to obtain a full primary education but who wish to learn about cooking, sewing, baby care and all the requirements which go to make a home.

NORTHERN RHODESIA

The educational system

African education forms part of the portfolio of the Member for Education and Social Service in the Legislative Council, at which level policy is decided. The Education Department is headed by a Director who is assisted by a specialist staff at headquarters; he acts also as chairman of the African Education Advisory Board, a body representing the various educational interests in the Territory, which meets annually to advise the Governor on matters of policy.

Below the territorial level there are local education authorities, one for each of the seven provinces and one for each rural or urban administrative district in the country. Provincial education officers serve as chairmen of the provincial authorities and are responsible for the control and supervision of all public and aided schools in their areas.

The system of education in Northern Rhodesia has always been based on co-operation between the Government and voluntary agencies, normally missionary societies. While the number of local authorities schools is now increasing rapidly, the missions still manage a large proportion of schools and maintain administrative and supervisory services for them.

The government's financial assistance to the missions and local authorities covers a wide field: teachers' salaries payable in full according to approved scales, equipment and boarding grants and, for approved school buildings, between 75 and 100 per cent of the cost.

A 10-year development plan (1947–56) was adopted after the war to provide for a rational expansion of the school system. A new plan, drawn up in 1955, had to be postponed until 1957 because of financial stringency. In general, educational policy is closely related to the country's economic and social policy. The long-term aims of the Department may be summarized as being: (a) to provide universal primary education as soon as possible; (b) to equip further, through secondary education and technical training, the numbers required to take part in the administrative and social services and in the industry, trade and commerce of the territory; (c) to assist in building up stable rural communities; (d) to assist economic development through trades and technical training schemes; and (e) to assist community development programmes and the production of suitable literature.

Types of secondary school

The African education system of Northern Rhodesia is divided into primary (8 years, with lower and upper cycles of 4 years each) and secondary ($4\frac{1}{2}$ years, the first 2 years forming the junior secondary course). At the end of the full primary course pupils take a departmental examination for the primary school leaving certificate. Selection for admission to secondary schools is carried out on a territorial basis and all the principals of junior secondary schools assemble annually for this purpose. Examination results, age, place of residence and headmasters' reports are among the factors taken into account.

The general secondary schools comprise junior and senior schools. The former have a 2-year course with mathematics, Latin, French, health science, metalwork, woodwork and book-keeping added to the subjects carried forward from the primary curriculum (including the two main vernacular languages). English is used as the medium. A departmental junior secondary school leaving certificate is taken at the end of the course. In senior secondary schools, students continue for two and a half years to the level of the Cambridge Oversea School Certificate. One school offers in addition sixth form work (two years) to the higher level required for admission to the University College of Rhodesia and Nyasaland.

Technical and vocational schools show a similar pattern as to level. Primary school leavers may go to trades schools run by local authorities and missions, where the courses of 3 years are directed chiefly to the building trades. Vocational training schools are run also by many other Government Departments, such as the medical training schools, the survey school, agricultural and veterinary training school and so on. The normal entry qualification has been the primary school certificate, but there is a tendency to demand completion of junior or even senior secondary school from applicants.

The territory has one technical college with a wide range of courses lasting between 2 and 4 years; the majority of these are at secondary level, but some are at higher level, recruiting students who have completed secondary school.

Teacher training courses take various forms. The department's policy is to build up a few large and efficient colleges in place of a profusion of small denominational institutions where inevitably the training is less diversified. The different courses are described in terms of the teaching certificate to which they lead: T4, a 2-year course for lower primary school teachers, recruiting primary school leavers; T3, a 2-year course following junior secondary school; T2 and T1, both at post-secondary level; and the Higher Teachers' Certificate In-Service Course, which is a modified form of the T4 but reserved for experienced teachers.

NYASALAND

The educational system

The Department of Education, headed by a Director, comprises a headquarters staff and a field staff of education officers in the three Provinces. The Director is responsible for the general conduct of schools, including the registration and classification of schools and teachers, and for co-ordinating the work of the various voluntary agencies. He is assisted by an Advisory Committee on African Education. The supervision of schools is centred mainly at provincial level, and further devolution for the planning and financing of schools is made to district authorities.

The first schools resulted from missionary enterprise, and today the majority of schools are maintained by the missions. Local authority schools are increasing. Both these types of administration receive financial grants from the Government. The Central Government maintains a few primary schools, but is more active at the post-primary level.

Since 1945 the expansion of education has taken place within the framework of a series of development plans, the current plan covering the period 1957–61. The long-term objectives of educational policy in Nyasaland include: the expansion of primary education towards the goal of universal schooling; the expansion of secondary education with the object of providing opportunities for further education for those pupils whose primary school performance indicates the likelihood of their successfully completing a course of secondary education; the provision of technical education facilities for those whose aptitude is for technical rather than academic skills and for whom there is an employment demand; and the preparation of the best pupils from secondary schools for entrance to universities.

Types of secondary school

The primary course covers 8 years in two cycles (5+3) and leads to the Nyasaland Government Standard 4 examination.

General secondary education is provided by junior secondary schools with a 2-year course leading to the departmental Standard 8 Certificate. Full secondary schools contain this cycle as well as the next cycle of two years which prepares for the Cambridge Oversea School Certificate. More recently, when the University College of Rhodesia and Nyasaland decided to require the Higher School Certificate as its standard of entry, the necessary course of 2 years has been added to one secondary school.

Technical and vocational training is provided by artisan and junior trade training centres at post-primary level with courses lasting up to 5 years.

Teacher training courses exist at three levels: the English grade course (2 years) immediately after primary school, the higher grade course (2 years) after junior secondary education, and the higher training course at a post-secondary level.

[*Text prepared by the Federal Ministry of Education, Salisbury, in March 1960.*]

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STATISTICS: RHODESIA AND NYASALAND

Population (mid-year 1958 estimate): 7,650,000.
Area: 483,829 square miles; 1,253,116 square kilometres.
Population density: 16 per square mile; 6 per square kilometre.

NON-AFRICAN EDUCATION

Summary of school statistics, 1953–57. In 1957 there were 67,959 pupils enrolled in non-African schools throughout the Federation. Of this number 59,787 were in European schools and 8,172 in schools for Asiatic and Coloured children. Of the European children, 43,528 were in schools in Southern Rhodesia, 15,335 in Northern Rhodesia, and 924 in Nyasaland. Of Asia and Coloured pupils, 4,778 were in Southern Rhodesia, 1,562 in Northern Rhodesia and 1,832 in Nyasaland. Compared with 1953, enrolment in European schools throughout the Federation increased by 45 per cent and in Asiatic and Coloured schools by 70 per cent. (See Tables 1, 2 and 3.)

Examination results in secondary education, 1953–57. Non-African candidates in the Federation awarded full certifi-

cates in the Cambridge Oversea School Certificate examinations rose from 988 in 1955 to 1,296 in 1957, representing an increase of 31 per cent. In the Cambridge Higher School Certificate examination, successful candidates numbered 104 in 1957 compared with 60 in 1955. (See Table 4.)

Educational finance. Educational finance for non-Africans is the responsibility of the Federal Government but details of the amounts spent are not available.

Source. Federation of Rhodesia and Nyasaland: annual reports on education.

1. SOUTHERN RHODESIA: SUMMARY OF SCHOOL STATISTICS, 1953–57. NON-AFRICAN EDUCATION

Type of institution	1953		1954		1955		1956		1957	
	Schools	Enrolment	Schools	Enrolment	Schools	Enrolment	Schools	Enrolment	Schools	Enrolment
Total	**168**	**34 957**	**175**	**37 400**	**182**	**40 539**	**194**	**44 210**	**201**	**48 306**
European schools										
Primary schools, public	116	19 542	120	20 635	127	22 514	111	24 660	118	26 760
Secondary schools, public		7 386		7 910		8 515	21	9 353	22	10 522
Primary schools, private	33	4 530	34	5 090	33	5 407	39	4 022	38	4 079
Secondary schools, private								1 730		2 167
Boarding schools, public[1]	...	(5 614)	...	(5 823)	...	(6 221)	...	(6 504)	...	(6 488)
Boarding schools, private[1]	...	(1 894)	...	(2 104)	...	(2 280)	...	(2 485)	...	(2 709)
Asiatic and Coloured schools										
Primary schools, public	14	2 469	16	2 660	17	2 976	15	2 871	15	3 047
Secondary schools, public							2	368	2	466
Primary and secondary schools, private	5	1 030	5	1 105	5	1 127	6	1 206	6	1 265
Boarding schools, public[1]	...	...	...	...	...	...	...	(304)	...	(292)
Boarding schools, private[1]	...	...	...	...	...	...	...	(1 187)	...	(1 241)

1. Boarding schools are included with primary and secondary schools shown above.

2. NORTHERN RHODESIA: SUMMARY OF SCHOOL STATISTICS, 1953–57. NON-AFRICAN EDUCATION

Type of institution	1953		1954		1955		1956		1957	
	Schools	Enrolment	Schools	Enrolment	Schools	Enrolment	Schools	Enrolment	Schools	Enrolment
Total	**50**	**9 921**	**53**	**11 415**	**57**	**13 077**	**73**	**15 319**	**76**	**16 897**
European schools										
Primary schools, public	29	6 507	34	7 300	37	8 319	41	9 697	42	10 333
Secondary schools, public		1 305		1 561		1 917	9	2 281	9	2 891
Primary schools, private	13	1 617	10	1 883	10	1 914	10	1 874	10	1 978
Secondary schools, private								136		133
Boarding schools, public[1]	...	(383)	...	(387)	...	(594)	...	(768)	...	(822)
Boarding schools, private[1]	...	(422)	...	(386)	...	(346)	...	(381)	...	(265)
Asiatic and Coloured schools										
Primary schools, public	8	492	8	603	9	822	12	1 167	14	1 402
Primary and secondary schools, private	–	–	1	68	1	105	1	164	1	160
Boarding schools, public[1]	...	...	...	...	...	...	...	(98)	...	(100)
Boarding schools, private[1]	...	...	...	...	...	...	...	(155)	...	(154)

1. Boarding schools are included with primary and secondary schools shown above.

3. NYASALAND: SUMMARY OF SCHOOL STATISTICS, 1953–57. NON-AFRICAN EDUCATION

Type of institution	1953		1954		1955		1956		1957	
	Schools	Enrolment	Schools	Enrolment	Schools	Enrolment	Schools	Enrolment	Schools	Enrolment
Total	...	**1 286**	...	**1 526**	...	**1 834**	**16**	**2 059**	**19**	**2 756**
European schools										
Primary schools, public	...	283	...	308	...	332	4	444	4	652
Secondary schools, public	–	–	–	–	–	–		–		48
Primary schools, private	...	185	...	210	...	200	2	200	2	214
Secondary schools, private	–	–	–	–	–	–		–		10
Boarding schools, public[1]	–	–	–	–	–	–	...	(51)	...	(105)
Boarding schools, private[1]	–	–	–	–	–	–	...	...	...	(50)
Asiatic and Coloured schools										
Primary schools, public	...	[2]818	...	[2]1 008	...	1 302	10	1 415	13	1 832
Boarding schools, public[1]	–	–	–	–	–	–	...	...	...	(135)

1. Boarding schools are included with primary and secondary schools shown above.

2. Public and private. Private schools taken over by Government in 1955.

4. RHODESIA AND NYASALAND: EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57. NON-AFRICAN EDUCATION

Type of diploma or certificate granted	School year				
	1953/54	1954/55	1955/56	1956/57	1957/58
Cambridge Oversea School Certificate	[1]710	[1]855	988	1 132	1 296
Incomplete certificates	[1]174	[1]254	272	275	322
Cambridge Higher School Certificate	[1]40	[1]38	60	93	104
Incomplete certificates	[1]71	[1]105	161	253	328

1. Not including Nyasaland.

STATISTICS: SOUTHERN RHODESIA

Population (mid-year 1958 estimate): 2,640,000.
Area: 150,333 square miles; 389,362 square kilometres.
Population density: 18 per square mile; 7 per square kilometre.

AFRICAN EDUCATION

Summary of school statistics, 1953–57. Total enrolment in African primary and secondary schools at the beginning of 1957 was about 410,000 children, representing 16 per cent of the estimated population. Girls made up some 43 per cent of enrolment in primary schools and 17 per cent in general secondary schools at the beginning and end of the period under review. Enrolment in primary schools represented over 98 per cent of all African pupils; under 2 per cent were in general and vocational secondary schools and teacher training centres. The teaching staff in African schools numbered 11,200 in 1957 of whom 97 per cent were in primary schools; the pupil-teacher ratio in primary schools was 37 and in general secondary schools 22. Compared with 1953, enrolment in primary schools had increased by 53 per cent, in general secondary schools by 157 per cent, in vocational education by 22 per cent, and in teacher training centres by 76 per cent. (See Table 5.)

Examination results in secondary education, 1956/57. In 1956/57 there were 285 African candidates for the University Junior Certificate or Matriculation equivalent and 534, including 80 girls, for the Southern Rhodesia Junior Certificate which is taken in the second year of secondary school. There were in addition some African candidates for the General Certificate of Education but details are not available. There were 75 passes in the Cambridge Oversea School Certificate and 6 in the Cambridge Higher School Certificate in 1956/57. In the same year 632 candidates, including 177 women, passed the Teachers' Lower Primary Certificate and 133, including 14 women, were awarded the Teachers' Higher Primary Certificate.

Educational finance, 1957/58. Expenditure for African education made by the Southern Rhodesia Government amounted to 2,270,425 pounds sterling in 1957/58.[1] This amount does not include any contribution made by the Federal Government.

Source. Southern Rhodesia: Department of Native Affairs, reports on education.

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.

5. SOUTHERN RHODESIA: SUMMARY OF SCHOOL STATISTICS, 1953–57.[1] AFRICAN EDUCATION

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	35	*587	...	20 570	9 794
	Community schools, public	1957				3 327	137
	Primary schools, aided private	1957	2 410	*9 140	...	349 401	152 502
	Community schools, aided private	1957	73	*39	...	4 901	579
	Undenominational schools, aided private	1957	14	*127	...	4 671	2 091
	Central primary schools, aided private	1957	101	*960	...	24 466	8 998
	Total	**1957**	**2 633**	***10 853**	**...**	**407 336**	**174 101**
	,,	1956	2 577	10 306	...	378 146	160 647
	,,	1955	2 519	9 513	...	337 768	143 323
	,,	1954	2 498	8 514	...	309 247	132 273
	,,	1953	2 314	7 829	...	266 242	113 926
Secondary *General*	Secondary schools, public	1957	2	*12	...	453	89
	Secondary schools, aided private	1957	16	*89	...	2 109	346
	Total	**1957**	**18**	***101**	**...**	**2 562**	**435**
	,,	1956	16	80	...	1 758	294
	,,	1955	14	85	...	1 530	255
	,,	1954	13	82	...	1 339	218
	,,	1953	12	68	...	996	174
Vocational	Industrial schools, public	1957	2	*42	...	631	–
	Industrial schools, aided private	1957	8	*22	...	471	–
	Domestic science schools, aided private	1957	7	*14	...	369	369
	Total	**1957**	**17**	***78**	**...**	**1 471**	**369**
	,,	1956	17	93	...	1 604	514
	,,	1955	17	89	...	1 538	467
	,,	1954	16	93	...	1 343	389
	,,	1953	14	84	...	1 203	303
Teacher training	Teacher training centre, public	1957	1	*12	...	100	27
	Teacher training centre, aided private	1957	33	*124	...	2 155	667
	Total	**1957**	**34**	***136**	**...**	**2 255**	**694**
	,,	1956	31	123	...	1 695	463
	,,	1955	28	100	...	1 398	375
	,,	1954	26	93	...	1 254	292
	,,	1953	24	88	...	1 281	340
Special	Schools for the handicapped, aided private						
	Total	**1957**	**3**	***18**	**...**	**267**	**86**
	,,	1956	4	19	...	221	66
	,,	1955	3	16	...	169	46
	,,	1954	3	18	...	220	65
	,,	1953	3	18	...	137	40

1. Figures for 1957 are not strictly comparable with those for 1956 and previous years, since they are based on returns supplied at the beginning of the year and not, as in previous years, at the end of the year.

STATISTICS: NORTHERN RHODESIA

Population (mid-year 1958 estimate): 2,300,000.
Area: 288,130 square miles; 746,256 square kilometres.
Population density: 8 per square mile; 3 per square kilometre.

AFRICAN EDUCATION

Summary of school statistics, 1953–57. In the school year 1957/58 enrolment in all institutions for African education totalled almost 236,000 pupils representing about 10 per cent of the total population. Of the African school-going population 98 per cent were enrolled in primary schools, about 1.5 per cent in general secondary and vocational schools and the remaining 0.5 per cent in teacher training courses. The proportion of girls enrolled in primary schools was 37 per cent in 1957/58 against 34 per cent in 1954/55. The number of teachers in African primary schools was nearly 4,800 of whom 16 per cent were women and the average pupil-teacher ratio was 48 in 1957/58 against 41 in 1954/55.

Total enrolment in general secondary schools was 1,600 in 1957/58, an increase of over 114 per cent compared with 1954/55. The number of girls enrolled in 1957/58 was 179, compared with only 45 in 1954/55. In vocational secondary schools enrolment increased to 1,886 in 1957/58, a rise of 15 per cent over 1954/55 but the number of girls declined slightly over the same period. All levels of teacher training courses enrolled 1,306 students in 1957/58 of whom 19 per cent were women. In 1957/58 the pupil-teacher ratio in general secondary schools was 19, in secondary vocational schools 13 and in teacher training centres 15. (See Table 8.)

Examination results in secondary education, 1953–57. The number of secondary school pupils awarded the Cambridge Oversea School Certificate was 87 in 1957/58 of whom 7 were girls. Eight students were awarded the Cambridge Higher School Certificate. In addition 350 children passed the Junior Secondary School Leaving Certificate in 1957/58, an increase of 126 per cent compared with 1953/54. In 1957/58, 36 of the successful candidates were girls, as against only 3 in 1953/54. Teaching certificates were awarded to 436 students in 1957/58, as compared with 263 in 1953/54. (See Table 6.)

Educational finance, 1956/57. Total public expenditure on African education in the fiscal year beginning July 1956 amounted to 2,305,845 pounds sterling. Of this total, £2,173,728 or 94 per cent was derived from territorial revenue and the remaining 6 per cent came equally from native authorities and voluntary missions. Capital expenditure amounted to £541,912 or about 24 per cent of the total spent.(See Table 7.)

Source. Northern Rhodesia: African Education Department, annual reports.

6. NORTHERN RHODESIA: EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57. AFRICAN EDUCATION

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Cambridge Oversea School Certificate	37	–	53	–	54	–	63	–	87	7
Cambridge Higher School Certificate	–	–	–	–	–	–	–	–	8	–
Junior Secondary School Leaving Certificate	155	3	153	8	[1]122	13	272	22	350	36
Teaching Certificates										
T. 4	247	...	350	...	374	...	363	...	389	...
T. 3	16	...	17	...	15	...	35	...	47	...

1. Including 4 external candidates.

7. NORTHERN RHODESIA: EDUCATIONAL FINANCE, 1956/57 (in pounds sterling).[1] AFRICAN EDUCATION

A. RECEIPTS BY SOURCE

	Amount
Total receipts	**2 305 845**
Territorial revenue	2 173 728
Other	132 117
Native authorities	67 877
Missions	*64 240

B. EXPENDITURE BY PURPOSE

	Amount
Total expenditure	**2 305 845**
Recurring expenditure	1 763 933
Capital expenditure	541 912

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure	**[2]1 733 933**	**[2]100.0**
Central administration	282 469	16.3
Primary education	1 184 973	68.3
Secondary education	90 371	5.2
Vocational education	85 615	4.9
Teacher training	88 908	5.1
Other education	1 597	0.1

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.

2. Excluding estimated recurring expenditure by missions of £30,000.

8. NORTHERN RHODESIA: SUMMARY OF SCHOOL STATISTICS, 1953–57. AFRICAN EDUCATION

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	496	1 662	265	77 559	26 653
	Primary schools, aided private	1957/58	1 228	3 079	517	149 737	56 891
	Primary schools, unaided private	1957/58	41	40	3	3 767	1 221
	Total	**1957/58**	**1 765**	**4 781**	**785**	**231 063**	**84 765**
	,,	1956/57	1 690	4 581	760	209 599	75 036
	,,	1955/56	1 662	4 642	624	195 351	68 526
	,,	1954/55	1 352	4 425	593	183 627	62 940
	,,	1953/54	...	4 456	495	...	...
Secondary *General*	Secondary schools, public	1957/58	6	41	5	781	–
	Secondary schools, aided private	1957/58	9	34	12	707	179
	Secondary schools, unaided private	1957/58	2	10	–	112	–
	Total	**1957/58**	**17**	**85**	**17**	**1 600**	**179**
	,,	1956/57	11	74	18	1 198	139
	,,	1955/56	10	53	11	901	75
	,,	1954/55	[1]22	[1,2]115	[1,2]29	746	45
	,,	1953/54	...	[1,2]121	[1,2]38	...	...
Vocational	Vocational schools, public	1957/58	13	74	–	934	78
	Vocational schools, aided private	1957/58	28	70	17	952	341
	Total	**1957/58**	**41**	**144**	**17**	**1 886**	**419**
	,,	1956/57	36	128	8	1 857	433
	,,	1955/56	32	139	11	1 700	395
	,,	1954/55	[3]...	[3]...	[3]...	1 637	428
	,,	1953/54	...	[3]...	[3]...	...	...
Teacher training	Teacher training centres, public	1957/58	3	34	9	515	32
	Teacher training centres, aided private	1957/58	12	52	22	791	216
	Total	**1957/58**	**15**	**[4]86**	**[4]31**	**[4]1 306**	**[4]248**
	,,	1956/57	15	[4]75	[4]28	[4]1 192	[4]225
	,,	1955/56	16	[4]63	[4]13	[4]1 068	[4]169
	,,	1954/55	[3]...	[3]...	[3]...	939	150
	,,	1953/54	...	...	...	...	...
Higher *Teacher training*	Teacher training school						
	Total	**1957/58**	**[5]1**	**[6]...**	**[6]...**	**(33)**	**(1)**
	,,	1956/57	[5]1	[6]...	[6]...	(39)	(1)
	,,	1955/56	[5]1	[6]...	[6]...	(26)	(–)
	,,	1954/55	1	2	–	27	–
	,,	1953/54	1	3	1	...	–
Adult	Evening classes						
	Total	**1957/58**	**...**	**...**	**...**	**[7]*1 213**	**...**
	,,	1956/57	...	...	...	[7]*500	...
	,,	1955/56	...	...	...	...	...
	,,	1954/55	...	...	...	...	...
	,,	1953/54	...	...	...	...	...

1. Including data on schools which offer vocational or teacher training courses.
2. Government maintained and aided schools only.
3. Included in secondary general education.
4. Including higher teacher training.
5. Number of courses.
6. Included in secondary teacher training.
7. In addition there are practical classes for women organized under the 'Badge Scheme', and evening courses for adults are organized in all the mining companies.

STATISTICS: NYASALAND

Population (mid-year 1958 estimate): 2,710,000.
Area: 45,366 square miles; 117,498 square kilometres.
Population density: 60 per square mile: 23 per square kilometre.

AFRICAN EDUCATION

Summary of school statistics, 1953–57. In 1957/58 total African enrolment in primary and secondary levels of education was over 265,500 pupils representing about 10 per cent of total population. About 99 per cent of these pupils were in primary schools and the remaining 1 per cent were divided between general secondary, vocational and teacher training schools. The proportion of girls to total enrolment was 36 per cent at the primary level in 1957/58 compared with 38 per cent in 1954/55. The increase in enrolment in primary schools between 1954/55 and 1957/58 was about 10 per cent. The number of primary school teachers increased by 6 per cent between 1955/56 and 1957/58. The proportion of women primary school

teachers was 11 per cent in 1957/58 and the average pupil teacher ratio was 43.

Total enrolment in general secondary schools increased by 78 per cent between 1954/55 and 1957/58 and the number of girls rose from 29 to 92 over the same period. The proportion of girls to total enrolment was 10 per cent in 1957/58 compared with less than 6 per cent in 1954/55. The pupil-teacher ratio in general secondary schools was 14 in 1957/58 and the proportion of women teachers 18 per cent. Enrolment in technical schools increased by nearly 150 per cent between 1954/55 and 1957/58. Enrolment in teacher training schools rose by 60 per cent between 1954/55 and 1957/58, and the proportion of women students increased from 14 per cent to 21 per cent over the same period. The higher teacher training course (post-secondary) which started with 3 students in 1955/56, enrolled 10 male students in 1957/58. (See Table 10.)

Examination results in secondary education, 1953–57. Information on results of the Cambridge Oversea School Certificate is incomplete but 54 candidates took this examination in 1957/58, against 24 certificates awarded in 1954/55. There has been a steady rise in the number taking the Standard 8 second year general secondary examination and over the period 1953/54 to 1957/58 passes increased from 68 to 180. Successful candidates in the 'English Grade' Teachers' Certificate examination numbered 190 in 1957/58, an increase of 52 per cent over 1954/55; those taking the 'Higher Grade' Teachers' Certificate increased from 32 to 37 over the same period. (See Table 11.)

Educational finance, 1956/57. Total expenditure on African education for the fiscal year beginning July 1956 was 981,254 pounds sterling representing about £0.3 per inhabitant. Of this sum 62 per cent came from territorial revenue, 9 per cent from United Kingdom Colonial Development and Welfare Fund, local authorities contributed 2 per cent and the remainder was derived principally from voluntary missions. Capital expenditure amounted to £235,270 representing 24 per cent of the total spent. (See Table 9.)

Source. Nyasaland: Education Department, annual reports.

9. NYASALAND: EDUCATIONAL FINANCE, 1956/57 (in pounds sterling).[1] AFRICAN EDUCATION

A. RECEIPTS BY SOURCE

	Amount	
Total receipts		**981 254**
Central Government		699 103
Territorial revenue	612 518	
Colonial Development and Welfare Fund	85 885	
Other sources	700	
Local authorities		22 172
Others		259 979
Missions	256 225	
Estates	3 573	
Local communities	181	

B. EXPENDITURE BY PURPOSE

	Amount
Total expenditure	**981 254**
Recurring expenditure	745 984
Capital expenditure	235 270

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure	**745 984**	**100.0**
Central administration	52 564	7.0
Primary education	522 679	70.1
Secondary education	60 780	8.2
Vocational education	22 874	3.1
Teacher training	78 658	10.5
Other education	8 429	1.1

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.

10. NYASALAND: SUMMARY OF SCHOOL STATISTICS, 1953–57. AFRICAN EDUCATION

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	53	179	45	8 424	2 723
	Primary schools, aided private	1957/58	813	2 716	557	115 412	38 404
	Primary schools, unaided private	1957/58	2 297	3 254	82	139 554	54 214
	Total[1]	**1957/58**	**3 163**	**6 149**	**684**	**263 390**	**95 341**
	,,	1956/57	3 294	5 865	623	259 179	95 283
	,,	1955/56	3 294	5 777	478	244 634	88 475
	,,	1954/55	4 688	[2]2 469	[2]481	238 657	90 760
	,,	1953/54	...	...	...	...	...
Secondary *General*	Secondary schools, public	1957/58	2	14	1	130	–
	Secondary schools, aided private	1957/58	2	13	1	223	24
	Secondary schools junior, aided private	1957/58	10	26	8	528	64
	Secondary schools junior, unaided private	1957/58	1	15	2	38	4
	Total[1]	**1957/58**	**15**	**68**	**12**	**919**	**92**
	,,	1956/57	13	[3]80	[3]22	879	44
	,,	1955/56	14	[3]48	[3]8	716	41
	,,	1954/55	11	[4]23	[4]4	517	29
	,,	1953/54	...	...	...	396	19
Vocational	Technical schools, public	1957/58	4	10	–	123	–
	Technical schools, aided private	1957/58	7	13	1	179	–
	Technical schools, unaided private	1957/58	9	19	10	174	136
	Total[1]	**1957/58**	**20**	**42**	**11**	**476**	**136**
	,,	1956/57	11	[5]6	–	304	43
	,,	1955/56	6	[6]6	–	143	18
	,,	1954/55	...	11	–	192	–
	,,	1953/54	...	...	...	...	...
Teacher training	Teacher training schools, public	1957/58	4	10	–	148	–
	Teacher training schools, aided private	1957/58	10	46	18	690	179
	Teacher training schools, unaided private	1957/58	2	3	–	55	3
	Total[1]	**1957/58**	**16**	**59**	**18**	**893**	**182**
	,,	1956/57	16	39	13	748	135
	,,	1955/56	14	46	18	657	146
	,,	1954/55	10	43	17	552	80
	,,	1953/54	...	...	...	...	...
Higher *Teacher training*	Teacher training school, public						
	Total	**1957/58**	**1**	**...**	**...**	**10**	–
	,,	1956/57	1	...	...	6	–
	,,	1955/56	1	...	...	3	–
	,,	1954/55	–	–	–	–	–
	,,	1953/54	–	–	–	–	–

1. Responsibility for non-African education was assumed by the Federal Ministry of Education (Federation of Rhodesia) in July 1954. From 1954/55 the statistics refer only to African education. Pre-1954/55 figures refer to both African and non-African education (primary and general education only).
2. Teachers in government and aided schools only with 93,441 (F. 30,929) pupils.
3. Probably including teaching staff of the aided and unaided vocational schools.
4. Teachers in government and aided schools only with 227 (F. 12) pupils.
5. Teachers in government schools only with 91 male pupils.
6. Teachers in government schools only with 74 male pupils.

11. NYASALAND: EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57. AFRICAN EDUCATION

Type of diploma or certificate granted	School year				
	1953/54	1954/55	1955/56	1956/57	1957/58
Cambridge Oversea School Certificate	...	24	...	...	[1]54
Government Standard 8 examination	68	92	93	212	180
'English Grade' Teachers' Certificate	...	[2]125	120	175	190
'Higher Grade' Teachers' Certificate	...	[3]32	34	39	37

1. Number of candidates.
2. Including 16 women.
3. Including 2 women.

SWAZILAND

The population of the Territory is made up mainly of the Swazi, a people akin to their southern neighbours the Zulu. The Swazi, most of whom live in areas reserved for African settlement, have their own native authority headed by the Paramount Chief, and a native treasury, revenue for which is derived from various taxes and fees, including an education levy. Swazi is not yet a written language, and Zulu, to which it is related, is still taught in schools for Africans and generally employed for official purposes. At the time of the 1956 census there were nearly 6,000 European and about 2,000 Coloured or Eurafrican residents.

THE EDUCATIONAL SYSTEM

General education policy for the Territory is laid down by the Resident Commissioner, and embodied in the proclamations which he issues or the notices framed under the existing proclamations. Education is administered by the Government through a fully constituted Department. The school system, and with it the work of the Education Department, falls into three clear-cut divisions—African, European and Eurafrican.

Most of the African schools are provided by missions. The native authority runs a number of tribal schools including three national schools financed by the Swazi National Treasury. The Government directly maintains a number of institutions, including a trade school and a teacher training centre, and aids the majority of the mission schools with grants covering teachers' salaries, and with book and equipment grants. Control is exercised by the Director of Education through the Native Schools Proclamation (No. 6 of 1940), which provides for the registration and inspection of all schools and the submission of returns, through the revised 'Rules Governing the Conduct of African Schools' gazetted in October 1954, and for the Swazi national schools through Government Notice No. 27 of 1944. Education is not compulsory for African children. Education advisory committees at district level bring together representatives of the native authority, missions and parents under the chairmanship of the District Commissioner. The Territorial Board of Advice on African Education, which meets annually under the chairmanship of the Resident Commissioner, includes representatives of the native authority, the missions, the district advisory committees, the Medical and the Agricultural Departments.

The Education Department exercises control of European Education through the Swaziland Public Education Proclamation (No. 31 of 1943). All European schools except one grant-aided convent are maintained by the Government, and each government school has a committee, elected by parents, which meets quarterly under the chairmanship of the District Commissioner. At territorial level the School Board, membership comprising representatives of the committees, meets annually under the chairmanship of the Resident Commissioner. The committees and the School Board are advisory bodies. Education is compulsory for all European children from 7 years of age until the completion of the 16th year or an earlier passing of the Junior Certificate (lower secondary) examination taken in standard 8.

The Eurafrican community is served by government-aided mission schools the majority of which have boarding establishments. Control is exercised through Proclamation No. 60 of 1951. There are parents' advisory committees and a central advisory board for the Territory as a whole. Education is not compulsory.

Structure of the educational system. All three school ladders (African, European and Eurafrican) begin with an 8-year primary course made up of sub-standards A and B and standards 1 to 6. African primary schools are classified as higher (full course), lower (up to standard 4), and elementary vernacular (up to standard 2). African post-primary institutions include junior secondary schools (3 years), high schools (5 years), a trades school (4 years), a housecraft centre (2 years), and teacher training centres with 2-year courses at different levels. Non-African post-primary education is given in junior secondary schools (2 years) or high schools (4 years). For other types of education and all forms of higher education Swaziland students of all races attend institutions outside the Territory. The study of English is introduced at the first stages of African primary education and in other schools where the mother tongue is Afrikaans. It is the sole medium of instruction at secondary level.

THE DEVELOPMENT OF SECONDARY EDUCATION

African education. Until the early 1950s little was done to develop secondary education in the Protectorate. Up to then Swaziland pupils could enrol at post-primary institutions in the Union of South Africa, and the principal contribution of the Protectorate Government towards the provision of schooling at this level took the form of a fairly large number of bursaries. There were however Junior Certificate classes at the Matapha national school, founded in 1928, and at two grant-aided mission schools. Teacher training, begun in 1936 at the Nazarene mission in Bremersdorp, was given official recognition two years later. A government trades school was founded in 1946 at Mbabane.

The decision of the Union Government that extra-territorial African students should not be admitted to South African secondary and vocational schools from 1954 onwards resulted in a considerable expansion of local facilities. With government assistance the Matapha national school and the Methodist mission school at Mahamba were developed into high schools while a third was founded at Bremersdorp by the Catholic mission. In addition to the high schools, which offer a full secondary

course leading to matriculation (university entrance), a number of junior secondary classes were formed, most of them attached to mission schools. The year 1952 saw the establishment of a government teacher training centre at Matapha and of a government-aided housecraft training centre at the Mbuluzi mission station.

The general aspects of administration have been mentioned above. The Matapha school is controlled by the governing body which was set up to manage all Swazi national schools and which comprises nominees of the Paramount Chief, of the parents and of the Resident Commissioner. All secondary institutions are subject to inspection by the Education Department.

Pupils in high schools and junior secondary schools must purchase their own textbooks and stationery and pay tuition fees ranging from £1 to £5 per annum. Where hostel establishments exist boarding fees range from £8 to £20 per annum. At the Mbabane Trades School an inclusive fee of £22 10s. covers board and tuition for the whole 4-year course. At the Government Teacher Training Centre the inclusive fee is £15 per year. A large number of bursaries are awarded.

The standard of classroom buildings is generally high. By law, window space must be not less than one-sixth of floor space and 12½ square feet of floor space must be allowed for every child on the roll. All post-primary schools have, or are being provided with, their own science laboratories.

School medical services include routine examination of pupils by Medical Department or missionary doctors and inspection of school premises.

European education. Full secondary education is provided in the secondary departments of St.Mark's School at Mbabane and the Evelyn Baring School at Goedgegun. Both are co-educational and have boarding establishments for boys and girls. St.Mark's was founded in 1908 as a Church of England school but was later established under independent control and registered as a profit-making company; in 1956 it was acquired by the Government. The Evelyn Baring School is a large central school maintained by the Government. In addition to these two schools, junior secondary education is provided at the Dominican convent, a girls' school founded at Bremersdorp in 1921.

At all government schools tuition, textbooks and stationery are free except that pupils in the secondary classes are required to pay for their English and Afrikaans 'set books'. Boarding fees may be remitted in whole or in part in necessitous cases.

Eurafrican education. Lower secondary education is provided at three of the four grant-aided mission schools for Eurafricans. Tuition is free and government grants make possible the issue, free of charge, of essential textbooks and stationery. Boarding fees range from £12 to £20 per annum and a large number of boarding bursaries are granted annually by the Department. Eurafrican pupils sometimes attend the African trades school at Mbabane.

TYPES OF SECONDARY EDUCATION

General secondary schools. Entrants to African secondary schools are required to have passed high enough to be awarded a continuation certificate in the external examination taken at the end of primary standard 6. The classes in the 3-year junior secondary course are designated standard 7, standard 8 and Junior Certificate, and in the 2-year upper cycle Matriculation 1 and Matriculation 2. The curriculum comprises English, Zulu, Latin, mathematics, arithmetic (to Junior Certificate), physical science, biology and geography, with book-keeping, typing and shorthand as optional subjects. Teachers are, as far as possible, African university graduates, supplemented by European teachers for certain subjects. Numbers of pupils leave after standard 7 to enter vocational training centres (usually teaching, nursing and trade training). For this reason, and also because standard 7 is in reality no more than an introduction to secondary education proper, the Department conducts an external examination at the end of that year. Successful pupils are awarded either a continuation certificate, which entitles the holders to proceed to standard 8, or a leaving certificate. Pupils who continue with the general secondary course are prepared for the Junior Certificate and Matriculation examinations of the Joint Matriculation Board of the University of South Africa. A pass in the Junior Certificate examination is required for entrance to certain levels of vocational training and the upper secondary course. On the results of the final external examination two kinds of certificate are awarded, Matriculation or the School Leaving Certificate. The former admits holders to the Pius XII University in Basutoland or to a post-matriculation centre in Southern Rhodesia which prepares students for entry to the University College of Rhodesia and Nyasaland.

European and Eurafrican secondary schools also prepare for the South African Joint Matriculation Board examinations but the full course lasts only 4 years, the Junior Certificate being taken at the end of the second year. The curriculum comprises English, Afrikaans, Latin, mathematics, physical science, arithmetic and geography, with agricultural science, domestic science and book-keeping as options. Teachers are recruited in the Union of South Africa or the United Kingdom. For higher education most secondary leavers go to institutions in the Union.

Technical and vocational schools. The Mbabane Trades School, with a staff of seven instructors, offers 4-year courses in general building, carpentry and cabinet making (entry post-standard 6), and motor mechanics (entry post-standard 7). The students, who are mainly African but include a few Eurafricans, obtain practical experience through erecting classrooms at government schools, providing furniture for schools and offices, and doing maintenance and repair work on government and private vehicles. A furniture factory, equipped with modern machinery, is attached to the school as a 'production department'. School leavers have had no difficulty in finding employment.

The housecraft training centres (one African and one Eurafrican) offer a 2-year course in dressmaking, cookery, upholstery and general housekeeping. The aim is to equip girls with the knowledge and skills needed to run a home efficiently and economically. The African centre also trains domestic science teachers.

The Department of Land Utilization conducts a one-year

course in elementary veterinary science and animal husbandry for African cattle guards, and a one-year course in elementary agriculture and soil conservation for African Land Utilization Officers.

The training of African nurses and midwives is conducted at a nursing school attached to the Bremersdorp hospital and coming under the Director of Medical Services. Courses are at three levels: a 4½-year course, post-Junior Certificate, leading to the High Commission Territories Nursing Council Certificate; the 4-year course, post standard 6, of the Swaziland Executive Nursing Committee; and a 2-year nurse-aid course, post-standard 6, leading to Red Cross certificates in first aid, home nursing and infant welfare.

No technical or vocational education is available for Europeans.

Teacher training schools. Teacher training courses for Africans exist at two levels: a post-standard 6 course, conducted at the Nazarene school only, for teachers in elementary vernacular schools (i.e. up to standard 2), and a post-standard 7 course for teachers in lower primary schools (i.e. up to standard 4). For higher primary teaching a number of students are trained in Basutoland, the entrance qualification being Junior Certificate.

There are no teacher training facilities for Europeans or Eurafricans.

Out-of-class activities. Organized sports and team games are included in the activities of all secondary schools, netball and association football being particularly popular with the Africans, and cricket, rugby, hockey and tennis with non-Africans. Annual athletic competitions are held.

TRENDS AND PROBLEMS

The recent expansion of secondary education in Swaziland has already been mentioned. The trend continues, impelled by the rapid increase in the number of primary schools and the consequent pressure of primary leavers on secondary institutions. One result affecting the latter has been a recent review of teacher training arrangements and a plan for their extension. A big problem in secondary education of all types and for all races is the recruitment of a sufficient number of qualified staff. Improvements in the salaries and status of African and Eurafrican teachers, initiated in 1957, have already relieved the position to some extent but it is always difficult to obtain European staff, who must be sought in the Union of South Africa and the United Kingdom.

There has been a remarkable change in recent years in the attitude of Africans to vocational and technical training. The trades school opened with two instructors and one pupil; today the demands for admission exceed the accommodation available, although the school was considerably enlarged in 1957. There has been a parallel if somewhat smaller increase in the demand for domestic training for girls.

[*Text revised by the Resident Commissioner, Mbabane, in December 1959.*]

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STATISTICS

1. EDUCATIONAL FINANCE, 1957 (in pounds sterling)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure	**189 881**	**100.0**
Central administration	10 696	5.6
African schools	8 119	4.27
European schools	2 277	1.20
Eurafricans schools	300	0.16
Primary education	[2]121 535	[2]64.0
African	68 735	36.2
European	[2]48 810	[2]25.7
Eurafrican	[2]3 990	[2]2.1
Secondary education	16 423	8.7
African	16 423	8.7
European	[3] ...	[3] ...
Eurafrican	[3] ...	[3] ...
Vocational education	12 652	6.7
African		
Other education[4]	6 732	3.5
African	1 340	0.7
European	4 962	2.6
Eurafrican	430	0.2
Other recurring expenditure[5]	21 843	11.5
African	2 270	1.2
European	18 693	9.8
Eurafrican	880	0.5

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.
2. Includes expenditure for secondary education.
3. Included with expenditure for primary education.
4. Bursaries and scholarships.
5. Board and lodging.

Population (mid-year 1958 estimate): 267,000.
Area: 6,704 square miles; 17,363 square kilometres.
Population density: 40 per square mile; 15 per square kilometre.

Summary of school statistics, 1953–57. In 1957 enrolment in all schools totalled over 28,000 pupils, representing about 11 per cent of the population. Of the total enrolment, 97 per cent were pupils in primary schools, 2.5 per cent in general secondary schools and 0.5 per cent in vocational and teacher training schools.

In the primary schools 92 per cent of the pupils were Africans, and the proportion of girls 51 per cent in 1957 against 53 per cent in 1953. The number of primary school teachers was over 780 in 1957, an increase of about 50 per cent over 1953. The average pupil teacher ratio in primary schools was 35 in 1957.

Total enrolment in general secondary schools increased by 44 per cent between 1953 and 1957 and the number of girls enrolled by 35 per cent over the same period. African pupils represented 74 per cent of total enrolment, Europeans 20 per cent and Coloured pupils 6 per cent respectively. In vocational schools, enrolment of Africans and Eurafricans increased by 41 per cent between 1953 and 1957. The number of Africans training to be teachers in 1957 was 70, of whom 43 were women. The pupil-teacher ratio in all

secondary schools including teacher training was 11 in 1957 compared with 19 in 1953. (See Table 2.)

Examination results in secondary education, 1953–57. Sixty-five pupils were awarded junior secondary certificates in 1957 and the number who matriculated was 6. In the same year 25 Africans passed the lower primary teacher training certificate and 5 the elementary vernacular teaching certificate; in addition 6 students successfully entered for the higher primary teacher training certificate in Basutoland.

Educational finance, 1957. Total expenditure on education in the fiscal year beginning January 1957 amounted to 235,573 pounds sterling or approximately £0.9 per inhabitant. Of the amount spent, 68 per cent (£160,958) was contributed by the Central Government from territorial revenue, 14 per cent (£32,196) came from United Kingdom funds, 9 per cent (£20,269) from local authorities and 9 per cent (£22,150) from voluntary agencies. Capital expenditure (£45,692) was 19 per cent of the total. The distribution of recurring expenditure by level and type of education is given in Table 1.

Sources. Swaziland: Director of Education, annual reports. United Kingdom: Information transmitted to the United Nations on Non-Self-Governing Territories.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	African primary schools, public	1957	56	136	85	5 695	2 822
	European primary schools, public	1957	8	36	29	824	358
	African primary schools, aided private	1957	115	471	320	16 035	8 290
	European primary schools, aided private	1957	1	6	6	123	92
	Eurafrican primary schools, aided private	1957	4	15	13	375	187
	African primary schools, unaided private	1957	95	121	102	4 193	2 237
	Total	**1957**	**279**	**785**	**555**	**27 245**	**13 986**
	"	1956	282	700	487	25 611	13 164
	"	1955	234	[1]649	[1]408	21 991	11 397
	"	1954	229	[1]549	[1]378	18 878	9 911
	"	1953	225	[1]520	[1]373	16 975	9 022
Secondary *General*	African secondary schools, public	1957	3	13	5	150	50
	European secondary schools, public	1957	2	15	3	119	40
	African secondary schools, aided private	1957	9	29	16	345	122
	European secondary schools, aided private	1957	1	2	2	21	21
	Eurafrican secondary schools, aided private	1957	2	4	1	43	23
	African secondary schools, unaided private	1957	1	2	2	39	39
	Total	**1957**	**18**	**65**	**29**	**717**	**295**
	"	1956	14	61	20	653	287
	"	1955	12	[2]46	[2]13	703	268
	"	1954	11	[2]38	[2]10	620	263
	"	1953	10	[2]32	[2]8	497	219
Vocational	African vocational schools, public	1957	1	8	–	51	–
	African vocational schools, aided private	1957	1	1	1	11	11
	Eurafrican vocational schools, aided private	1957	2	1	1	17	10
	Total	**1957**	**4**	**10**	**2**	**79**	**21**
	"	1956	3	10	2	81	15
	"	1955	3	[3] ...	[3] ...	62	9
	"	1954	3	[3] ...	[3] ...	60	12
	"	1953	3	[3] ...	[3] ...	56	16
Teacher training	African teacher training schools, public	1957	1	3	2	32	14
	African teacher training schools, aided private	1957	2	4	4	38	29
	Total	**1957**	**3**	**7**	**6**	**70**	**43**
	"	1956	2	7	6	67	42
	"	1955	2	[3] ...	[3] ...	75	59
	"	1954	2	[3] ...	[3] ...	64	49
	"	1953	2	[3] ...	[3] ...	41	28

1. Including teachers of European and Coloured secondary schools.
2. African education only, including teaching staff for the vocational and teacher training schools.
3. Included in secondary general education.

CAMEROONS

Trust Territory

The Territory is administered as an integral part of the Federation of Nigeria. In education the Southern Cameroons has considerable autonomy, with an education department under a Chief Education Officer who is generally supervised by the Chief Federal Adviser on Education in Nigeria. The Northern Cameroons forms part of the Northern Region and the educational system therefore falls directly under the Minister of Education of that region.

Details of the school system and statistics are included in the chapter on the Federation of Nigeria.

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STATISTICS

Population (mid-year 1958 estimate): 1,591,000.
Area: 34,081 square miles; 88,270 square kilometres.
Population density: 47 per square mile; 18 per square kilometre.

Educational statistics are included in those given for the Federation of Nigeria on pages 1266–68.

GAMBIA

THE EDUCATIONAL SYSTEM

The territory of the Gambia comprises an area known as the Colony (30 square miles) and a much larger hinterland (4,000 square miles) known as the Protectorate. As regards education, there is a marked contrast between the two areas; some 70 per cent of the total school population are drawn from the Colony. In the Protectorate, conditions are overwhelmingly rural, and owing to the nature and shape of this part of the territory it is not easy for people, news or ideas to circulate.

The Education Ordinance and Regulations which came into force on 1 January 1947 remain the main legal basis of the school system. Education is not compulsory. The ordinance provides for a Board of Education, representative of the education authorities, the Legislative Council, the Missions, the Muslim community and the Protectorate, to advise the Governor on educational policy. Education in the Protectorate is surveyed each year at the Conference of Chiefs.

The administration of education is in the hands of a Director of Education, assisted by education officers in charge of the Colony area and the Protectorate. Teacher training is also the responsibility of the Education Department. In Bathurst (the capital) and the rest of the Colony, schools are classified as government, local agreement, aided or unaided schools. Local agreement schools are primary schools which were formerly run by missions but which were transferred to the Government under the Cox Agreement of 1946; the Government pays rent to the former owners and the schools are administered through management committees, on each of which the appropriate religious authority is represented. In the Protectorate most schools are owned and controlled by district authorities but there is a growing number of mission schools, usually aided.

The Director of Education is an *ex officio* member of the West African Examinations Council, which meets once a year. The Department is responsible in the Gambia for the conduct, on behalf of the Council, of the West African School Certificate and the external examinations of the University of London.

In the Colony the educational ladder begins with a 3-year infant school, which receives pupils at the age of 5. This is followed by a 4-year basic primary course (standards 1 to 4), leading to education in 6-year schools of a secondary grammar type, or a 3-year secondary modern school, or senior primary classes (standards 5 to 7). There is so far no provision for further education, but several students

proceed to teacher training. Students requiring higher education go abroad, usually to the United Kingdom; assistance is available in the form of government scholarships and bursaries. Other government departments provide a variety of awards for advanced technical and professional training. The language of instruction in all schools is mainly English, although the vernacular is often used in the first year.

In the Protectorate there are no infant schools but the basic primary course was extended in 1959 to six years. There is only one post-primary school. Otherwise Protectorate children go to Colony schools for secondary education.

THE DEVELOPMENT OF SECONDARY EDUCATION

Until quite recently all secondary education in the Colony (as distinct from senior primary schooling) was being provided by the Methodist and Roman Catholic missions. The first record of a Methodist secondary school is in 1876. By 1950 each mission was running two secondary schools—one for boys and one for girls. For the teaching of sciences, pupils from all secondary schools attended classes at the Bathurst School of Science, founded in 1949 by the Government and the missions as a joint enterprise. In 1951 the Baldwin Report, covering the whole field of education, recommended the establishment of one independent, co-educational, non-denominational secondary school for the territory. In a White Paper entitled 'Government Statement on Secondary Education', published in 1956, the Government accepted this recommendation. The Methodist Mission agreed to co-operate in the founding of the school, which was established by Ordinance No. 3 of 1958 and began functioning in January 1959 as the Gambia High School. The new school incorporates the two Methodist high schools and the science school and is administered by an independent board of governors.

To make better provision for non-academic secondary education, the Government in 1958 opened a new secondary modern school at Crab Island, the building being provided from the Colonial Development and Welfare Fund. This school has brought together in one institution all the senior primary classes in Bathurst, with the exception of those in Roman Catholic schools.

The only post-primary school in the Protectorate is Armitage School, founded in 1927 as a boarding school originally for the sons of chiefs. Latterly it has provided a 5-year post-primary course; selection is made from all boys completing standard 4 in protectorate schools. It is now being rebuilt to admit a larger number of pupils and reorganized as a two-stream post-primary school offering a 4-year course.

In the Colony, evening classes in commercial subjects began in 1944 and were reorganized as the Government Clerical School in 1949. The Technical School began to function in 1950. Prior to 1949 teachers received their training in Sierra Leone or at courses held at regular intervals in Bathurst. In that year a teacher training centre was opened at Georgetown in the Protectorate; in 1952 the centre was transferred to Yundum, near Bathurst, and became the Teacher Training College, a residential institution.

All secondary schools charge fees but a number of scholarships are available. Teachers in government schools are civil servants and enjoy full pension rights. Staff salaries in the mission secondary schools are reimbursed by the Government; the missions also receive the fee income of £6 per pupil, less 25 per cent which is paid to the Government. The well-being of school children is the concern of a social welfare officer. All school children in the Colony undergo medical and dental inspection; for those in the Protectorate this is carried out when staff is available.

TYPES OF SECONDARY EDUCATION

Schools of the secondary grammar type set their own entrance examinations and select pupils from standard 4 in both Colony and Protectorate. In addition they accept pupils who have passed the Government Standard 4 Scholarship examination. The schools follow a 6-year course and are recognized for the award of the West African School Certificate. The curriculum is determined largely by the requirements of the certificate. The subjects taught include English language and literature, history, geography, Latin, French, Bible knowledge, mathematics, biology and health. Biology is the only science subject, and religious knowledge is taken by both Christian and Muslim pupils.

Pupils who do not gain admittance to the secondary grammar type of school go to the three-year secondary modern school or remain in their primary schools for a further three years to standard 7. In both cases they then take the Government School Leaving examination. The new secondary modern school provides good facilities for arts and crafts and domestic science.

The Technical School in Bathurst gives artisan training for carpenters and joiners, and for masons. Apprentices follow a 4- to 5-year course and are recruited from the senior forms of primary schools. Courses in motor-fitting and metalwork are to be started when staff can be recruited. Technical instruction is also given to probationers and trainees in the Agricultural, Medical, Printing, Public Works, Marine Dockyard, and other government departments.

The Government Clerical School gives instruction in typing, shorthand and book-keeping. Two courses are admitted during the year: the main course is intended for clerks who have passed the Government Entrance examination and lasts six months; the subsidiary course is for clerical assistants and is for a shorter period. Students also receive instruction in English, arithmetic and civics, and attend lectures given by heads of departments on the functions of government.

The minimum qualification for entry to the training college is completion of standard 7. The course is for men and women students and lasts 3 years. The curriculum stresses training in the teaching of primary school subjects, including English, handwriting, art, subjects of rural interest, the use of prescribed textbooks and project work with groups.

Out-of-class activities in the various secondary schools include team games, particularly football and cricket, athletic sports, Boy Scouts and Girl Guides.

TRENDS AND PROBLEMS

At present about 30 per cent of the pupils who reach standard 4 are accepted for entry into secondary grammar schools. The provision of this type of secondary education is thus adequate for the time being, and it is hoped that the quality will improve with the establishment of the Gambia High School. There is so far no provision for post-certificate (sixth form) work, but it is hoped that this will soon be remedied.

The new secondary modern school can admit 180 pupils each year, and is large enough to absorb the intake of standard 4 pupils until 1960: thereafter these numbers increase steeply, and it will be necessary either to limit entry or to institute double sessions.

New schools are being built as resources permit; but the demand for education is rapidly outstripping the capacity to finance it.

[*Text revised by the Director of Education, Bathurst, in January 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 292,000.
Area: 4,003 square miles; 10,369 square kilometres.
Population density: 73 per square mile; 28 per square kilometre.

Summary of school statistics, 1953–57. In 1957 total enrolment in 54 institutions at primary and secondary levels was 6,626 pupils representing just over 2 per cent of the total estimated population. Nearly 89 per cent of total enrolment was in primary schools, about 10 per cent in general secondary and the remaining pupils were divided between vocational and teacher training courses. In 1957 the proportion of girls was 26 per cent in primary schools (against 20 per cent in 1953); 13 per cent in general secondary schools, 7 per cent in technical and 42 per cent in secondary teacher training schools. The number of primary school teachers increased by 29 per cent between 1953 and 1957 and women were over half the total teaching staff. Enrolment in primary schools increased by 38 per cent over the period under review and in general secondary schools by 14 per cent. The pupil-teacher ratio in primary schools was 29 in 1957 and in general secondary schools 17. (See Table 2.)

Examination results in secondary education, 1953–57. There has been no increase in the number of candidates passing the West African School Certificate and the General Certificate of Education over the past three years. Fourteen boys and 4 girls succeeded in the former examination in 1957/58 compared with 17 boys and 4 girls in 1955/56. In the General Certificate of Education there were 19 successful candidates in 1957/58 compared with 26 in 1955/56.

Educational finance, 1958. Total expenditure on education in the fiscal year beginning January 1958 was 180,851 West African pounds or about £0.6 per inhabitant. Of this sum 77 per cent (£138,749) was contributed by the Central Government from territorial sources, 12 per cent (£21,612) came from United Kingdom funds, 6 per cent (£10,950) from local authorities and 5 per cent (£9,540) from voluntary agencies. Capital expenditure (£45,256) was 25 per cent of the total. The distribution of recurring expenditure by level and type of education is given in Table 1.

Sources. Gambia: Education Department, annual reports. United Kingdom: Information transmitted to the United Nations on Non-Self-Governing Territories.

1. EDUCATIONAL FINANCE, 1958 (in West African pounds)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure	**135 595**	**100.0**
Central administration	15 000	11.1
Primary education	54 845	40.4
Secondary education	30 750	22.7
Vocational education	8 708	6.4
Teacher training	22 422	16.5
Other education	3 870	2.9

1. Official exchange rate: 1 West African pound = 2.80 U.S. dollars.

2. SUMMARY OF SCHOOL STATISTICS, 1953-57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	35	174	104	5 020	1 317
	Primary schools, aided private	1957	11	27	9	868	237
	Total	**1957**	**46**	**201**	**113**	**5 888**	**1 554**
	„	1956	48	204	124	5 559	1 477
	„	1955	46	[1]95	[1]16	5 016	1 263
	„	1954	46	137	73	4 887	773
	„	1953	42	156	...	4 253	870
Secondary *General*	Secondary school, public	1957	1	8	–	82	–
	Secondary schools, aided private	1957	4	29	17	563	203
	Total	**1957**	**5**	**37**	**17**	**645**	**203**
	„	1956	5	[1]26	[1]6	664	199
	„	1955	5	[1]20	[1]6	621	183
	„	1954	5	38	15	608	180
	„	1953	5	41	...	568	173
Vocational	Technical schools, public						
	Total	**1957**	**2**	**5**	**2**	**43**	**3**
	„	1956	4	9	6	37	12
	„	1955	4	7	5	65	23
	„	1954	3	10	5	42	9
	„	1953	4	9	...	47	12
Teacher training	Teacher training school, public						
	Total	**1957**	**1**	**7**	**2**	**50**	**21**
	„	1956	1	6	2	31	13
	„	1955	1	5	3	34	8
	„	1954	1	2	–	41	12
	„	1953	1	2	...	26	12

1. Incomplete figure.

FEDERATION OF NIGERIA

THE EDUCATIONAL SYSTEM

The first education ordinance was enacted in 1882, when the Colony of Lagos was united to Gold Coast Colony. Rapidly changing conditions in the early part of the twentieth century were stabilized by the Codes of 1926 (Ordinance No. 14 of 1926, referring to the Northern Provinces and No. 15 to the Southern Provinces), which remained in force virtually untouched until after World War II. In 1945 a 10-year plan was formulated and after an investigation on grants-in-aid had been made the 1948 Ordinance was enacted and the present educational system may be said to have come into being.

Constitutional changes made it necessary to re-enact the 1948 Ordinance in 1952 to make it applicable to the newly established Regions, and the Adaptation of Laws Ordinance in 1954, when Nigeria became a Federation, provided for the devolution of the functions of the Central Authority on Regional Directors and Regional Boards.

Legislation thereafter developed regionally and although at first the main provisions of the 1948 Ordinance were retained, later ordinances introduced significant changes. The essential framework remains the same, but it will be necessary to consider the Regions separately to show what divergences have occurred.

All the education ordinances in force today control the provision of primary and secondary education, but not of higher education, which is the subject of separate ordinances. Secondary education includes the secondary grammar, secondary modern, secondary commercial, technical and vocational, and teacher training types of education. Regulations are framed to control the opening of schools, the conduct of schools, the registration and salaries of teachers and the payment of grants-in-aid. As a rule, no

conditions of entry to schools refer to religion, nationality, race or language. Religious instruction must be included in the curriculum but pupils are not obliged to attend classes. Instruction is normally in the vernacular or English or both.

In all Regions schools are controlled by the Regional Government or by the local education authority, or by the missions and other non-government bodies (known as voluntary agencies), or by private individuals. The majority of schools are either voluntary agency or local authority schools.

Lagos

The Education Ordinance in force today is No. 26 of 1957, together with some later amendments. It provides for free primary education. Most schools are voluntary agency, but one primary school, two secondary schools (which, although situated in the federal capital, serve the entire Federation), a teacher training college, the technical institute and the trade centre are government schools and are not controlled by grants-in-aid regulations.

Southern Cameroons

The 1952 Ordinance, as adapted in 1954, remains in force. The majority of schools are voluntary agency, but not all are assisted.

Eastern Region

The 1952 Ordinance, as adapted in 1954, was replaced by No. 28 of 1956, which provided for a purely regional system of education based on ministerial organization. Later amendments to the grants-in-aid regulations enabled the introduction of free primary education. Schools are controlled mainly by voluntary agencies and local authorities.

Northern Region

Ordinance No. 17 of 1956 replaced the 1952 Ordinance. It did not provide for the introduction of free primary education. Voluntary agencies and native authorities (which are included here in the term 'local authority') control most of the schools in the Northern Region.

Western Region

In 1955 an Ordinance (No. 6) was enacted which departed very considerably from its predecessor. It provided for free primary education and laid down new regulations governing the administration and organization of the school system. Local education authorities, when established, were made responsible for primary and secondary modern schools. As in the Eastern Region, by far the greater number of schools in the West are controlled by voluntary agencies or local authorities.

Role of public authorities

Central Government. The Federal Government, through the Ministry of Education and Education Department, controls primary and secondary education in Lagos. It has executive control over the two government secondary grammar schools, the technical institute and the trade centre.

With respect to the Regions, the functions of the Central Government are advisory. Inspections of schools and colleges are undertaken on request, and assistance is given with practical teaching tests. Committees have been set up on which professional representatives of the Federal Education Department and the Regions sit to discuss educational matters of common interest and to pass resolutions which, though they have no legal force, nevertheless carry considerable weight. The University College, the Nigerian College of Technology and the Nigerian Union of Teachers are also members of the main Joint Consultative Committee. Both the Ministry and the Department are concerned with the two institutions of higher education, University College, Ibadan, and the Nigerian College of Arts, Science and Technology; these two institutions are federal.

Regional governments. With the exception of Southern Cameroons, the staff of whose Education Department at present comes under the control of the Federal Education Office, all the Regions are completely independent with regard to education.

Regional governments control all education, except higher education, through the ordinances referred to above, and provide the necessary administration. Curricula and syllabuses in primary schools and teacher training colleges are also controlled.

Since 1954 the organization has been on a ministerial basis, and the Educational Departments which at first existed separately are now incorporated in the Ministries of Education.

Regional governments directly maintain and control a small number of schools (mainly post-primary), make grants to the voluntary agencies and local authorities, the payment of which is governed by grants-in-aid regulations, and provide for the inspection of schools.

Local governments. All the education ordinances in force today provide for the setting up of local education authorities and local education committees. These, together with native authorities, perform the function of local government in education.

As a general rule, they have the power to levy rates and they are responsible for most types of primary and secondary education to a degree which varies considerably from Region to Region. For example, in the West the local authorities have complete control, subject to the provisions of the law, of primary and secondary modern schools.

The part played by local authorities in education has increased rapidly during the last few years and it seems likely that it will continue to increase.

Role of private agencies

Private agencies are known as voluntary agencies. They include a considerable number of missions and religious societies, business houses and private individuals. The larger missions have an organization comparable with that of a government department or ministry, and control, as proprietors and managers, a large proportion of the primary

schools, secondary grammar schools and teacher training colleges in the country. Until the post-World War II period the voluntary agencies were responsible for the greater part of educational development, particularly in the South. The initiative in the acquiring of lands and buildings and the opening of schools lay with them.

Today, the Government assists the approved voluntary agencies by making grants-in-aid for salaries, running expenses and for building purposes.

However, by no means all voluntary agency schools receive assistance. In the West, theoretically, no educational institution is unaided, and in the East unaided are comparatively few, but in the North there is a considerable number of unaided primary schools.

Structure of the school system.

This is shown in the diagram on page 1259.

A description of the educational system today is not complete without reference to education outside institutions and outside the Ministries of Education. Adult education, mainly concerned with literacy and welfare for both men and women, is under the aegis of the regional governments and local authorities. Other government departments such as Forestry, Veterinary, and Posts and Telegraphs, the corporations, and several of the larger business houses run their own training courses, which are largely technical.

In the Northern Region there are a large number of Muslim schools where religious instruction and training in the elementary laws of social behaviour are given. They are not schools in the strict sense of the word, being rather gatherings of young boys (with a few girls occasionally) at certain places for instruction by the *mu'allim* (teacher).

THE DEVELOPMENT OF SECONDARY EDUCATION

At the beginning of the twentieth century a few secondary grammar schools and teacher training colleges were in existence, all in the southern part of Nigeria, where the various Christian missions first operated. Government assistance was limited to four secondary schools.

The 1908 Code provided for greater assistance to secondary education and in 1909 the first government secondary school (King's College in Lagos) was opened.

In 1914 Southern and Northern Nigeria were amalgamated and Lord Lugard, the Governor-General, formulated a general policy for education which resulted in the Code of 1916. The object was to increase assistance to the voluntary agencies.

The 1926 Ordinance provided for greater control by the Education Departments and a system of grants-in-aid based on salaries paid to teachers. The Government came into the picture by establishing further secondary schools and introducing elementary training centres for teachers. During the period 1914–29 most development went on in the South but in 1921, in the North, a teacher training college was opened at Katsina, and a number of post-primary schools (12 in 1929), described as 'central', came into being. These schools very soon acquired the name 'middle' and both South and North Education Departments used the term synonymously with secondary. This was eventually to cause a great deal of confusion as in a full 6-year middle school course the first 2 years corresponded to the last 2 of the primary course, and years 3–6 corresponded to the first 4 of the secondary course. The middle schools of the North were financed largely by Native Administrations and were known as 'NA' schools.

In 1929 the Northern and Southern Education Departments were amalgamated, by amendment of the 1926 Ordinances, and considerable expansion followed. Immediately prior to World War II there were 30 non-government and 4 government (including 1 for girls) secondary schools in the South and 1 government secondary school and 10 NA middle schools in the North. Both the government and voluntary agency teacher training colleges had increased in number considerably.

The year 1932 saw the establishment of a Higher College at Yaba, near Lagos. The significance of this to secondary education was that for the first time courses in technical subjects appeared in an education department institution.

After a period of stagnation or recession in the early part of World War II, education in Nigeria began to move forward again and in 1945 a 10-year development plan (Sessional paper No. 24) was published. It referred specifically to secondary schools, teacher training colleges and technical education, and was followed up by an investigation on grants-in-aid by S. Phillipson and W. E. Holt, and by the 1948 Ordinance.

Since 1948 the number of secondary grammar schools has rapidly increased; the West has developed secondary modern schools on a large scale and the North has converted its middle schools to provincial secondary schools. Teacher training colleges also increased in number and settled down into two main categories—elementary (Grade III) and higher elementary (Grade II).

The 1945 scheme for technical education was put into operation almost immediately and was assisted by Colonial Development and Welfare funds. Higher College, Yaba, was converted into a technical institute and further technical institutes were established at Kaduna and Enugu. Trade centres and handicraft centres have been developed throughout the Federation.

The development of secondary education has been closely bound up with that of primary education, and not until the 10-year plan of 1945 did it attract undivided attention. Even then, it did not become the subject of a separate ordinance. The main events in the history of secondary education are, therefore, also the main events in the history of education generally until the last few years when free primary education was introduced in the East, Lagos and the West.

Legal basis

There are no ordinances referring to secondary education alone, except those that provide for the establishment of certain government schools. The laws and regulations governing secondary education are embodied in the education ordinances referred to above.

Administration

In each Region and in the Federal Territory the Minister is responsible for administration. He is advised by boards

of education in the Regions, and in Lagos by the Chief Federal Adviser acting for a local education authority to be appointed. The boards, which consist of representatives of all parties interested in education, are responsible for planning and policy, as they were before 1954. However, the professional sides of the Ministries, corresponding to the original education departments, provide expert advice to the boards from the heads of the sections responsible for secondary education.

Control. Except in Lagos, the central education authority does not control secondary education. Regional Ministries control secondary education in their own regions. The details of nomenclature and structure vary considerably from region to region but the essential framework remains the same. At headquarters there will be administrative officers responsible for secondary education (general), secondary education (technical), and teacher training. This does not apply to Southern Cameroons and Lagos, where the organizations are too small to permit this sub-division.

The government secondary grammar schools are usually controlled direct from headquarters. Voluntary agency grammar schools are controlled by boards of governors which consist of representatives of the agencies and of the Government (including members of the Ministries of Education), and are responsible to their regional headquarters.

Secondary modern schools in the West are controlled by local education authorities, and provincial secondary schools in the North by boards of governors or advisory councils responsible initially to the Native Administrations and Provincial Education Officers. Government officers are posted by the Northern Regional Government to these schools to assist with staffing.

Technical institutes and trade centres are controlled direct from headquarters.

Teacher training colleges may be government, local education authority (or Native Administration), or voluntary agency. Government teacher training colleges are controlled by headquarters, and other training colleges are controlled locally. As a general rule the voluntary agency colleges have boards of governors, boards of trustees, or managers, responsible to regional headquarters.

There is virtually no control over unassisted institutions except that they can be closed if they do not conform to regulation requirements.

Government control over the voluntary agency secondary schools is largely financial, but over teacher training colleges it is much greater since syllabuses and examinations are a government responsibility.

There is some liaison between the technical education organizations of corporations, business houses, and certain other Ministries, and the technical sections of the Ministries of Education.

Supervision and inspection. The East, North and West each have an inspectorate branch or section. There is no inspectorate yet in the Southern Cameroons or in Lagos but the advisory staff of the Federal Ministry of Education perform the function of an inspectorate on request.

In the three regions mentioned above, the organization of the inspectorate varies considerably. In the West there are staff inspectors in charge of secondary education, teacher training, etc., at headquarters, and inspectors and assistants in the Provinces. In the North a senior inspector (secondary) and a senior inspector (teacher training) are in charge at headquarters, and regional inspectors in the Provinces. In the East there are inspectors for teacher training, and secondary and technical education at headquarters. Each region has a chief inspector.

The organization in the West permits fairly regular visits and inspections but elsewhere special arrangements have

GLOSSARY

'*bridge course*': 1-year course for Grade IV teachers in Northern Region and some experienced uncertificated teachers before entry to Grade III training colleges.

emergency training scheme (science): 2-year post-School Certificate course in science subjects only, leading to General Certificate of Education (Advanced level).

junior secondary: three schools in the Northern Region with 2-year secondary grammar course.

modern classes: 2-year post-primary course with strong practical bias.

preliminary teacher training: preliminary course before entering Grade III teacher training colleges.

primary: the first 6, 7 or 8 years of education, the length of course varying from region to region. The terms used on the diagram indicating various stages and names of classes are self-explanatory.

secondary 'grammar': secondary schools with 5- or 6-year courses leading to School Certificate. Strong academic bias. Includes *provincial secondary schools* in Northern Region with higher practical content.

secondary commercial: secondary schools with courses in commercial subjects.

secondary modern: schools in Western Region with 3-year post-primary courses with strong practical bias.

secondary technical: secondary departments of technical institutes.

teacher training: courses of varying length and difficulty leading to Teacher's Certificate.

Grade IV: 4-year course after 4th primary class in Northern Region; previously known as *vernacular training course.*

Grade III: 2- or 3-year course leading to Teacher's Elementary (Grade III) Certificate.

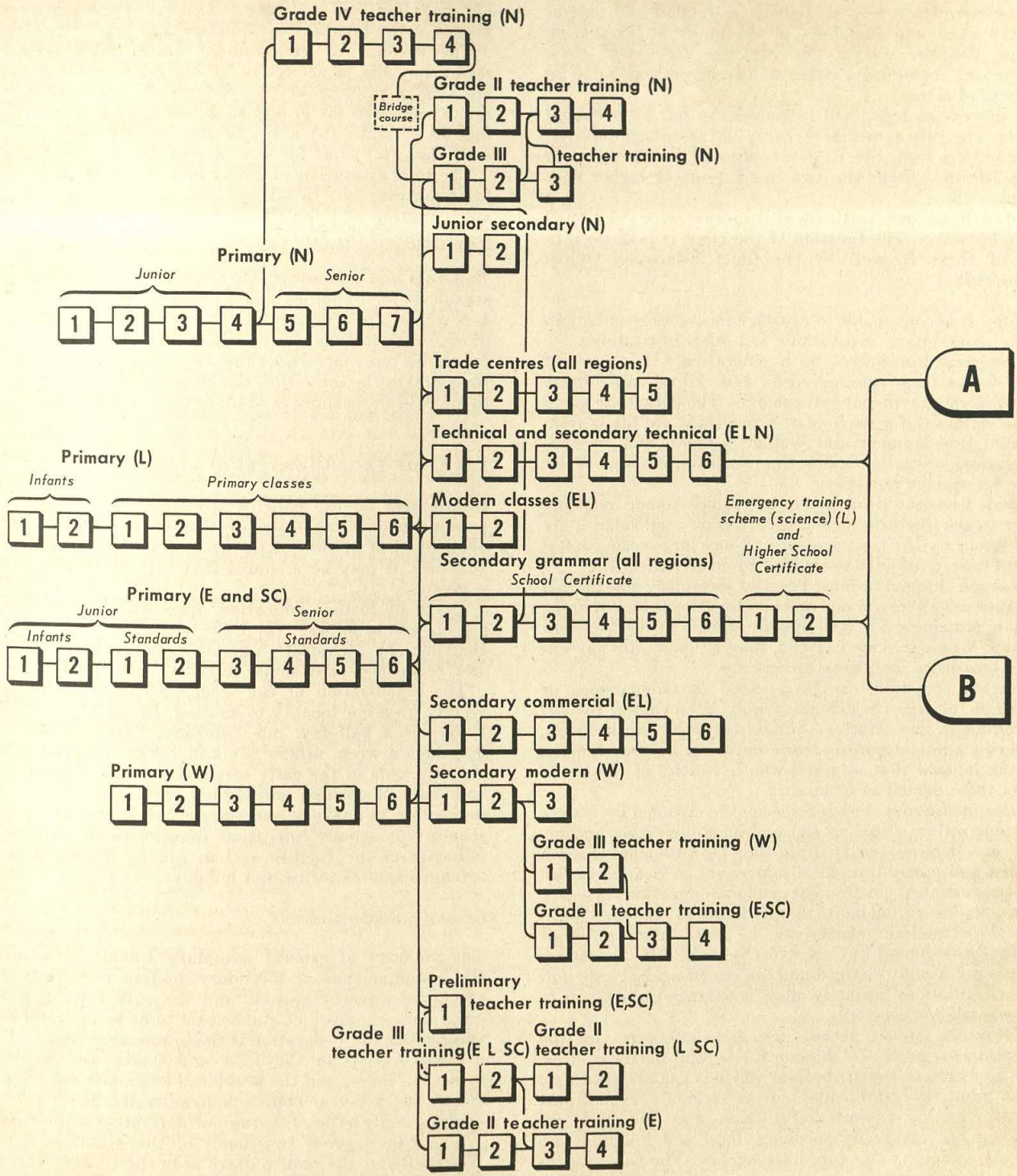
Grade II: 4-year course for entrants who have completed their primary education (Eastern Region) or completed class 2 secondary modern) Western Region) or class 2 secondary grammar (Northern Region); 2-year course for entrants with Grade III Certificates or who have completed the 5- or 6-year secondary grammar course. Both courses lead to Teacher's Higher Elementary (Grade II) Certificate.

technical: full-time and part-time courses at technical institutes in Eastern and Northern Regions and Lagos, principally in engineering and commercial subjects. Courses vary in length with the subject.

trade centre: courses for training in trades such as cabinet making, plumbing, painting and decorating.

HIGHER EDUCATION

A. University College, Ibadan.
B. Nigerian College of Arts, Science and Technology.


Grade IV teacher training (N)
1 2 3 4
Bridge course
Grade II teacher training (N)
1 2 3 4
Grade III teacher training (N)
1 2 3
Junior secondary (N)
1 2
Primary (N)
Junior
Senior
1 2 3 4 5 6 7
Trade centres (all regions)
1 2 3 4 5
A
Technical and secondary technical (E L N)
1 2 3 4 5 6
Primary (L)
Infants
Primary classes
1 2 1 2 3 4 5 6
Modern classes (EL)
1 2
Emergency training scheme (science) (L) and Higher School Certificate
Secondary grammar (all regions)
School Certificate
1 2 3 4 5 6 1 2
Primary (E and SC)
Junior
Senior
Infants
Standards
Standards
1 2 1 2 3 4 5 6
B
Secondary commercial (EL)
1 2 3 4 5 6
Primary (W)
1 2 3 4 5 6
Secondary modern (W)
1 2 3
Grade III teacher training (W)
1 2
Grade II teacher training (E,SC)
1 2 3 4
Preliminary teacher training (E,SC)
1
Grade III teacher training (E L SC)
1 2
Grade II teacher training (L SC)
1 2
Grade II teacher training (E)
1 2 3 4

to be made. However, all regions call upon the federal advisory staff and members of the staffs at University College, Ibadan, and of the Nigerian College of Arts, Science and Technology, either to lead inspections or to be members of a team.

An inspecting team will frequently be led by a federal adviser, the other members being an assistant adviser, senior officers from the Region concerned and lecturers or senior lecturers from the two institutions of higher education.

In the West and North there is no inspector (technical) at headquarters. The function of the office is performed in each of these Regions by the Chief Education Officer (Technical).

Finance. It is convenient to consider this section under two heads—government institutions and other institutions.

Government institutions. As a general rule the source of funds for salaries, running costs, and capital expenditure is the federal or regional governments. The details are given in the estimates for each year. Exceptions are funds from Colonial Development and Welfare sources, and overseas foundations or trusts. Grants from such sources are usually made for specific purposes.

Funds from the Government are usually made available direct to the institution concerned. Senior staff salaries are paid direct by the Government and any large-scale capital expenditure is usually controlled by headquarters.

Fees are charged in most types of secondary educational institutions. There are one or two exceptions; for example, fees are not charged in government colleges in the Northern Region. Where fees are charged, they are paid into government treasuries, and rank as revenue.

Parents of pupils can be assisted by scholarships or remission of fees. Scholarships may be awarded by the Government, by Native Administrations (Authorities), local education authorities, corporations or business houses. It may be said that no pupil who is worthy of support is likely to be denied assistance.

Other institutions. Funds for schools controlled by Native Administrations (Authorities) and local education authorities are derived partly from the Government of each Region and partly from local sources (i.e. education rates). The proportion of government and local education authority funds varies throughout the Federation. In the West, secondary modern schools are, in most instances, built by the Government but are expected to be self-supporting.

Fees are usually charged and are set off against expenditure. Regulations normally allow assistance to be given to parents where necessary.

Voluntary agency schools are financed partly by the Government, partly by mission funds, and partly by fees. The government's contribution, which is usually paid as a block grant (in instalments), covers staff salaries and part of the running expenses. Provision may be made for building but, generally speaking, land and buildings are already owned by the voluntary agency. The Government has the power to make special purposes grants for buildings and of recent years this power has been used to expand and improve existing buildings.

Fees are charged and are regarded as revenue by the institution concerned. Tuition fees swell the general income, but boarding fees are expected to cover the running expenses of the boarding establishments.

The systems of grants-in-aid varies from region to region but the principles on which grants are calculated are similar throughout the Federation. An institution is usually assessed for grants as follows: (a) a sum equal to salaries of staff; (b) a capitation sum for each pupil or each class; (c) sums for special purposes, e.g. buildings.

The total capitation sum may be reduced by an assumed local contribution. In all cases the payment of grants-in-aid is contingent upon the institution's conforming to the regulations of the Ministry or authority concerned.

Buildings and equipment. There are no generally accepted standards for buildings and equipment in the Federation as a whole. The Ordinances which form the statutory basis of education include clauses which refer to minimum space for pupils, but control over the size and quality of buildings is general in the sense that the Ministry reserves the power to approve or disapprove of plans for new buildings.

TYPES OF SECONDARY EDUCATION

Information on the help or direction given to pupils or parents in choosing types of secondary education is not available, but in view of the general absence of vocational guidance, it may be assumed that little help of this kind is given.

Types of further education open to secondary school leavers are as follows: (a) University (University College, Ibadan); (b) Technical: Nigerian College of Arts, Science and Technology; and senior sections of technical institutes.

The organization of the secondary school year varies greatly from one locality to another. In the Muslim North, Friday is a half-day, not Saturday. Some schools work five days a week, others five and a half. In most schools the day ends in the early afternoon. The length of terms and dates of opening and closing vary so much that it is impossible to make a general statement except that the school year usually runs from January to December. The influence of the English system can be discerned in the arrangements of terms and holidays.

General secondary schools

The majority of general secondary schools are either of the grammar type or secondary modern type. The latter are of very recent growth, and the only type of general secondary school which can be said to be firmly established throughout the Federation is the grammar school.[1]

Some schools in the East and Lagos are developing technical 'sides', and the provincial secondary school in the North has a 6-year course in handicrafts, but no schools could possibly be described as multilateral or comprehensive.

The names given to schools of the grammar type in Nigeria follow the same pattern as in the United Kingdom. Grammar, high, academy, secondary, college, are commonly used.

1. The term 'secondary school' is commonly used to refer to the 'grammar' type of school only.

Secondary grammar. The aim of the secondary grammar school is to provide a general education leading to School Certificate, and in some schools to Higher School Certificate, and to produce good citizens.

Pupils are selected by means of competitive examinations and interviews. The standard of these examinations varies considerably, and the only common factor that can be found is the setting of papers in English and arithmetic. Most voluntary agencies run their own examinations, a small number in the West and the two government colleges in Lagos take part in a Common Entrance examination conducted by the West African Examinations Council, and government colleges and other schools that wish to do so sit a Common Entrance examination in their own region.

The curricula of most grammar schools follow closely the lines of the traditional English grammar school. A survey made a few years ago showed that English language and literature, geography, history, mathematics and religious knowledge were common to very nearly all schools. Latin appeared in most, and the sciences in about half.

Domestic science was common to the majority of girls' schools, and music, handwork, art and the vernacular occurred in about half of all schools. Civics and health science were taught in the lower forms of about one-third of the schools. Physical training, either in the time-table or out of school hours, was carried on in most schools.

In a very few schools were found such subjects as agriculture, farming, technical drawing, French, and book-keeping.

A typical weekly time-table would consist of 35 periods of 40 or 45 minutes each. English language and literature would be very generously treated, particularly in the lower school, and would be followed by mathematics, languages, the sciences, the social studies, and other subjects.

The majority of schools either have a 5- or 6-year course leading to School Certificate, or are working towards such a course. Many newly established schools have not been in existence long enough to complete the course. A few schools have Higher School Certificate courses, comprising a further two years' study.

Promotion from one form to the next is usually decided on the results of an annual examination. Results are debated at staff meetings and doubtful cases are usually thoroughly examined before decisions are made.

Some schools promote more or less automatically up to two years before School Certificate when a weeding-out of pupils unlikely to pass this examination takes place.

It is common practice to make a report on a pupil at least once a year. Term reports are frequently made. The form of the report varies from a bare statement of marks and positions in the subjects of the curriculum to comprehensive documents giving comments by subject masters, form masters, house masters, and the principal.

The School Certificate examination referred to above is an examination conducted by the West African Examinations Council. It replaced the Cambridge Oversea School Certificate, and the greater part of it is still set and marked in the United Kingdom, where final awards are made. The Higher School Certificate examination is the Oversea Examination of Cambridge University.

The teaching staff of the grammar type school varies from untrained young men and women whose academic attainment may not be as high as School Certificate to fully trained graduates with honours degrees. In government colleges the percentage of graduates is usually high. These teachers are known as education officers, and are recruited locally or from overseas. Locally recruited officers are appointed by the Public Service Commission of each region, and officers from overseas are usually appointed by the Colonial Office acting for the Government concerned.

Voluntary agency schools are responsible for their own recruiting, which is usually conducted through representatives overseas for expatriate staff, and by whatever means are available for local staff. The percentage of graduates is much lower than in government colleges but varies considerably from school to school.

The staff of the provincial secondary schools in the Northern Region consists partly of education officers as above, and partly of Native Administration teachers of varying qualifications.

Taking the secondary grammar schools of the Federation as a whole, certainly not more than one-third of the teaching staff are graduates, not all of whom are trained. The remaining two-thirds are certificated (overseas qualification, Nigerian Grade I, II or III) or uncertificated.

Few facilities exist in Nigeria for the training of teachers specifically for secondary schools. University College, Ibadan, has a one-year post-graduate course and a College diploma course in education, and the Nigerian College of Arts, Science and Technology has a one-year professional course leading to the Teacher's Certificate of the College.

Junior secondary schools. There are three junior secondary schools in the Northern Region. They have a 2-year course on the same lines as those in the secondary grammar schools. Pupils pass from them to provincial secondary schools or other secondary schools with full courses. The middle school of the Northern Region was renamed junior secondary school and then provincial secondary school, and the three schools referred to above were not developed above form 2.

Secondary modern schools. Secondary modern schools were established in the Western Region in 1955. Recent information about developments in other regions is not available but statistics returned for 1957 do not include this type of school. In Lagos and the East are what are known as 'modern classes', the majority of which are attached to primary schools.

The secondary modern school provides a 3-year course and the modern classes a 2-year course, both terminating in a school-leaving examination.

The curriculum in Lagos includes English language and literature, arithmetic, geography, home economics, music, arts and crafts, and physical training, and the aim of the modern classes is to continue the work of the primary school with more emphasis on the practical side.

In the Western Region about two-thirds of the time-table is taken up by compulsory subjects—arithmetic or mathematics, English, the vernacular, history and civics, geography, religious knowledge, physical education, nature study or general science or hygiene, and about one-third by optional subjects—domestic science, needlework, agriculture or rural science, commerce and book-keeping,

woodwork and carpentry, arts and crafts, and music. The aim is to give a strong practical bias to the curriculum without making it strictly vocational.

At the end of the course pupils may sit the competitive examination for entry to the West Region Public Service, and if successful would enter the service as clerical assistants or the equivalent grade.

The majority of teachers in the secondary modern schools and modern classes are Grade II, i.e. holders of the Teachers' Higher Elementary (Grade II) Certificate. They are trained in training colleges in Nigeria. Untrained teachers on the staffs will almost certainly have completed a secondary school course before starting teaching.

Technical institutes. There are three technical institutes in the Federation, one in the North at Kaduna, one in the East at Enugu and one in Lagos at Yaba. The institutes at Lagos and Kaduna offer more varied courses than the institute at Enugu.

At the Yaba Technical Institute 4-year courses for juniors in engineering, commercial subjects and printing are available, and for seniors, courses in civil, electrical, mechanical and radio engineering. These latter courses are known as 'sandwich', i.e., students attend a full session at the institute, then work for 18 months 'in the field' and follow up with a second full session at the institute. There are also part-time day and evening courses in engineering, printing, building construction, art and design, and commercial subjects.

Students sit the internal examinations of the institute at the end of their courses and seniors also enter for the General Certificate of Education (Advanced level) of London University, and parts I and II of the major institutional examinations in the United Kingdom if they wish to do so. Juniors may sit the GCE (Ordinary level) of London University, and part-time students may enter for examinations of the Royal Society of Arts and the City and Guilds in the United Kingdom. The Technical Institute, Yaba, will take the West African School Certificate in future.

Entry to the junior courses is by examination (open to pupils holding the Primary School Leaving Certificate) and interview. Entrants to senior courses hold the School Certificate or its equivalent and are usually sponsored by an outside business house, corporation or government department.

Courses and conditions of entry at Kaduna are similar except that there are no part-time students, and the junior courses are for technical assistants in engineering and for commercial subjects. The secondary technical school, previously part of the institute, is now within the general secondary section of the Ministry of Education. Its curriculum is similar to those of the grammar schools, with a technical bias.

Courses at Enugu are limited to junior, as at Yaba, and senior sandwich engineering courses.

The teaching staffs at technical institutes are very largely recruited from overseas, principally from the United Kingdom. They include graduates (with or without training), and non-graduates with qualifications such as the Ministry of Education Certificate, Higher or Ordinary National Certificate, and Final City and Guilds Certificate of the United Kingdom.

Trade centres. The courses at trade centres, of which there is at least one in each region, are all trade training, the length depending on the particular trade and varying from five years for fitter/machinists to two and a half years for painters and decorators. The number of courses varies from one trade centre to another.

Entry is from the primary school, by examination and interview.

The staff at trade centres consists principally of holders of Final City and Guilds Certificates and Higher National Certificates, or skilled artisans who have passed through approved apprenticeships in the United Kingdom. The majority are recruited from the United Kingdom.

Secondary commercial schools. Commercial schools exist in all regions. Many of them are unrecognized and nearly all are private concerns. A number are recognized in the Eastern Region and one school in Lagos is assisted.

Courses include general subjects, shorthand and typing, and students enter for examinations of the Royal Society of Arts in the United Kingdom. In the East, successes have been very few indeed. Detailed information of staff is not available but it appears that most teachers are untrained, and the best will have Royal Society of Arts Advanced Level Certificates.

Training schools of ministries, corporations, business houses. The information available on these is very limited.

As a general rule there are schools of agriculture and forestry attached to appropriate ministries, and courses in veterinary education, clerical training, administration and other specialized subjects. Federal Posts and Telegraphs have a training school, the Nigerianization Office administers an Emergency Training Scheme (Science) and a Training Centre, and Civil Aviation has training schools. The corporations, e.g. Railway, and Broadcasting, and some of the larger business houses, run their own training schemes. It is not certain that all of the courses can be described as secondary.

The Ibadan School of Forestry serves Forest Departments (or appropriate sections of ministries) of all regions. Entrance requirements are normally School Certificate or its equivalent. Courses are practical and include botany, geography, geology, surveying and map-making, introductory forestry, and forest engineering.

The Emergency Training Scheme (Science) was begun in Lagos in 1958, to meet the need for graduates in engineering and the sciences. The object is to produce students with qualifications giving them entry to universities or other institutions of higher education. Two-year courses leading to the General Certificate of Education (Advanced level) of London University are available in pure and applied mathematics, physics, chemistry, botany, zoology, biology, and engineering drawing.

Teacher training schools

Teacher training schools in Nigeria fall into the following main classes: (a) rural education centres; (b) Grade II (higher elementary); (c) Grade III (elementary); (d) preliminary; (e) Grade IV.

The last four of these classes may be regarded as second-

ary, although it is doubtful if Grade IV is much more than primary.

Grade IV training schools. These exist only in the North. They were previously known as vernacular training centres, and accept entrants from class 4 of the primary school. The course is 4 years and after obtaining the Grade IV Certificate a student may go on by means of a 'bridge course' to a Grade III training college.

Preliminary training centres. These centres were developed in the East and in Southern Cameroons to provide a one-year course for the brighter pupils of primary schools, after which they would teach for two years and then enter a Grade III training college. The two-year teaching period is often omitted. Many of the preliminary training centres have been converted to Grade III colleges to help meet the growing demand for teachers.

Grade III (*Elementary*). Grade III colleges are found in all regions. The course is a 2-year one except in the North where it is 3 years. In the West the minimum qualification for entry is 'Modern II', i.e., a school leaving certificate awarded at the end of the second year in the secondary modern school. The standard is likely to be raised to Modern III in the near future. Elsewhere the minimum qualification is the Primary School Leaving Certificate. The majority of students teach for a period before they enter the Grade III college.

The curriculum, which is of general application, includes English, arithmetic, school organization, physical and health education, language method (vernacular and English), arithmetic method, and matter and method of such other subjects in the primary school curriculum as a Ministry of Education may require. At the end of the course the student is examined in these subjects, the syllabuses of which are prescribed by the individual Ministries of Education, and undergoes practical tests in class teaching (including physical education), spoken English, and in any two of rural science or gardening, domestic science, needlework, handwork, art, and such other subjects as a Ministry of Education shall determine.

The examination is internally set in the North, Lagos and Southern Cameroons, and moderated by inspectors, and in the East and West it is set by the Ministries of Education.

The staff of the Grade III colleges consists largely of Grade II teachers, but in the North there is a high proportion of expatriate graduates and holders of Ministry of Education Certificates of the United Kingdom or University of London Institute of Education Certificates.

Grade II (*Higher Elementary*). Although the Grade III college accepts many of its students after they have taught for a period, thus introducing a break in the continuity of their schooling, the education it offers must be regarded as secondary without doubt. The Grade II college is not quite in the same situation. There are two types, one offering a 4-year course and the other a 2-year. The majority of students have taught for some time and, in the 2-year colleges, hold a Grade III Certificate. The break in continuity may be considerable, but as the standard of education is certainly no higher than that of the General Certificate of Education (Advanced level), and may be lower, it is reasonable to include the Grade II colleges in this brief description of secondary education in Nigeria.

The curriculum in both types of Grade II college include principles and practice of education, English language, comprehension and grammar, and arithmetical processes, all of which are examined by the West African Examinations Council, and physical and health education, English literature, history, geography and practical mathematics, which are examined internally or by a Ministry of Education. Students are also tested in class teaching, spoken English, physical training and games, and from two to five other subjects from two groups, one of which has a strong practical bias and the other a strong academic bias.

The minimum qualifications for entry to a four-year Grade II college are the Primary School Leaving Certificate in the East, Lagos and Southern Cameroons, Secondary II in the North, and Modern II in the West. For the 2-year course, a Grade III Certificate with at least one year's teaching experience or School Certificate or a full course (without School Certificate) at a secondary school is required.

The staff of Grade II colleges consists of graduates, holders of certificates of the Ministry of Education or the University of London in the United Kingdom, Grade I teachers, and instructors in some practical subjects. The proportion of the several grades of staff varies considerably from college to college and region to region.

Grade III teachers are trained for the primary school and most of them are to be found there. Grade II teachers go mainly to the upper classes in primary schools, secondary modern schools, modern classes, Grade III colleges and the lower forms of secondary schools.

The conditions of award of Grade I certificates are such as to exclude the Grade I teacher from a description of secondary education.

Out-of-class activities

In most schools and colleges the secondary level pupils participate to some extent in school government. There is, however, considerable variation in the kind and amount of participation. In this connexion it must be remembered that students at technical institutes and teacher training colleges are on the whole older and more mature than pupils of general secondary schools. At one end of the scale are schools with a simple prefectorial or monitorial system, with officers appointed by the principal and staff, and at the other end are schools with elected officers, varied posts of responsibility and perhaps a school council. The house system is general, but it, again, varies from names with little significance except on the playing fields to well organized communities.

The majority of schools and colleges which have been described are boarding or part boarding. Consequently, organized out-of-class activities are of special importance.

There are a few examples of school councils run by the pupils themselves on the lines of the country's own legislature, and much good work has been done by committees of such councils. There are more examples of effective house systems where house officials have real authority and all the members have some say in the affairs of the house.

Most of the foregoing remarks may be applied to games. English traditional games and sports are usual, football, athletics and table tennis being very popular in boys' schools, and cricket, hockey, lawn tennis and basket-ball less so. Girls play netball, hockey, table tennis, lawn tennis, and take part in athletics. The participation of girls in games and sports is of comparatively recent growth. Swimming is popular with boys and girls where facilities exist.

Clubs and societies such as Boy Scouts, Red Cross, Girl Guides, gardening, photographic, debating, literary, science, natural history, geographical, dramatic and handicrafts are common. It is not possible to say how many schools have well organized clubs and societies, but the schools which offer a wide range of out-of-class activities of this kind are few. Most schools have a very limited number of clubs and societies, partly because of lack of staff and partly because the importance of these activities is not fully appreciated.

One centre deserves special mention. It is called the Man O'War Bay Training Centre, and is situated on the coast of Southern Cameroons, but is open to persons of both sexes from all parts of the Federation. Courses are designed for training in citizenship and community development, and to give ample opportunity for qualities of leadership, self-reliance and service to develop. Those selected to attend come from schools, colleges, local authorities, business houses, the teaching profession, the police, government departments and corporations.

TRENDS AND PROBLEMS

The pattern of secondary education remained virtually unchanged from 1900 to the end of World War II. Grammar type schools and teacher training colleges had a clear field. Their number was small, provision for the education of girls was negligible, and although towards the end of the period pressure on the Government to assist by building schools and increasing grants-in-aid was apparent, it was not great enough to influence public opinion to such an extent as to make demands for expansion imperative. Technical education was, in the words of a Director of Education immediately after World War II, 'left to other interested departments'.

During this period the North had lagged behind, largely because its predominantly Muslim population was hesitant to accept Western ideas on education, particularly the education of women and girls.

The following table shows the development in secondary education since 1947. For this year (1947) the figures are approximate and none is available for technical and vocational education.

The table shows that secondary (general) schools and teacher training colleges increased rapidly in number and enrolment during the decade covered, and that the rate of increase was greater towards the end of the period. These figures should, however, be interpreted in the light of certain specific developments. In 1955 the majority of secondary (general) schools were of the grammar type and the exceptionally large increase from 163 to 477 in 1957 is due principally to the establishment of over 250

DEVELOPMENT OF SECONDARY EDUCATION, 1947–57

Type of school	Number of schools				Enrolment			
	1947	1950	1955	1957	1947	1950	1955	1957
Secondary (General)	60	120	163	477	11 000	22 200	28 243	67 250
Teacher training	80	111	174	311	4 000	6 200	12 862	23 186
Technical and vocational	..	15	11	34	....	1 207	2 256	5 782
Total	...	246	348	822	.....	29 607	43 361	96 228

secondary modern schools in the Western Region. By the same token, the increase in technical and vocational schools from 11 to 34 is largely due to the inclusion in this branch of 15 commercial schools with an enrolment of 2,590 in the Eastern Region in 1957.

The plans made at the end of World War II for the expansion of secondary education presumably seemed reasonable to the planners in view of the financial limitations of the time and the expected rate of development of the country. Looked at now, they appear inadequate, because they did not take into account the problems which arose at the arrival or near approach of self-government.

After 1954 the problems became acute and their magnitude became apparent to many who had not considered them before. The response varied from region to region and from one branch of secondary education to another.

The problems can be stated quite simply. They were: (a) how to meet the popular demand for education for all in the West, East and Lagos; and (b) how to train the large numbers of Nigerian administrators, executives, technicians and all grades of skilled clerical, commercial and industrial workers that were necessary for the proper development of the country (with or without independence), and the replacement of expatriates (with independence).

Although it has more than half the population of Nigeria, the North has lagged behind the South in the provision of education as a whole. With the exception of technical education, all branches of primary and secondary education are much less developed in the North than in the South. One example will suffice: in 1957 there were 2,945 boys and 345 girls in secondary (general) schools in the North, and in Lagos alone there were 2,949 boys and 1,138 girls in such schools. The reasons for this are partly industrial and partly political. Free primary education has not been introduced and the popular demand for education is by no means overwhelming.

In the Western and Eastern Regions and in Lagos, there was considerable popular demand, which was met, separately in each case, by introducing free primary education. As a result the problems of secondary education were greatly magnified. Previously there had been secondary education facilities for only a comparatively small proportion of the primary school leavers. Expansion to provide for the remainder was a sufficient problem, which was, in fact, being vigorously dealt with. Now something had to be done to provide not only for this remainder but also for the flood of primary school leavers to come.

The West established secondary modern schools as

quickly as possible with whatever buildings were available or could be built, and with whatever staff and equipment could be obtained, and accelerated the expansion of secondary grammar schools. Elsewhere in the South, a few modern classes appeared and there was some increase in the number of grammar schools, but up to the end of 1957 no great expansion in secondary (general) education had taken place. Even if schools could be provided for all children at the secondary level there remains the major problem of finding the staff to teach them. The South adopted a policy of expanding primary and secondary education and then turned their attention to the problem of obtaining more teachers. Training facilities were rapidly increased but the same problem arose—there were not enough qualified tutors to train the teachers.

There is, consequently, a serious shortage of qualified teachers at the primary and secondary level. The problem cannot be stated simply because it is complicated by the existence of a considerable number of expatriate teachers in secondary grammar schools, technical and vocational schools, and training colleges, who may or may not stay in the country. It seems, however, that the first step must be to provide suitably qualified staff for the training colleges so that teachers for the primary schools, the secondary modern school and the lower forms of the secondary grammar school can be produced. Plans to this end are being formulated.

The training of qualified staff for the upper forms of secondary grammar schools and technical institutes is dependent on the facilities available for higher education. Expansion of the existing facilities in Nigeria is being considered, and scholarship schemes to finance students at home and abroad are well developed. But, as yet, the means of obtaining suitably qualified Nigerians to fill positions in government, commerce, industry and education are inadequate.

The position with regard to technical education requires further attention. Three technical institutes and a handful of trade centres are recognized by the Ministries of Education as insufficient for a country of over 30 million inhabitants. The main (and possibly the only) obstacle to development is the difficulty of obtaining qualified staff, nearly all of whom must still be recruited overseas. It is interesting to observe that the problems of secondary education today tend to move in circles. Pupils must be educated at the secondary level to provide the material for future administrators, executives, teachers and other professionals, and skilled workers of all kinds, but before the pupils can be educated they must have properly qualified teachers. Clearly, therefore, the main problem in Nigeria today is the provision of more and better qualified teachers. Realistic plans are now under active consideration. With the help of financial assistance from external sources progress should be made in the very near future towards supplementing the efforts which are being made locally with Nigerian funds.

At the time of writing, various surveys—federal and regional—are taking place or about to start. These surveys will high-light priority problems and, it is hoped, suggest means of solving them in ways best suited to the varied needs but not unlimited resources of Nigeria. Among other matters now under consideration are:

1. The growth and development of professional associations and their collaboration with the various Ministries of Education and in particular the Joint Consultative Committee, referred to above.
2. Student counselling and vocational guidance—careers masters and mistresses.
3. The use of broadcasting in education.
4. The development of post-school certificate work as a prelude to admission to institutions of higher education.
5. Ways and means of benefiting from international organizations offering technical and financial assistance in the field of education.
6. The development and maintenance of academic standards throughout the Federation by such means as the consolidation and expansion of the work of the West African Examinations Council and by developing the ideas of joint consultation on common problems.
7. Planning scholarship schemes in relation to Nigeria's anticipated needs for university graduates in all fields.
8. Variation of the traditional pattern of secondary education to meet the needs of the country in all fields.
9. Training of Nigerian teachers and the recruitment and retention of expatriate teachers in the meantime.
10. Improvements in methods of inspection.
11. Improvements in the methods of teaching English, spoken and written, at all levels.
12. Adjustment and modification of syllabuses at all levels to relate what is taught more closely to Nigeria's needs and interests. In this problem the Joint Consultative Committee, Sub-Committee of the West African Examinations Council and professional associations collaborate. There are also various syllabus committees dealing with this problem.

[*Text prepared by the Federal Education Department, Lagos, in June 1959.*]

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STATISTICS

FEDERATION OF NIGERIA

Population (mid-year 1958 estimate): 33,052,000.
Area: 339,169 square miles; 878,447 square kilometres.
Population density: 97 per square mile; 38 per square kilometre.

The following comments on statistics cover the Trust Territory of British Cameroons as well as the Federation of Nigeria.

Summary of school statistics, 1953–57. In the school year 1957 enrolment in educational institutions of all levels totalled 2,600,000 pupils, representing about 8 per cent of the estimated population of Nigeria and the Trust Territory of the British Cameroons. Of the school-going population approximately 96 per cent were in primary schools and nearly 4 per cent in all secondary schools including teacher training colleges. There were in addition 1,458 students, of whom 88 were women, at Ibadan University and at the Nigerian College of Technology. The proportion of girls enrolled was 35 per cent in primary, 18 per cent in general secondary and 22 per cent in teacher training colleges. Compared with 1954 enrolment had increased at all educational levels. The increase in primary schools was 48 per cent and in teaching colleges 78 per cent. As regards general secondary schools comparisons with earlier years are not valid owing to the rapid development of secondary modern schools. The teaching staff in all primary and secondary schools in 1957 numbered about 92,500 of whom 19 per cent were women. The average pupil-teacher ratio in primary schools was 29 and in general secondary schools 19. (See Table 1.)

Examination results in secondary education, 1955–57. Results of secondary examinations for the whole Federation are only available since 1955/56. Between 1955/56 and 1957/58 the number of students awarded the West African School Certificate increased from 2,079 to 2,552 (23 per cent). In 1957/58, 289 girls were awarded this certificate, an increase of 55 per cent over the figure for 1956/57. Successful candidates for the General Certificate of Education increased from 709 in 1956/57 to 1,055 in 1957/58. Teaching certificates were awarded to 5,396 students in 1957/58. Numbers entering for other commercial and technical examinations also increased in 1957/58. (See Table 2.)

Educational finance, 1956/57. Total federal expenditure on education in the fiscal year beginning April 1956 amounted to 14,853,825 pounds sterling, or approximately £0.4 per inhabitant. Receipts were derived from regional governments and local authorities in the Federation, including the Southern Cameroons. (See Table 3B.) Of the total spent, £2,807,674 (19 per cent), was capital expenditure. The distribution of recurring expenditure by level and type of education for all regions, except the Southern Cameroons, is given in Table 3C.

Sources. Federation of Nigeria: digest of statistics 1956 and 1957; return to Unesco questionnaire.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, Northern Region	1957	2 009	7 862	1 227	205 769	51 273
	Primary schools, Western Region	1957	6 628	34 851	6 743	982 755	363 178
	Primary schools, Eastern Region	1957	6 986	40 851	7 585	1 209 167	417 071
	Primary schools, Lagos	1957	96	1 646	936	50 182	22 750
	Primary schools, Southern Cameroons	1957	394	1 750	222	50 618	11 002
	Total	**1957**	**16 113**	**86 960**	**16 713**	**2 498 491**	**865 274**
	,,	1956	14 084	70 782	13 761	1 954 276	640 699
	,,	1955	13 048			1 702 762	513 692
	,,	1954				1 687 927	508 883
	,,	1953				*1 094 200	
Secondary *General*	Secondary schools, Northern Region	1957	27	318	46	3 651	345
	Secondary schools, Western Region	1957	362	1 956	382	46 810	9 245
	Secondary schools, Eastern Region	1957	68	934	102	12 242	1 558
	Secondary schools, Lagos	1957	17	292	87	4 087	1 138
	Secondary schools, Southern Cameroons	1957	3	35	5	460	50
	Total	**1957**	**477**	**3 535**	**622**	**67 250**	**12 336**
	,,	1956	300	1 958	290	39 495	6 392
	,,	1955	[1]163			[1]28 243	3 678
	,,	1954				27 883	3 678
	,,	1953				26 200	3 000
Vocational	Technical institutes, Northern Region	1957	2			160	–
	Trade centres, Northern Region	1957	4	78	1	592	–
	Other vocational institutions, Northern Region	1957	2			120	–
	Trade centre, Western Region	1957	1			200	–
	Domestic science school, Western Region	1957	1	33	3	20	20
	Technical institute, Eastern Region	1957	1			125	–
	Trade centres, Eastern Region	1957	3	126	4	303	18
	Commercial and other vocational schools, Eastern Region	1957	16			2 672	74
	Technical institute, Lagos	1957	1			1 070	–
	Trade centre, Lagos	1957	1	52	–	348	–
	Trade and vocational centres, Southern Cameroons	1957	2	12	–	172	–
	Total	**1957**	**34**	**301**	**8**	**5 782**	**112**
	,,	1956	12	332	11	2 778	27
	,,	1955	34			[2]2 256	–
	,,	1954				2 086	–
	,,	1953				1 940	
Teacher training	Teacher training colleges, Northern Region	1957	46	235	71	2 546	363
	Teacher training colleges, Western Region	1957	99	738	191	10 471	2 508
	Teacher training colleges, Eastern Region	1957	152	738	173	9 413	2 161
	Teacher training colleges, Lagos	1957	2	8	2	129	35
	Teacher training colleges, Southern Cameroons	1957	12	41	7	627	47
	Total	**1957**	**311**	**1 760**	**444**	**23 186**	**5 114**
	,,	1956	284	1 476	372	20 459	4 483
	,,	1955					
	,,	1954				13 030	2 958
	,,	1953					
Higher	University College, Ibadan[3]	1957	1	...	...	754	53
	Nigerian College of Technology[3]	1957	1	...	...	704	35
	Total[3]	**1957**	**2**	**...**	**...**	**1 458**	**88**
	,, [3]	1956	2	...	...	1 115	[4]31
	,, [3]	1955	2	...	...	931	[4]21
	,, [3]	1954	2	...	...	702	[4]21
	,, [3]	1953	2	...	...	549	[4]18

1. Not including secondary modern schools.
2. Not including enrolment in 23 commercial schools.
3. Including teacher training.
4. Girls enrolled in University College only.

2. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1955–57

Type of diploma or certificate granted	School year		
	1955/56	1956/57	1957/58
West African School Certificate	2 079	[1]2 190	[1]2 552
Cambridge Higher School Certificate	...	...	[2]783
General Certificate of Education	...	709	1 055
Royal Society of Arts			
School Commercial Certificate	...	20	57
Senior School Commercial Certificate	...	13	19
City and Guilds of London Institute	...	[2]368	[2]401
Teachers' Elementary Certificate (Grade III)	...	...	4 256
Teachers' Elementary Certificate (Grade II)	...	...	1 140
Other examinations			
Associated Board of the Royal School of Music	...	7	7

1. Including 186 girls in 1956/57 and 289 in 1957/58.
2. Number of subjects passed.

3. EDUCATIONAL FINANCE, 1956/57 (in pounds sterling)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts	**14 853 825**
Regional governments and local authorities	14 853 825

B. EXPENDITURE BY PURPOSE

	Amount
Total expenditure	**[2]14 853 825**
Recurring expenditure	[3]11 710 751
Northern Region	2 505 488
Western Region	4 795 140
Eastern Region	3 994 805
Lagos	415 318
Southern Cameroons	...
Capital expenditure	[3]2 807 674
Northern Region	711 303
Western Region	1 692 150
Eastern Region	398 056
Lagos	6 165
Southern Cameroons	...

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION[3]

	Northern Region	Western Region	Eastern Region	Lagos	Amount	Per cent
Total recurring expenditure	**2 505 488**	**4 795 140**	**3 994 805**	**415 318**	**[3]11 710 751**	**100.0**
Central administration	134 615	645 500	113 824	56 184	950 123	8.1
Primary education	1 244 124	3 350 000	2 827 813	117 138	7 539 075	64.4
General secondary education	364 481	270 000	379 087	96 626	1 110 194	9.5
Vocational education	119 524	100 390	74 353	134 612	428 879	3.7
Teacher training	354 724	395 000	386 477	10 758	1 146 959	9.8
Higher education	–	–	179 100	–	179 100	1.5
Other education[4]	233 181	–	24 824	–	258 005	2.2
Other recurring expenditure	54 839	34 250	9 327	–	98 416	0.8

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.
2. Includes expenditure by Southern Cameroons amounting to £335,400 for which the distribution is not available.
3. Not including expenditure by Southern Cameroons for which the distribution is not available.
4. Includes adult education.

THE EDUCATIONAL SYSTEM

The statutory basis of the present educational system (apart from education at university level) is the Education Ordinance, 1953. The Minister of Education is responsible for policy matters, while the Education Department does all the work necessary or incidental to the control of education by the Minister. There is an advisory Board of Education. Secondary education is controlled by the Ministry through the Department, either directly in the case of government secondary schools, or indirectly in the case of schools operated by churches, missions or governing boards.

The school course begins with a 7-year primary school, which leads to the various types of secondary education described below. Secondary school leavers have a variety of educational opportunities available to them, including degree and diploma courses at Fourah Bay College [a constituent college of the University of Durham (U.K.)], evening classes in various subjects at the Technical Institute, evening and part-time classes organized by the Extra-Mural Department of Fourah Bay College, and teacher training courses. There is also provision for sending selected students overseas at public expense to follow approved courses of study.

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary education was pioneered by the missionary societies. The first grammar school in Sierra Leone was established in 1845 by the Church Missionary Society, and similar schools were set up by various denominations in the next few decades. They were supported by means of pupils' fees and subsidies from missionary bodies. The Education Ordinance of 1911 first introduced the principle of financial assistance to secondary schools. A government secondary school (originally for the sons and nominees of chiefs) was established at Bo, but the development of secondary education was interrupted by the two wars and by the financial crisis in the 1930s. The Government opened a second secondary school, the Prince of Wales School, Freetown, in 1925. Since the second world war, efforts have been made to diversify the curriculum and break away from the formal grammar school type of secondary education; a secondary technical school was opened in 1957. There has been an increase in the number of school libraries.

During the period 1952–57 a number of 'junior secondary schools' were opened, providing a 3-year course of post-primary education. The Government has decided that they should be reclassified as secondary schools and should develop to full secondary status as soon as buildings and staff permit.

Regarding 'sixth forms' (post-School Certificate classes), the policy has been and remains to permit of the gradual introduction of work at this level where facilities, including staff, are considered adequate. In 1958 sixth forms were in operation at the Prince of Wales School, Freetown, the Government Secondary School, Bo, the Annie Walsh Memorial School, Freetown, and the Sierra Leone Grammar School, Freetown.

Secondary education is not free, but since the second world war the Government has adopted a very liberal policy in the award of scholarships. Local authorities and commercial firms also award scholarships.

Legal basis

The Education Ordinance, 1953, governs secondary education. The Grant-in-Aid Rules made under this ordinance are the basic regulations applicable to secondary education; their main purpose is to ensure that instruction, staffing, accommodation, equipment and attendance meet the requirements of the Department. They also provide that no pupil shall be refused admission to an aided school on religious grounds, or receive any religious instruction to which objection is raised by his parents or guardians.

Administration

In formulating policies for secondary education the Minister of Education may seek the views of the following in addition to those of his professional advisors and, of course, his colleagues in the Government: the Board of Education, the Advisory Committee on Secondary Education (composed mainly of heads of institutions), the Council of Principals of the Freetown Secondary Schools, the West African Examinations Council, and the Amalgamated Teachers' Organizations—the trade union to which the majority of teachers in secondary and primary schools belong.

Professionally qualified staff of the Department of Education is responsible for supervision and inspection. The aim is to interfere as little as possible, while at the same time trying to raise professional standards.

As regards the financing of secondary education, there are three main sources of funds: the Central Government, school fees, and grants from the United Kingdom for capital expenditure.

In the case of aided or assisted schools, the basis on which the funds are distributed by grants-in-aid is 95 per cent of the approved salaries of approved staff and £1 per pupil for equipment. Grants are also given for libraries, science equipment and clerical assistance, and in the case of certain schools a *per capita* boarding grant. The necessary additional funds for running these schools are derived from fees, at the standard rate of £12.12 s. per annum in Freetown but varying slightly in the Provinces.

In five government secondary schools in the Provinces boarding is at present free, being a charge on the Central

Government. Parents who are unable to pay fees are assisted by means of scholarships. Between one-third and one-quarter of all pupils are at present on scholarship, i.e., they pay no tuition fees.

TYPES OF SECONDARY EDUCATION

The following types of secondary education exist: (a) grammar, a 5-year course, or in the case of schools with sixth forms, a 7-year course; (b) modern (at present, for girls only), a 4-year course operated side by side with the grammar course in girls' schools; (c) secondary technical; (d) evening classes in subjects at secondary level.

The selection of pupils for the appropriate type of secondary education is by the Common Entrance Examination for admission to secondary schools, held annually in the seventh primary year, the subjects being English and arithmetic.

The school year is from September until June. Saturdays and Sundays are observed as holidays and there are about 11 public holidays during a normal year. A school day commences at about 8.30 a.m. and consists of seven or eight periods each of 40 minutes' duration.

English is the language of instruction in all schools.

General secondary schools. The aim of the grammar type of school is to provide an education enabling pupils either to proceed to courses of further training at universities or similar institutions, or to obtain employment at the clerical or executive level. Pupils in this type of school are not prepared directly for particular careers. They are selected through the Common Entrance examination, places being available for about 25 per cent of candidates who sit the examination.

An external examination, the West African School Certificate examination, is taken in the fifth year in a minimum of six subjects, and in certain schools a further examination, the Cambridge Higher School Certificate examination, in three or four subjects in the seventh year. The body responsible for conducting these external examinations is the West African Examinations Council, which has its headquarters in Accra, Ghana.

The subjects taught to School Certificate level are chemistry, physics, zoology, botany, mathematics, English, Latin, French, geography, economics, history, religious knowledge, art, technical drawing, commerce, health science, biology, cookery, needlework, housecraft and woodwork; and to Higher School Certificate level, the first 10 on this list. Other subjects include physical education and music.

A 4-year modern course for girls is conducted in the girls' grammar schools. The aim is to prepare girls for married life and also to enable them to enter training courses for such professions as nursing and teaching at the sub-graduate level. During the fourth year of the course the Education Department conducts an examination in the following subjects: English, arithmetic, housecraft, needlework, hygiene, child welfare and home nursing. A certificate is issued to successful candidates, who average about 70 per cent of the number presented for the examination.

There are evening classes in secondary school subjects at the Freetown Technical Institute, providing opportunities for students who for one reason or another have not passed successfully through the full secondary grammar course. The principal subjects are English, Latin, geography, mathematics, physics, chemistry, zoology. They are taught to the stage of the London General Certificate of Education Ordinary and Advanced levels, which are approximately equivalent to the School Certificate and Higher School Certificate respectively.

Vocational and technical schools. The only technical institution at the secondary level in Sierra Leone is the Government Secondary Technical School, Freetown, which opened in 1957. The aim of this school, which is co-educational, is to provide a course of training leading to the West African School Certificate in technical as well as general subjects, and it is anticipated that the boys who successfully complete the course will proceed to further training in engineering, etc. Pupils are selected through the Common Entrance examination mentioned above. The subjects taught include the basic 'tool' subjects and, in addition, mechanics, woodwork, metalwork and mechanical drawing for boys and domestic science for girls. It is intended that these practical subjects shall be taken in the School Certificate examination.

Other institutions of a vocational or technical nature on approximately the secondary level include the technical institutes at Freetown and at Kenama, South Eastern Province. At these institutes some trade training is carried out, but their main aims are the training of artisans and of clerks for the Civil Service. Trainees are selected by competitive examination. Training is either full-time day, or part-time day (apprentices and others) or evening, and the courses include engineering (mechanical), engineering (electrical including telecommunications), carpentry, masonry, painting and decorating, commercial, pre-apprentice training, instructor training. Trainees enter for the Intermediate examinations of the City and Guilds of London Institute in technical subjects and for the appropriate stage of the Royal Society of Arts examinations in commercial subjects. There are also trade schools operated by two large mining companies for their employees.

Teachers. The object is to staff the secondary schools with as many trained graduates as possible. In 1958, of the 335 teachers employed in these schools 126 held degrees of recognized universities. Two courses of training are provided locally for secondary school teachers: (a) A 1-year professional course for graduates, leading to the Durham University Diploma of Education. This is conducted in a sub-faculty of the Arts Faculty at Fourah Bay College and is under the control of a Senior Lecturer in Education. The final examination, apart from that in practical teaching (which is held locally), in conducted by Durham University. (b) A 3-year course leading to the Sierra Leone Teachers' Advanced Certificate. This is conducted in the non-graduate Department of Teacher Training at Fourah Bay College, under the control of the Director of Teacher Training. Only holders of the School Certificate are eligible for admission, there being no formal entrance examination. The aim of the curriculum is to enlarge the students' academic knowledge of at least two subjects, and also to

equip them with teaching techniques appropriate for the lower forms of secondary schools. Professional work covers educational psychology, principles of education, the history of education, and teaching method. Students are examined in practical teaching in addition to theory.

A Sierra Leone qualified graduate teacher has a salary commencing at £660 per annum and rising to £1,476. Principals and vice-principals of secondary schools are remunerated at higher rates according to the type and size of school.

The teaching staff for the evening courses in secondary subjects consists partly of teachers employed at the Technical Institute but chiefly of teachers who are on the full-time staffs of secondary grammar schools and Fourah Bay College.

Out-of-class activities. Teachers and teachers-in-training are made aware of the important role of the school in character formation. Efforts are made to educate pupils in their duties as citizens and to develop in them self-reliance and a willingness to co-operate with others. It is usual in the secondary schools to devote some time to civics and economics, or to current events, and to have a measure of self-government by the pupils. All the secondary schools have clubs and societies, and school sports.

TRENDS AND PROBLEMS

The Ministry of Education's preoccupations as regards secondary education are set out in the government's White Paper on Educational Development, summarized in the following paragraphs:

It is the government's intention: (a) to set up nine new secondary schools; (b) to develop all existing junior secondary schools to full secondary status; and (c) to provide secondary modern schools.

So far as Freetown is concerned, the emphasis has been primarily on physical reconstruction and extension rather than on the foundation of new schools. It is intended shortly to build a boys' and a girls' secondary school, each with an Islamic background, in recognition of the long-deferred aspirations of the Muslim population.

In the Provinces, seven new secondary schools, i.e., at Bo, Port Loko, Jaiama, Taiama, Makeni, Kailahun and Magburaka, have already been approved, and work has commenced on permanent buildings.

The Government will continue to keep in view, as industrial development progresses, the necessity of providing separate secondary technical schools such as the school already provided in association with the Freetown Technical Institute. Schools of this type will give a general education related to one or other of the main branches of industry (including agriculture) or commerce. Apart from their value from the industrial point of view, such schools meet the needs of boys and girls with a practical turn of mind, and provide that sense of reality and objective which makes a direct appeal to young people of this kind.

Nevertheless, the grammar/technical school is designed for children whose abilities are likely to lead them as far as School Certificate and it remains a disturbing feature of the present system that, apart from a few senior primary classes, no provision exists for pupils who, at the end of the primary course, fail to gain admission to a secondary school or a technical or vocational course. To cater for these, the Government now proposes the establishment of secondary modern schools offering initially a 3-year course (forms 1 to 3) but without prejudice and, indeed, with every encouragement to their growing a fourth or even fifth form as occasion and the calibre of the late developers may warrant. These schools will offer a broad general education closely related to the interests and environment of the pupils.

There is a lack of properly qualified and trained staff. Efforts to recruit overseas staff on contract terms will be continued until more local staff is available. Adequate housing provision will be included in all schemes for secondary school development and indigenous staff will also be catered for in areas where the situation makes it necessary. To ensure continuity in instruction, the Government has now introduced a system whereby all senior teaching staff are required to take their leave during the period of the long vacation.

It is the government's intention to widen the scope of the secondary school curriculum by introducing more foreign languages, e.g., German, Italian, Spanish. The object of this development is to enable students who may be offered travelling scholarships by the Government to take the fullest advantage of them; it also looks forward to the time when it will become necessary to train Sierra Leoneans for diplomatic and consular careers.

[*Text prepared by the Education Department, Freetown, in June 1959.*]

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STATISTICS

Total population (mid-year 1958 estimate): 2,260,000.
Area: 27,925 square miles; 72,326 square kilometres.
Population density: 81 per square mile; 31 per square kilometre.

Summary of school statistics, 1953–57. In 1957 enrolment in all educational institutions was approximately 69,500, representing some 3 per cent of the total population. Of the total enrolment, about 89 per cent were pupils in primary schools, 9 per cent in general secondary schools and 2 per cent in vocational and teacher training schools. In addition 371 students from Sierra Leone and other West African countries attended Fourah Bay College. The proportion of girls in primary schools was 32 per cent, in general secondary schools 33 per cent and in vocational and teacher training colleges 23 per cent. There were nearly 1,900 teachers in primary schools, of whom 33 per cent were women, and the average pupil-teacher ratio was 33. Compared with 1953, enrolment had increased by 4 per cent in primary and by 79 per cent in general secondary schools. In teacher training schools total enrolment increased by 45 per cent between 1953 and 1957 but the number of women students declined slightly over this period. The teaching staff in general secondary schools numbered 311 in 1957 and the average pupil-teacher ratio was 19. (See Table 2.)

Enrolment trends in secondary education, 1947–57. Average total enrolment in all types of secondary school more than doubled between 1947 and 1957. The ratio of secondary enrolment to the age group 15–19 years old rose from 1.0 over the period 1947–49 to 2.6 in the three years 1955–57. (See Table 4.)

Educational finance, 1958. Total expenditure on education in the fiscal year beginning January 1958 was 1,790,986 pounds sterling, or approximately £0.8 per inhabitant. Of the total spent, 74 per cent was contributed by the Central Government, 5 per cent came from school fees, 6 per cent from local authorities, and 14 per cent came from external sources (£252,000 from Colonial Development and Welfare and £3,232 from the International Co-operation Administration). Capital expenditure was about 17 per cent of the total. (See Table 1.)

Sources. Sierra Leone: Education Department, annual reports; reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1958 (in British West African pounds)[1]

A. RECEIPTS BY SOURCE

	Closed account (A) Budget estimate (B)	Amount
Total receipts		**1 790 986**
Central Government	A	1 331 014
Local authorities	B	109 067
Tuition fees	B	95 673
Colonial Development and Welfare Fund	A	252 000
International Co-operation Administration	A	3 232

B. EXPENDITURE BY PURPOSE

	Closed account (A) Budget estimate (B)	Amount	
Total expenditure			**1 790 986**
Recurring expenditure	A		1 489 470
Central administration	A	139 779	
Salaries to teachers	A	658 000	
Other instructional expenditure	A	249 000	907 000
Other recurring expenditure	A, B	442 691	
Capital expenditure	A		301 516

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent
Total recurring expenditure		**1 489 470**	**100.0**
Central administration		139 779	9.4
Primary education		362 000	24.3
Secondary education		347 435	23.3
General	182 435		12.2
Vocational	62 000		4.2
Teacher training	103 000		6.9
Higher education		196 000	13.2
Special education		1 565	0.1
Adult education		30 000	2.0
Scholarships for secondary and higher education		128 000	8.6
Other recurring expenditure		284 691	19.1

1. Official exchange rate: 1 British West African pound = 2.80 U.S. dollars.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	50	227	52	7 788	1 869
	Primary schools, aided private	1957	420	1 542	490	49 412	16 337
	Primary schools, unaided private	1957	27	94	70	4 681	1 843
	Total	**1957**	**497**	**1 863**	**612**	**61 881**	**20 049**
	,,	1956	460	1 755	567	55 972	17 776
	,,	1955	421	1 580	579	48 934	14 766
	,,	1954	371	1 374	472	46 577	14 108
	,,	1953	357	...	...	42 981	13 864
Secondary							
General	Secondary schools, public	1957	7	74	2	1 346	–
	Secondary schools, aided private	1957	15	221	101	4 010	1 705
	Secondary schools, unaided private	1957	2	16	4	568	266
	Total	**1957**	**24**	**311**	**107**	**5 924**	**1 971**
	,,	1956	23	306	115	5 776	1 911
	,,	1955	22	270	93	5 247	1 636
	,,	1954	20	[1]274	[1]76	4 369	1 266
	,,	1953	16	...	...	3 312	972
Vocational	Vocational schools, public	1957	2	[2]61	[2]9	[3]803	[3]190
	Vocational schools, aided private	1957	1	[2]2	[2]2	74	74
	Total	**1957**	**3**	**[2]63**	**[2]11**	**[3]877**	**[3]264**
	,,	1956	3	[2]56	[2]16	[3]1 605	[3]442
	,,	1955	2	[2]43	[2]5	474	150
	,,	1954	1	...	...	524	84
	,,	1953	1	...	...	59	–
Teacher training	Pre-training centres	1957	3	[4]8	–	104	–
	Teacher training schools, public	1957	2	[4]14	[4]4	176	17
	Teacher training schools, aided private	1957	3	[4]32	[4]11	319	60
	Total	**1957**	**8**	**[4]54**	**[4]15**	**599**	**77**
	,,	1956	8	[4]54	[4]15	558	80
	,,	1955	5	[4]46	[4]14	388	55
	,,	1954	4	...	...	317	39
	,,	1953	4	...	...	412	86
Higher[5]	Fourah Bay College						
	Total	**1957**	**1**	**33**	**4**	**[6]371**	**86**
	,,	1956	1	31	4	[6]370	83
	,,	1955	1	24	4	[6]360	84
	,,	1954	1	26	6	[6]276	57
	,,	1953	1	25	6	[6]149	17
Special	School for the blind, public	1957	[7]1	1	1	10	2

1. Excluding teachers in unaided private schools; including teachers of vocational and teacher training schools.
2. Including part time teachers: 37 (F. 5) in 1957; 30 (F. 12) in 1956; and 24 in 1955.
3. Including part time students; 488 (F. 129) in 1957; 1,228 (F. 314) in 1956 and 237 (F. 63) in 1955.
4. Including teachers of post-secondary teacher training at Fourah Bay College.
5. Including post-secondary teacher training at Fourah Bay College.
6. Including students from other West African countries.
7. Blind school opened in 1957.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Cambridge Oversea School Certificate	83	24	108	42	119	33	109	33	152	44
Elementary Teachers' Certificate	72	6	79	16	107	4	106	13	95	18
Teachers' Certificate	31	8	58	23	50	12	48	15	35	18

4. TRENDS IN SECONDARY EDUCATION, 1947–57

School year	Number of students enrolled by type of education						Average total enrolment[1] (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio[1]
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1947	2 170	...	–	–	...	...	2.1	204	*1.0*
1948	1 900	...	–	–	...	...			
1949	2 312	47	–	–	84	71			
1950	2 792	32	–	–	230	70	3.3	209	*1.6*
1951	2 707	31	–	–	231	56			
1952	3 096	31	–	–	378	25			
1953	3 312	29	59	–	412	21			
1954	4 369	29	524	16	402	18			
1955	5 247	31	474	32	498	20	5.6	217	*2.6*
1956	5 776	33	[2]1 605	28	676	20			
1957	5 924	33	[2]877	30	719	19			

1. Calculated for general secondary education only.

2. Including part-time students.

ADEN

The Colony of Aden comprises a small area formed by a high rocky peninsula and a local isthmus on the southern coast of Arabia, and the island of Perim, situated in the straits of Bab-el-Mandeb. To the north-east of the Colony lie the two Protectorates, Western and Eastern, the latter including the Hadhramaut, which stretch along the seaboard to the border of the Sultanate of Muscat. The area consists of a number of small Arab States, some of which are based on tribal units, whose sultans and chiefs are advised by British political officers.

Arabic is the sole language of the Protectorates but in the Colony Arabic, English, Gujerati, Urdu and Hebrew are spoken as mother tongues by the various racial communities.

THE EDUCATIONAL SYSTEM

In the Colony, education is under the control of the Director of Education, who is responsible to the Governor. The present legal basis of the system is the Education Ordinance of 1952 and rules and regulations made under the ordinance. Schools are classified as maintained by local government and colonial funds, aided by these funds, or independent. The aided schools are required to meet criteria established by the Director, and all non-government schools, whether aided or independent, are open to inspection by the Education Department. Regulations for the employment and further training of apprentices are laid down in the Apprentice Training Ordinance of 1956.

In each of the two Protectorates education is under the immediate general guidance of the British Agent, who is assisted by a Protectorate Education Officer who, in turn, is advised by the Director of Education of Aden Colony. The present policy is to build up self-supporting departments of education as the various states and sultanates become sufficiently advanced to make this possible. All expenditure on education over and above what the states can afford is borne by the United Kingdom Government.

The organization of the school system is based on a four year primary school followed by a three-year intermediate school (four years in the Eastern Aden Protectorate). These two stages cover the type of curriculum associated with primary education in other countries. From the intermediate schools selected pupils go forward to institutions providing general and technical education at secondary level and teacher training. There is no provision for higher education, but a system of scholarships enables selected secondary graduates to continue their education overseas.

There is no compulsory education as the demand for schooling still exceeds supply.

THE DEVELOPMENT OF SECONDARY EDUCATION

Until 1950 the only institution providing education at secondary level was the Government Secondary School which offered a 4-year general course for boys. Expansion of facilities began under a five-year plan initiated in 1948. The year 1951 saw the opening of a technical college which later became the day school of what was redesignated the Aden Technical Institute, an institution embracing all the activities of full-day apprentice classes, and part-time day and evening classes. Aden College, which replaced the Government Secondary School, was opened in 1953 and Aden Girls' College in 1956. From the latter year Aden College has provided a 6-year course (forms 1 to 6) leading to the General Certificate of Education Examination at Advanced level. The teacher training section formerly provided at Aden College is now run as a separate training centre in its own premises.

Designed and constructed on a generous scale, the three new government schools include up-to-date and well equipped classrooms, laboratories, special subject rooms, workshops, libraries and recreational rooms. Aden College has a boarding establishment for boys from the protectorates, a hospital unit and a mosque.

Of the six non-government schools providing secondary education the St. Joseph's Boys' School (grant-aided) was recognized by the Government in 1956 as being of equal status to Aden College.

Secondary education is fee-paying; fees payable in government and grant-aided schools are laid down in the School Fees Rules 1956.

Most schools have a parents' committee which meets regularly to discuss day-to-day problems with the Director of Education, the head teachers and senior members of the Education Department. A certain number of social welfare services are provided, notably the annual medical and dental inspection by the Colony Medical Department.

The only post-intermediate institution in the Protectorates is a junior secondary school at Gheil Ba Wazir in the Eastern Aden Protectorate. The school provides courses of 2 years; during the final year boys specialize either in clerical work or in teacher training. For further general secondary education pupils are sent either to Aden College or abroad, for vocational secondary education to the Aden Technical Institute, and for teacher training to the Colony Teacher Training Centre. Protectorate boys studying in the colony are supported out of Colonial Development and Welfare funds or by scholarships provided by their respective states.

TYPES OF SECONDARY EDUCATION

General secondary schools. Entrance to Aden College is by competitive examination at the completion of intermediate school (7 years' formal schooling); candidates must be under 15 years of age. The course leads in four years to the General Certificate of Education, Ordinary level, and in five or six years to the Advanced level. The curriculum includes English, Arabic, mathematics, physics, chemistry, biology, history, geography, religion, art and physical training.

Pupils who have successfully completed their secondary education in Aden are eligible for selection for scholarships provided by the Government, the Aden Municipality and the Aden Port Trust. Among countries in which Aden students have held such scholarships are Egypt, India, Lebanon, Sudan and the United Kingdom.

Football, volley-ball and other organized games form an integral part of school life. Inter-schools' athletics competitions are held annually. A social sense is instilled into the pupils by the fostering of school societies, such as musical, dramatic and photographic societies, and by the delegation of a certain amount of responsibility for the conduct of school life. In some schools the School General Society, usually under the presidency of the head prefect, puts forward suggestions for the consideration of the headmaster and his staff.

Teachers holding senior posts in secondary schools are recruited overseas, passage allowances being paid. Aden College provides houses in the school grounds for all teaching and other staff.

The Technical Institute. Entrants must have completed intermediate school (seven years' schooling) and passed an entrance examination. There are full-time 4-year courses in engineer fitting, electrical engineering practice, carpentry and joinery, cabinet making and motor vehicle mechanics. These courses, which include academic subjects of the same standard as Aden College, lead to the Intermediate Examination of the City and Guilds of London Institute. Two-year courses in craftwork are provided for boys below the educational standard required for the City and Guilds courses, and 2-year clerical courses for students unable to obtain places at Aden College.

There are part-time classes for indentured apprentices released from industry under the terms of the Apprentice Training Ordinance, and sandwich courses of 4 to 5 months for junior clerks in government departments and commercial firms. The institute has a branch establishment at Little Aden for apprentices and junior employees at the oil refinery.

Pupils at the day school participate in extra-curricula activities similar to those provided in general secondary schools. Teachers are recruited overseas and from among local students with overseas experience. There is also a large part-time staff of instructors recruited locally from government departments, private firms and the Royal Air Force.

Teacher training centres. Teacher training is provided for men and women in separate centres. The minimum qualification for entry is five years' primary education, although the usual requirement is the General Certificate of Education (11 years' schooling).

[*Text revised by the Colonial Office, London, in June 1959.*]

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STATISTICS: ADEN COLONY

Population (mid-year 1958 estimate): 150,000.
Area: 80 square miles; 207 square kilometres.
Population density: 1,875 per square mile; 725 per square kilometre.

Summary of school statistics, 1953–57. In the school year 1957/58 total enrolment in the Colony was 11,647 pupils representing approximately 8 per cent of total population; 87 per cent of enrolment was in primary schools, 10 per cent in general secondary schools, 2.5 per cent in vocational schools and the remainder in teacher training centres. Girls made up 29 per cent of enrolment in primary schools, 15 per cent in general secondary schools and 21 per cent in teacher training centres. The teaching staff, excluding teacher training centres, numbered 454 in 1957/58 and the pupil-teacher ratio was 28 in primary schools and 17 in secondary schools. Compared with 1953/54 enrolment in primary schools increased by 39 per cent and in general and vocational secondary schools by over 160 per cent (from 543 pupils to 1,427 in 1957/58). (See Table 2.)

Examination results in secondary education, 1956–57. Sixteen candidates passed the General Certificate of Education at Ordinary level in 1956/57 and four passed the same examination at Advanced level in 1957/58. Twelve teaching certificates were awarded in 1956/57.

Educational finance, 1956/57. Total expenditure on education in the fiscal year beginning April 1956 was 325,828 pounds sterling, or about £2.2 per inhabitant. Of this sum, 32 per cent (£103,110) was contributed from United Kingdom funds and 68 per cent (£222,718) from Territorial revenue. Capital expenditure (£119,540) made up 37 per cent of the total spent. The distribution of recurring expenditure by level and type of education is given in Table 1.

Source. Government of Aden: Education Department, annual reports.

1. ADEN COLONY: EDUCATIONAL FINANCE, 1956/57
(in pounds sterling)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure	**206 288**	**100.0**
Central administration	17 861	8.7
Primary education[2]	71 898	34.9
Secondary education	43 167	20.9
Vocational education	35 619	17.3
Teacher training	6 567	3.2
Other education	31 176	15.1

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.
2. Includes intermediate education.

2. ADEN COLONY: SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	13	137	54	3 678	1 291
	Intermediate schools, public	1957/58	4	51	12	1 254	281
	Primary schools, aided private	1957/58	12	79	38	2 082	895
	Intermediate schools, aided private	1957/58	9	47	12	1 068	324
	Primary schools, unaided private	1957/58	6	32	8	1 024	133
	Intermediate schools, unaided private	1957/58	3	23	–	1 058	–
	Total	**1957/58**	**47**	**369**	**124**	**10 164**	**2 924**
	,,	1956/57	46	330	118	9 087	2 668
	,,	1955/56	...	...	...	...	...
	,,	1954/55	...	...	...	...	...
	,,	1953/54	34	278	99	7 287	2 151
Secondary *General*	Secondary schools, public	1957/58	2	[1]65	[1]10	431	97
	Secondary schools, aided private	1957/58	5	15	6	393	72
	Secondary schools, unaided private	1957/58	1	5	1	316	–
	Total	**1957/58**	**8**	**[1]85**	**[1]17**	**1 140**	**169**
	,,	1956/57	7	[1]48	[1]10	750	106
	,,	1955/56	...	...	...	...	...
	,,	1954/55	...	...	...	...	...
	,,	1953/54	2	[1]37	[1]6	431	52

1. Teachers in the Technical Institute are included with those of public general secondary schools.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Second. [cont.] *Vocational*	Technical Institute, public						
	Total	**1957/58**	**1**	[1] ...	[1] ...	[2]**287**	–
	„	1956/57	1	[1] ...	[1] ...	[2]183	–
	„	1955/56	...	...	...	...	...
	„	1954/55	...	...	...	...	...
	„	1953/54	1	[1] ...	[1] ...	[2]112	–
Teacher training	Teacher training centres, public						
	Total	**1957/58**	**2**	**11**	**2**	**56**	**12**
	„	1956/57	2	2	2	31	7
	„	1955/56	2	...	...	21	9
	„	1954/55	–	–	–	–	–
	„	1953/54	–	–	–	–	–

1. Teachers in the Technical Institute are included with those of public general secondary schools.

2. Not including part-time students (*950 in 1957/58).

STATISTICS: ADEN PROTECTORATES

Population (mid-year 1958 estimate): 650,000.
Area: 112,000 square miles; 290,080 square kilometres.
Population density: 6 per square mile; 2 per square kilometre.

Summary of school statistics, 1953–57. In the school year 1957/58 there were some 12,100 pupils enrolled in government maintained and aided schools. There were in addition an unknown number of children in unaided Koranic schools. Total enrolment in officially recognized schools represented about 2 per cent of the estimated population. Girls made up only 5 per cent of the enrolment in primary schools and none so far attended secondary schools. There were 22 pupils in the public junior secondary school in 1957/58 compared with 35 in 1953/54. The reason for this decline is not known. In 1957/58, 26 students were taking a teacher training course. There was an increase in total primary school enrolment of 58 per cent in 1957/58 compared with 1953/54 but the number of girls attending declined over the period under review. (See Table 2.)

Examination results in secondary education, 1957/58. In 1957/58, 26 candidates passed the final teacher training examinations in the Eastern Aden Protectorate.

Educational finance, 1956/57. Total expenditure on education in the fiscal year beginning April 1956 amounted to 130,110 pounds sterling, being £0.2 per inhabitant. Of this total 28 per cent (£35,865) was contributed from United Kingdom funds and the remainder (£94,245) by local authorities. Capital expenditure was mainly confined to the Western Protectorate and represented 14 per cent (£17,704) of the total spent. The distribution of recurring expenditure by level and type of education is given in Table 1.

Sources. Government of Aden: Education Department, annual reports.

1. ADEN PROTECTORATES: EDUCATIONAL FINANCE, 1956/57
(in pounds sterling)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure[2]	**112 256**	**100.0**
Central administration	45 938	40.9
Primary education[3]	44 591	39.7
Secondary education	7 860	7.0
Vocational education	1 145	1.0
Teacher training	3 241	2.9
Other education	9 481	8.5

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.
2. Eastern Protectorate, £47,866; Western Protectorate, £64,390.
3. Includes intermediate education.

2. ADEN PROTECTORATES: SUMMARY OF SCHOOL STATISTICS, 1953/57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	58	113	11	5 470	413
	Primary schools, private	1957/58	52	138	12	6 085	214
	Intermediate schools, public	1957/58	2	2	–	310	–
	Intermediate schools, aided private	1957/58	6	18	–	230	–
	Total[1]	**1957/58**	**118**	**271**	**23**	**12 095**	**627**
	,,	1956/57	...	...	...	...	...
	,,	1955/56	112	328	15	10 711	1 021
	,,	1954/55	...	...	...	...	...
	,,	1953/54	107	*310	...	7 658	861
Secondary							
General	Junior secondary school, public						
	Total	**1957/58**	**1**	**4**	–	**22**	–
	,,	1956/57	...	...	...	...	...
	,,	1955/56	1	...	...	33	–
	,,	1954/55	...	...	...	...	...
	,,	1953/54	1	3	–	35	–
Teacher training	Teacher training course						
	Total	**1957/58**	**1**	**...**	**...**	**26**	–
	,,	1956/57	...	...	...	...	...
	,,	1955/56	1	...	...	10	–
	,,	1954/55	...	...	...	...	...
	,,	1953/54	...	...	...	...	...

1. Not including unaided schools.

BRUNEI

THE EDUCATIONAL SYSTEM

The educational system in the State of Brunei is divided into three main groups: (a) government primary vernacular schools and secondary schools (in which the media of instruction are Malay and English respectively); (b) mission schools, primary and secondary, in which the medium is English; and (c) Chinese schools, which use Chinese (Mandarin).

Although the three principal groups are distinct there is a sufficient measure of integration and government assistance to ensure that the various agencies function in a unified manner.

Educational policy is determined by the Sultan-in-Council. Responsibility for administration and general control of the school system is entrusted to the Education Department which is headed by the State Education Officer. There is also a consultative body, the Advisory Committee on Education, which includes representatives of the State Council, the Malay and Chinese communities and the schools. A scholarship committee recommends the award of local and overseas scholarships.

Under the Education Enactment 1952, which amended and consolidated previous legislation, non-government schools and their managers, and the teachers in these schools, must register with the State Education Officer, who is empowered to enter and inspect all schools. The General Regulations for Schools, 1939, were given continued validity by the 1952 Enactment; they relate to hygiene and sanitation discipline, registers, reports and books of accounts, prohibition of the use of schools for undesirable purposes, control and supervision of subscriptions and collections on behalf of schools, etc.

The government English language secondary schools and primary vernacular schools (Malay) are financed and administered by the Education Department and most of the teachers are in permanent established posts or seconded from the United Kingdom or Malaya.

Each Chinese school is organized and supervised by a Chinese school committee, headed by a supervisor. The

Government nominates one-half of the committee and pays 50 per cent of the recurrent costs of running the school. The remainder comes from school fees, and from collections and contributions made by the local Chinese community. Building grants not exceeding 50 per cent of the total cost are made.

Mission schools are controlled by the missionary bodies concerned. Each school must have a registered committee with a supervisor or chairman. The mission schools receive financial aid from the Government in the form of grants which are based on the qualifications of the teachers in those schools but do not exceed 33⅓ per cent of the total cost of salaries. Grants towards new buildings are also made. Government policy towards mission schools is under revision.

In addition to the three main agencies providing education, a private company maintains a primary school for the children of its senior officers and also a trades school.

The pupils in Brunei schools are from many different ethnic groups, principally Malay, Kedayan, Chinese, Dusun, Indian, Eurasian and Iban. Other very small groups include Murut, Javanese, and Europeans.

Compulsory education has not yet been instituted in the State but it is estimated that over 90 per cent of the boys and 60 per cent of the girls attend school. It should be noted that the School Attendance Enactment, 1939, empowering the Education Department to require the attendance at a particular government vernacular school of any Malaysian boy between 7 and 14 years of age, is still in force. Education in these Malay schools is free and all textbooks and apparatus are provided.

The full primary course last 6 years, as does also the full general secondary course—forms 1 to 6 in the English-language schools and junior middle 1 to 3, followed by senior middle 1 to 3 in the Chinese schools.

THE DEVELOPMENT OF SECONDARY EDUCATION

There was practically no secondary education in English prior to 1951 with the exception of one mission school (Roman Catholic, at Seria) which had a few pupils staying on in school up to form 2. Government English secondary education was not really started until 1953 when a few children were selected for a preparatory English course after having passed primary 4 Malay; some Chinese, Indian and Eurasian pupils were included in these classes. Junior secondary education up to form 3 was available by 1955, when the Sarawak Junior Certificate was taken for the first time. (This was in fact the first time in the history of the State that candidates were entered for an external examination.) At the beginning of 1956 it was possible to start senior secondary education in Brunei Town. The first candidates for the Cambridge Oversea School Certificate sat the examination, taken after completing form 5. Opportunities were given during 1957 and 1958 for students who left school to go to evening classes preparing them for the (United Kingdom) General Certificate of Education. A further development in senior English secondary education was made in January 1959 when a sixth form was started at the Sultan Omar Ali Saifuddin College. At the present time selected Cambridge School Certificate holders are sent for their higher secondary education to a United Kingdom boarding school which specializes in preparing for the GCE Advanced level.

It is the policy of the Government to segregate boys from girls wherever possible. Owing to the fact that there was no provision for English education sponsored by the Government prior to 1951, the number of over-age pupils in secondary forms is still a problem and will be so for some time. Every effort has been made to provide hostel accommodation for children from country districts and by the beginning of January 1958 there were 292 children receiving either subsistence allowance or hostel accommodation.

Secondary education in mission schools has tried to keep abreast of the rapid development in government English schools. The missions schools are very greatly handicapped by being unable to attract a sufficient number of fully qualified trained teachers for their secondary department. However, improvements have been and are still being made and new accommodation for the pupils is increasing annually.

There has been considerable development in Chinese secondary education since 1954 when junior middle classes were started at two schools. Regular junior middle examinations are now taken (at the end of the 3-year junior course) and during 1957 a senior middle class was started at the Seria Chung Ching School.

Administration

The three principals of the government secondary schools are responsible to the State Education Officer, who is also the Registrar of all non-government secondary schools and teachers. He recommends what grants should be paid to non-government secondary schools, acts as local secretary for all secondary external examinations, and ensures the efficient running and administration of ancillary services to secondary schools.

Curricula are determined by the principals of the secondary schools with the approval of the Education Department.

Inspection of secondary schools is carried out by the State Education Officer or his representative; his staff includes a Chinese Inspector of Schools who advises on Chinese school affairs.

In government secondary schools all instruction is free and textbooks are supplied free of charge although a small number of non-scholarship holders receive textbooks only on loan. All mission schools and Chinese schools charge fees.

No standards are laid down for buildings and equipment but all new building plans have to be approved by the State Education Officer, the State Engineer, and the Municipal Board.

School welfare services include free meals at school, free medical inspection and treatment, and free dental inspection.

TYPES OF SECONDARY EDUCATION

General secondary schools

School holidays and term times are adapted to religious and community needs. Thus, in government secondary

schools, holidays and term times are planned to fit in with the Islamic year. Mission schools follow a European (British) pattern with Christian holidays. All schools have a five-day week with a maximum of 25 hours instruction per week.

Pupils wishing to present themselves as candidates for entry to government secondary schools must have completed primary 4 in a vernacular school (Malay or Chinese), reached the age of 13, be Brunei-born and be selected by a scholarship committee, such selection depending on attainment in the primary 4 examination. They then enter preparatory classes where there is considerable concentration on the teaching of English for two, or sometimes three, years. Thereafter, admittance to the secondary forms is determined by selection based on terminal examinations and the results of the Common Entrance examination. Admission to the secondary course in mission schools is open to pupils who have completed a primary course (English), which normally lasts 6 years. The Common Entrance examination results and primary school records are used when selection is made. Admission to the Chinese junior middle school is by a Common Entrance examination (in Chinese) which is held at the end of the 6-year primary course.

The education in government and mission secondary schools is similar. All instruction is full-time. Subjects taught include English, English literature, Malay, mathematics, science, hygiene, history and geography. Mission schools have religious instruction, and Malay pupils in government secondary schools receive religious instruction from special Muslim religious teachers. Government secondary education also makes provision for woodwork, metalwork, homecrafts, art and local crafts.

Chinese secondary schools teach Chinese, Malay, English, physics, history, geography and hygiene.

Terminal tests and end-of-year tests are held in all schools. Promotion is based on the results of these tests and school records. Report books are kept for each pupil in the government secondary schools. In secondary schools where English is the medium of instruction an external examination is held at the end of form 3 (Sarawak Junior Secondary School Certificate examination) and form 5 pupils sit for the Cambridge Oversea School Certificate and certain subjects of the General Certificate of Education (Associated Examining Board). Chinese schools prepare for the Junior and Senior Middle examinations, taken from junior middle 3 and senior middle 3 respectively. The examinations are set and marked by a special committee nominated by the State Education Officer and certificates are issued by the Education Department.

Most of the teachers in all three types of secondary schools, and particularly in the senior secondary forms, are specialist teachers, engaged to teach specific subjects. In the large government secondary schools specialists are in charge of certain subjects, e.g., English, science, mathematics, woodwork, metalwork, homecrafts, art and local crafts. The staff in government secondary schools is made up of European expatriate staff, regional expatriate staff and teachers seconded from Malaya. Expatriate staff are all graduate trained teachers. All 'regional teachers' are on short contract engagements (two or three years) and are recruited from Malaya, India, Burma, Ceylon and other countries in South-East Asia. Teachers seconded from Malaya have received secondary school education and professional training, some of them in the United Kingdom (Kirkby Training College). The staff of mission schools consists of expatriate European missionaries and regional expatriate staff, with varying qualifications. Teachers employed in Chinese schools are generally recruited from outside the State but the number of locally born teachers is increasing.

Vocational and technical schools

There is one trade school in the State which provides a full-time 3-year course. The school is administered and financed by a petroleum company, but the Government pays a proportionate share of the expenses for government-sponsored students. As the course progresses students spend an increasing part of their time in the workshops of the company. Subjects taught include blacksmithing, welding, automotive engineering, fitting, machining, sheet metal work, electrical practice. General educational subjects taught are mathematics, technical drawing, and science. English is studied outside normal school hours.

Teacher training schools

One institution in the State offers a 3-year course for vernacular teachers at upper primary and junior secondary level. Students are recruited from the Malay primary schools and are selected by examination and interview. Subjects in the curriculum include Malay language and literature, English, arithmetic, art, teaching method, educational psychology, hygiene, physical training, algebra and geometry, geography, history.

The staff consists of European expatriate officers, one of whom is the principal, and trained teachers seconded from Malaya.

Out-of-class activities

All pupils take part in organized games, the chief of which are, in order of priority, association football, badminton, hockey, basketball, rugby and cricket. Most of the secondary schools have clubs for social, cultural and educational activities—chess, exploring, photography, debating, etc. Outside organizations in which pupils enrol are the Boy Scouts, Girl Guides and Red Cross.

TRENDS AND PROBLEMS

The main factors which have to be considered when attempting to evaluate the trends and problems of secondary education in the State of Brunei are the rising school population which increases by approximately 10 per cent each year, the provision of well designed and well built school buildings to house the added number of pupils, modern quarters for teachers, the recruitment of well trained and well qualified teachers, and the revision of curricula and syllabuses so that the country's dire need of professionally qualified technicians and artisans can be met.

The first Development Plan for Education is now

virtually completed and part of that plan was the establishment of three major government secondary schools with adequate staff. This has been accomplished, but the trends now seem to indicate that the establishment of technical education and junior secondary education in the vernacular should be the next projects to be initiated. The introduction of technical education, and especially the recruitment of well qualified staff, will not be easy, and the integration of technical instruction with the well established academic type of learning will need time to become effective. A comprehensive survey has recently been made by Mr. J. C. Jones, CBE, Chief Technical Adviser to the Secretary of State, regarding proposals for practical training, junior technical training and apprenticeship schemes.

[*Text prepared by the State Education Officer, Brunei, in July 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 77,000.
Area: 2,226 square miles; 5,765 square kilometres.
Population density: 35 per square mile; 13 per square kilometre.

Summary of school statistics, 1953–57. In 1957 total enrolment in primary and secondary schools was 11,260 pupils representing about 15 per cent of the total population. Of the total enrolment about 92 per cent were pupils in primary schools, 7 per cent in general secondary, 1.3 per cent in technical and 0.3 per cent in the teacher training centre. The proportion of girls enrolled was 37 per cent in primary and 30 per cent in general secondary schools. There were no girls in the teacher training centre in 1957. Enrolment in primary and general secondary schools increased by 87 per cent between 1953 and 1957. There were 383 primary school teachers in 1957, of whom 40 per cent were women, and 61 general secondary school teachers, of whom 36 per cent were women. The average pupil-teacher ratio was 27 in primary and 13 in general secondary schools in 1957. (See Table 2.)

Examination results in secondary education, 1953–57. The number of candidates passing the Sarawak Junior Secondary Certificate examination rose from 20 in 1955 to 40 in 1957. There were seven successes in the Cambridge Oversea School Certificate examination in the latter year.

Educational finance, 1957. Total expenditure on education in the fiscal year beginning January 1957 amounted to 6,014,769 Malayan dollars, or about $78 per inhabitant. Of this sum 74 per cent ($4,422,793) was contributed by the Central Government from territorial revenue, 13 per cent ($757,024) by Chinese school boards, 5 per cent ($321,067) by missions, and 8 per cent ($513,885) by the Brunei Shell Petroleum Company. Capital expenditure ($2,259,385) was 38 per cent of the total. The distribution of recurring expenditure by level and type of education is given in Table 1.

Sources. Brunei: Education Department, annual reports.

1. EDUCATIONAL FINANCE, 1957 (in Malayan dollars)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure	**3 755 384**	**100.0**
Central administration	191 034	5.1
Primary education	[2]2 223 912	[2]59.2
Secondary education	764 797	20.4
Vocational education	[3]407 022	[3]10.8
Teacher training	133 832	3.7
Adult education	34 787	0.9

1. Official exchange rate: 1 Malayan dollar: = 0.327 U.S. dollar.
2. Includes subsidies to non-government schools.
3. Includes 'Development Funds'.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	51	237	49	5 327	1 596
	Mission schools, aided private	1957	6	52	44	1 767	750
	Chinese schools, aided private	1957	7	94	59	[1]3 069	[1]1 339
	Primary school, unaided private	1957	1	...	...	137	73
	Total	**1957**	**65**	**[2]383**	**[2]152**	**[1]10 300**	**[1]3 758**
	,,	1956	62	[2]360	[2]118	9 357	3 279
	,,	1955	[2]55	[2]318	[2]106	[2]8 300	[2]2 760
	,,	1954	46	...	...	[3]7 181	[3]2 262
	,,	1953	45	...	...	[3]5 917	[3]1 749

1. Including enrolment in kindergarten classes of Chinese schools.
2. Not including unaided private school.
3. Including enrolment in secondary schools.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Secondary							
General	Secondary schools, public	1957	3	27	12	330	81
	Mission secondary school, aided private	1957	1	10	5	177	68
	Chinese secondary schools, aided private	1957	3	24	5	273	86
	Total	**1957**	**7**	**61**	**22**	**780**	**235**
	„	1956	5	59	28	607	193
	„	1955	5	54	23	332	110
	„	1954	5	...	...	...	...
	„	1953	2	...	...	...	...
Vocational	Trade school, unaided private						
	Total	**1957**	**1**	**...**	**...**	**146**	–
	„	1956	1	...	...	166	–
	„	1955	1	...	...	169	–
	„	1954	1	...	...	...	–
	„	1953	1	...	...	113	–
Teacher training	Teacher training centre, public						
	Total	**1957**	**1**	**...**	**...**	**34**	–
	„	1956	1	2	–	21	–
	„	1955	–	–	–	–	–
	„	1954	–	–	–	–	–
	„	1953	–	–	–	–	–

HONG KONG

THE EDUCATIONAL SYSTEM

The statutory basis of the educational system as a whole is the Education Ordinance of 1952, amended in 1958. This ordinance requires, and sets out the conditions for, the registration of all schools, school managers and teachers, and further requires the appointment by each registered school of a supervisor to act as an administrative link between the school and the Director of Education. Government schools are not registered under the enactment, nor are teachers in government schools. Under the ordinance, regulations are made in respect of such matters as structural and health requirements for schools, the keeping of registers and books of account, the control of fees, etc., and the proper conduct and efficiency of schools and teachers.

As will be seen in the section dealing with the historical development of secondary schools, linguistic and social factors have continuously influenced the policy for secondary education. The two media of instruction are Cantonese and English, but all textbooks for Chinese secondary schools are written in the Mandarin idiom, although taught in the Cantonese dialect; there is little or no writing in Cantonese. English has a much stronger commercial appeal for parents and pupils, as it increases the chance of employment, whereas Chinese has a stronger cultural appeal.

The Director of Education is in direct control of all government, aided and private schools. Private agencies play a considerable part in the educational system. Nearly 70 per cent of all secondary education is conducted in private schools.

In Chinese, Anglo-Chinese and English type schools, the school ladder begins with a six-year primary school, the usual age for admission being six years. The secondary curriculum leads to School Certificate examinations in both English and Chinese-medium schools. For pupils seeking university admission, there is provision for two further years of study leading to the University Entrance examination. There are various possibilities for vocational and technical training at secondary and post-secondary level; teacher training is post-secondary. Higher education and professional training are provided at the University of Hong Kong.

THE DEVELOPMENT OF SECONDARY EDUCATION

Prior to 1900, the Government had built one secondary school, which concentrated on an English education. In 1902, a committee was formed to report on education and prepare a policy. Out of this policy arose British schools for English children and a Chinese high school to provide an education in both Chinese and English. At the same time a reasonable form of grant was instituted to assist mission and other schools, and the old system of payment on results was abolished.

A technical institute was started in 1907 with the support of a government grant and an endowment. The founding of Hong Kong University in 1912 gave a stimulus to English secondary education, and shortly afterwards, the effects of the Chinese Revolution in 1911 were apparent in a revived interest in Chinese.

In 1913, the first Education Ordinance was passed, bringing all schools under government supervision; thereafter, the Government accepted full responsibility for the control of primary and secondary education. Secondary education in English was still encouraged not only by the Government, but by the Chinese as well, who fully realized the utilitarian and market value of the English language.

In 1920 a Board of Education was set up to advise the Director of Education, and by 1924 certain general principles were established. It was decided that as the Government could not educate all the Chinese, a good standard should be set in government schools, and other schools should be encouraged by grants and subsidies to copy their example. This principle, with modifications, is still observed.

In 1925–26, intensified Chinese nationalism led to pressure for the reform of vernacular education. As a result a middle school, with normal classes for teacher training, was started by the Government, and a number of private schools were established on this model. The organization of vernacular education was also altered to conform with the Chinese pattern, adopted in 1921, of a 6-year primary course, followed by a 3-year junior middle course, and a 3-year senior middle course. In 1928, the University of Hong Kong started a School of Chinese Studies, which further stimulated secondary education in Chinese.

When the slump of the early thirties focused attention on the need for technical and vocational schools, a junior technical school was opened in 1933 and a government trade school in 1937.

A visit by one of His Majesty's Inspectors in 1935 had significant results for secondary education. Amongst the suggestions which he made and which were implemented were the introduction of a sound selection examination for secondary school pupils, and the establishment of a course in Anglo-Chinese schools leading to a Hong Kong School Certificate. The latter was introduced in 1937 was not just an academic yardstick for the purposes of university selection, but served rather as a measure of general attainment.

Legal basis

The Education Ordinance (amended 1958) supplies the legal basis for secondary education. Other relevant legislation is included in the Factories and Industrial Undertakings Ordinance (Ordinance No. 34 of 1955, regulation 3) which states that no person under the age of 14 may be employed in any factory, business, or dangerous undertaking.

There is at present no local legislation governing apprenticeship, the Hong Kong Government following the United Kingdom pattern.

Administration

All major problems of policy are discussed by the Board of Education, whose advice is forwarded to the Governor by the Director of Education, together with any comments he may wish to make thereon. The implementation of policy together with the minor problems of policy are decided by the Director in consultation with the senior officers of the Department. Each type of non-government school, i.e., grant, subsidized and private, has representative councils or associations which advise on, and negotiate, points of policy concerning their respective schools, with the Director. A Syllabus and Textbook Committee meets under the chairmanship of the Assistant Director (Inspectorate). This is an overall body, and sub-committees for the various subjects report to it; the sub-committees frame syllabuses and review textbooks for approval by the Director, while the main committee puts up recommendations on policy to the Director. A development section plans accommodation and the financial aspect of educational policy. All these bodies are concerned with both primary and secondary education. A Standing Committee for Technical Education and Vocational Training deals with problems in this field and there is an Advisory Committee to assist the Principal of the Technical College. Local Examination Boards are set up for the three departmental examinations, viz., Joint Primary 6, English School Certificate, Chinese School Certificate. Each of the three boards is autonomous and administers its respective examination.

Supervision and inspection. Inspectors are chosen from among government teachers who have had considerable teaching experience in schools or have been lecturers in training colleges. The academic and professional qualifications of inspectors vary from a teacher's certificate awarded after two years' full-time study at a training college to a university honours degree with a teaching diploma.

The Assistant Director of Education (Inspectorate) is the Chief Inspector of Schools and he is assisted by 3 senior education officers and 77 others inspectors for all schools in Hong Kong. Where technical schools are concerned, the Chief Inspector may request the assistance of the Principal of the Technical College who is the advisor to the Director of Education on technical education. In addition there are a few inspectors who are maintained and controlled by Her Majesty's Forces for the purposes of supervising schools under that authority.

In so far as secondary schools are concerned, area inspectors are responsible for advising the supervisors and heads of private Chinese secondary schools on such matters as syllabuses, time tables, textbooks, administration and the improvement of educational standards. One section of the inspectorate is specifically responsible for private

Anglo-Chinese secondary schools throughout the Territory, while another deals with subsidized Chinese secondary schools. There is also a group of subject advisers including inspectors for Chinese, English, mathematics, science, geography, history, art, domestic subjects, and handicrafts, an organizer of physical education, and an organizer of music. One senior education officer advises on the education of girls, the general welfare of women teachers, and the administration of girls' schools.

The inspectorate assists with the preparation and revision of suggested syllabuses, one inspector being full-time secretary of the Syllabuse and Textbook Committee, and the remainder being representatives of the Department on the various sub-committees. The inspectorate also produces pamphlets on teaching methods, edits bulletins on the teaching of Chinese, English and mathematics, and organizes short training courses and conferences for practising teachers. All translation from English to Chinese and vice versa is handled by the inspectorate.

Inspectors act as examiners and markers for departmental examinations and have a special responsibility for the organization of the Chinese School Certificate examination and the Joint Primary 6 examination.

Finance. All funds for government and aided schools are raised from current government revenue, and payments made in accordance with approved financial estimates. Payment to schools varies with the three main categories of schools.

Government secondary schools. These schools are completely controlled by the Department of Education, and all financial matters are dealt with by an accounting section of the Department. Expenditure is detailed in the government estimates, and is split into Personal Emoluments and Recurrent Expenditure, the former covering salaries and allowances of all government teachers, and also certain travelling expenses and pensions. All capital works, and non-recurrent expenditure on buildings, furniture and equipment is financed in the estimates from the Public Works Department, and the expenditure is incurred on the advice of the Education Department. Minor equipment is purchased from the Education Department estimates.

All government schools charge fees, which in secondary schools vary from $HK.120 to $HK.240 per annum, and are payable in 10 monthly instalments. The fees at secondary technical schools are $HK.120 per annum. The fees charged represent 17 per cent of the expenditure on recurrent educational costs only.

Assistance to parents is given in the form of free places (up to 30 per cent of the total enrolment), scholarships (awarded by the Government from scholarship funds or awarded from private sources), maintenance grants for deserving pupils in the matriculation classes, i.e., form 6 of Anglo-Chinese schools, who are in need of the money to complete their studies.

Grant-in-aid secondary schools. Various salary scales (mainly as for government schools), are authorized for teachers in grant-in-aid schools. Appointments and promotions are approved, and salaries assessed by the Government, having regard to qualifications, experience, efficiency and suitability. Fees range from $HK.250 to over $HK.500 per year depending upon the school grade. Provision is made for up to 30 per cent of the total enrolment to enjoy free places. A provident fund is established for the teaching staff. The administration of the fund is controlled by a board, consisting of representatives of both the Government and the schools concerned.

Subsidized secondary schools. Annual tuition fees charged in secondary subsidized schools range from $HK.40 per pupil to $HK.240 per pupil. Tuition fees are taken into account in arriving at the recurrent subsidy. Besides tuition fees, subsidized schools are allowed to charge supplementary subscriptions at rates approved by the Government. This source of income is normally not taken into account to calculate the recurrent subsidy, but is used by schools to defray the other part of capital expenditure not met by the Government. Salaries paid to teachers are the same as in grant-in-aid schools, but no provident fund is established for the staff.

Private secondary schools. Private schools may apply for government grants to pay for the rates and for architects fees for the examination of the structural safety of the school. Non-profit-making private schools are also eligible for grants of building sites on concessionary terms and for interest-free building loans.

Building and equipment. An attempt has been made to produce a standardized government secondary school, which will serve as an example for non-government schools. The standard school is erected on a plot of 50,000 square feet, and contains 24 classrooms, specialist rooms and ancillary rooms. There are detailed regulations covering lighting and sanitation.

School welfare services. The Government provides a school medical service and a school dental service. At present the number of schools which can participate in these services is limited. Treatment is given when necessary in government health and dental clinics without charge, and hospitalization is available for serious cases. Government school pupils pay $HK.5 a year for these services, aided schools $HK.5 a year, and private school pupils $HK.15 a year. In grant-in-aid schools a great deal of welfare work is done for needy pupils both in the school and outside.

TYPES OF SECONDARY EDUCATION

At the end of the primary school course a Joint Primary 6 promotion examination is held in which all government schools compete, together with most grant-in-aid schools, and such subsidized and private school pupils as have reached a sufficiently high standard. Pupils who are over-age for competing for the Joint Primary 6 examination or not of sufficiently high standard may enter private secondary schools. Any pupil who leaves school because he is over-age or has financial difficulties can continue in night schools or evening classes at a secondary level. In addition pupils can enter vocational schools where the medium of instruction is Chinese, or the junior technical schools where the medium of instruction is English. No official form of guidance is given for selection of the type of secondary education to be followed by a pupil when he leaves the primary school.

The secondary school year begins in September and finishes in July. The summer holiday at the end of the year is the longest holiday. Shorter holidays are given at Christmas, Chinese New Year (about early February) and Easter. The academic year with one or two exceptions is divided into two terms, the Chinese New Year holiday being the dividing line. The school week consists of five working days, and the school day is normally from 9 a.m. to 4 p.m.

General secondary schools

Anglo-Chinese schools. In these schools, the aim is to provide a broad general education in academic subjects taught in English, although the study of Chinese is also encouraged so that pupils leave school with a working knowledge of both cultures. A 5-year course (forms 1 to 5) leads to the Hong Kong School Certificate, in which pupils must pass in selected subjects at one and the same time in order to qualify for a certificate. Pupils then leave for suitable employment or enter a teacher training college or proceed to form 6. This latter course lasts for 2 years and ends with the London University General Certificate of Education, or with the University of Hong Kong Matriculation examination, which qualifies pupils for entrance to British Commonwealth universities.

Pupils are admitted on the basis of the Joint Primary 6 examination, and come from both Chinese-medium and English-medium schools. The pupils in a government secondary school need not necessarily come from a government primary school but must take the Joint Primary 6 examination. Grant schools admit secondary pupils under two schemes: under Scheme A, 67 per cent of the entrants to form 1 are accepted from the Joint Primary 6 examination and 33 per cent of the places are filled at the discretion of the head of the school; under Scheme B, schools make their own selection up to 70 per cent and the remaining 30 per cent is filled by pupils selected through the examination. Subsidized and private schools enter selected pupils for the examination; such schools are only allowed to enter pupils if the academic standard warrants it.

In government and grant schools, there is streaming by academic ability but the remaining schools prefer to stream by ability in English, or tend to group pupils by the date of entry into a school. This is necessary as pupils reach school with varying abilities to cope with lessons in English. At the fourth year of the secondary course, pupils are allocated to arts or science courses, according to their performances in examinations. Most Anglo-Chinese schools have a half-yearly terminal examination as well as a promotion examination at the end of the year. Pupils are promoted, retained or rusticated on the promotion examination.

The subjects in the curriculum are English language, literature, Chinese language, history, geography, civics, mathematics, physics, chemistry, biology, art, music, physical education, domestic science, and Biblical knowledge in schools with missionary influences. Commercial subjects are taught in some classes as special subjects, or in a post-secondary class. The normal academic subjects are taught to School Certificate standard.

The organization, curriculum, syllabuses, and methods of teaching in Anglo-Chinese schools are modelled on current education patterns in England, modified where necessary to suit local conditions. This means that particular textbooks, suitable for England, are not necessarily suitable for Hong Kong.

School report cards are maintained by all schools, although no standard technique exists. Promotion depends more upon examination than upon the report card, which usually details the results of the examination.

The teaching staff in government secondary schools is recruited from various universities, and also from the 2-year training course at Northcote Training College (Hong Kong). The university material varies considerably in its background and academic attainment. Graduates are generally recruited as assistant education officers. Assistant education officers can be promoted to education officers, and as such are eligible for headships of schools, eventual appointment to the inspectorate, or to administerial posts, rising to senior education officers. The two-year trained teachers begin as certificated teachers on the time scale. In grant schools, the same system is followed except that there are no education officers; hence a teacher can only achieve a senior position on the staff, or perhaps a headship, if he enters government service. In subsidized schools, the same rates of pay are given as for the other two types of schools, but the teachers receive no provident fund as in grant schools, nor pension as in government schools. In private schools, the rates of pay tend to be low and the schools recruit whoever is available at the price they are prepared to pay.

Chinese schools. The aim of the Chinese school is to give a general education based on Chinese culture with the addition of some Western knowledge, and to teach English as a second language. A 6-year course leads to a Chinese School Certificate.

Pupils enter Chinese secondary schools from Chinese primary schools, and there is usually an entrance examination. Children are not usually grouped according to general ability, but according to their proficiency in the Chinese language.

All schools have a prefect of studies in charge of academic subjects, and, in the larger schools, the teaching of each subject throughout the school is organized by a dean. In all but the smallest schools there is also a dean of discipline, who maintains order. The headmaster deals with administrative matters and does not carry out actual teaching duties although he may be a qualified teacher. The school is run by a board of managers, acting for philanthropic, public spirited, or financial reasons. The supervisor, who is one of the managers, is officially in charge of the school, and is the administrative link between the school and the Department of Education; among other duties he engages and dismisses teachers in conjunction with the Department. In the larger schools there is a prefect of general affairs, a teacher appointed to conduct the routine business of the school, e.g., collection of fees. It will be seen that the functions of a teacher in such an organization may differ from those of a teacher in an Anglo-Chinese school; the system is the traditional Chinese one. These remarks do not apply to government schools or schools which are conducted in the same way as government schools.

The schools compile reports on pupils in detail and hold examinations twice a year. Pupils at the end of their 6-year course enter for the Hong Kong Chinese School Certificate. Successful pupils are admitted to Chinese post-secondary colleges, to the School of Higher Chinese Studies at the Evening Institute, or to the Special Classes Centre.

The teaching staff has been largely recruited from universities in Taiwan and mainland China but it is expected that the recent growth and development of the post-secondary colleges will supply secondary teachers in the future. Teachers in the schools can expect to progress to the posts of deans or prefects, and finally headmasters. Chinese secondary schools are mainly private schools. There are a few government schools, some Chinese departments of grant-in-aid secondary schools and a few subsidized schools.

The Special Classes Centre. This centre gives a 2-year course in English to pupils who have completed courses in Chinese secondary schools. As only 60 places are available, competitive tests are held to select suitable candidates. Many of the centre's students, having passed in English language but not having completed all the five subjects required for matriculation, continue their studies in Anglo-Chinese schools in the hope of entering the University of Hong Kong. About half of the candidates who pass the School Certificate English language paper after their first year of study do not proceed to the second year but continue their studies in one of the teacher training colleges.

Evening Institute. This comprises three sections, viz., the Evening School of Higher Chinese Studies, English language classes, and classes in academic and practical subjects for teachers. The institute is organized by the Education Department, and is financed by government funds. Instructors are recruited from all members of the teaching profession, and from outside the profession as well.

The Evening School of Higher Chinese Studies was founded in March 1951. The aim of this school is to provide education in the Chinese medium at post-secondary level to men and women who have passed the Hong Kong Chinese School Certificate examination or its equivalent. There is an entrance examination for which certain exemptions are provided. The school now offers two courses of study—general arts and commerce—each being a 3-year course leading to a diploma issued by the Education Department.

Vocational and technical schools

Technical and vocational education in Hong Kong roughly follows the United Kingdom pattern. At the apex of the pyramid is the University of Hong Kong which, in its Department of Engineering, provides degree courses in civil, mechanical and electrical engineering. These courses, being at technological and not technical level, are not referred to further in this text. There is close co-operation between local industry and the various technical and trade schools.

Agriculture, forestry and fisheries. Short courses for skippers, coxswains and engineers of fishing vessels are provided by the Department of Agriculture, Forestry and Fisheries. The courses are entirely vocational and bear directly on the needs of the fisherfolk. Agricultural education is provided by the same Department, mainly in the form of visits and lectures to small groups but 6-week courses of practical farm training for young farmers have recently been introduced.

Domestic science and careers for girls. Nearly all the girls' secondary grammar schools in Hong Kong provide instruction in domestic science but the Ho Tung Technical School lays much greater emphasis on this subject with the aim of training girls for careers as teachers of the subject or for employment in hotels and hospitals. This school also teaches housecraft, needlecraft, pottery, toymaking, fabric printing, window dressing and home nursing; all these are designed to prepare girls for direct entry into employment. The proportion of time devoted to vocational subjects rises from about 25 per cent of the school week in the first year of the course to about 40 per cent in the fifth year.

The Po Kok School is a primary and secondary school with a strong bias towards vocational subjects, principally needlecraft and commercial subjects. About 30 per cent of the students' time is given to technical subjects. There are some five or six private schools offering short concentrated courses in dressmaking or embroidery.

Many of the girls' secondary schools in the Colony have a sixth form in which commercial subjects are taught, mainly shorthand and typing.

The Government Technical College. All Departments have day and evening classes. All full-time classes are taught in English and applicants for admission are required to have a general education to School Certificate level. The number of applicants is in excess of the places available and a competitive entrance examination is held in August of each year.

The various departments of the college and courses offered are as follows:

Building. A full-time 3-year course, the subjects taught being building construction and drawing, field surveying, structural engineering, organization and management and book-keeping. About half of the time is spent in practical work such as carpentry, joinery, bricklaying and surveying. Four months of each school year are spent in full-time attendance at building sites for practical training. The Department also offers a 3-year 'sandwich' course for Building Contractors' Apprentice Foremen and a part-time day course in building construction for Health Inspectors.

Commerce. Two 1-year full-time courses, one concentrating on book-keeping and the other on secretarial work, shorthand and typing.

Mechanical engineering. A full-time 3-year course, the subjects including heat engines and internal combustion engines, technical drawing and machine design, production engineering and electro-technology. Students spend approximately half their time in the workshops and laboratories. From each class, a few students go to England for student-apprenticeships with large engineering firms. Part-time day release classes for engineering apprentices are also provided by this Department.

Electrical engineering. Courses for radio officers and

telecommunications technicians. Mathematics and science, woodwork and metalwork, electrical and radio technology, and technical drawing form an all-round course in which the students spend half their time in practical work.

Navigation. Short courses for Masters', Mates' and Second Mates' Certificates of the Marine Department, radar observers' courses and a pre-sea training course.

Textile industries: a 3-year course in weaving and spinning, testing and dyeing with about 50 per cent of the time spent on practical work.

The day departments of the college are also responsible for related evening courses in regard to curricula, staffing and equipment. The lecturers are from the staff of the Technical College, the Victoria Technical School and other government institutions, and from local commercial and industrial firms.

The technical courses are divided into senior and advanced sections. The senior course requires 3 years' study and leads to the College Ordinary Certificate, comparable with the ordinary National Certificate (United Kingdom). The advanced course requires a further two years' attendance and prepares for the Higher Certificate, equivalent to a Higher National Certificate (United Kingdom). Preliminary courses in building and engineering are intended for those students whose basic education is not up to the standard for entry to the senior technical classes. The duration of the book-keeping and the shorthand courses is 3 years. In the majority of these courses, the medium of instruction is English but since September 1955 a number of technical classes have been conducted in Cantonese.

Victoria Technical School. This school is equipped with large woodwork and metalwork shops, a small foundry, laboratories for chemistry, physics and applied mechanics, several drawing offices, music room, library and an adequate number of classrooms. The curriculum is that of a secondary technical school in which a general education is added to vocational training in woodwork, metalwork, technical drawing and workshop technology. About 25 per cent of the student's time is given to technical subjects.

Aberdeen Trade School. The school has a primary section and an apprentices' section where three trades are taught—mechanics, electro-mechanics and carpentry. For many years the school has provided a complete apprenticeship training of five years' duration and produced competent craftsmen, immediately available for employment as improvers or artisans. Many employers, however, prefer to recruit at the apprentice stage and the school will now meet this need and provide a more complete education through a secondary technical school stream leading to the Hong Kong School Certificate. The boys spend some 30 per cent of their time in the workshops and a good deal of production work is undertaken.

Tang King Po School is situated in Kowloon and provides trade training for apprentice printers and bookbinders, tailors and shoemakers.

Teacher training

Two training institutions offer three different full-time courses: (a) a 2-year course producing a certificated teacher capable of teaching in upper primary or lower secondary schools; (b) a 1-year course producing a trained primary school teacher: (c) a special 1-year course for successful students from the post-secondary colleges, which qualifies the students to teach in secondary schools as non-graduates. In addition there are part-time courses of in-service training for untrained teachers.

The curriculum of the above courses includes: language study, either English or Chinese; basic professional subjects (a) principles, psychology and practice of education, (b) health education; teaching practice; two to four optional subjects chosen from mathematics, science, geography, history, handicrafts, art, music, physical education and domestic science (at least one must be academic and at least one of a practical nature). Besides their academic studies, students are required to take part in the usual extra-curricular activities such as dramatics, debates, athletics, etc. In the 1-year primary teachers' course, the instruction is less theoretical than in the 2-year course, as time does not permit a deep study of the subjects, and the teachers are urgently needed in the primary school expansion programme. The level of study in the 2-year academic course is slightly above the accepted secondary level, but does not approach university level.

Out-of-class activities

Pupils participate in school government through the prefect system and through school clubs and societies. Schools also have committees composed of pupils who discuss the spending of funds raised from additional fees paid.

Sports facilities in schools vary greatly. Inter-school competitions are organized in athletics, badminton, basketball, boxing, association football, hockey, swimming, tennis, etc.

A rapid expansion of cultural activities in the schools has occurred during the last few years. The Hong Kong Festival of the Arts incorporates school performances in music, drama, and art, and the Schools Music Festival attracts competitors in ever-increasing numbers. An inter-school dramatic competition is organized by the Education Department, and once a year plays are performed in both English and Cantonese.

Numerous school societies exist for all forms of cultural activity including those organized by religious bodies. There are active Boy Scouts and Girl Guides associations.

TRENDS AND PROBLEMS

The present trend of secondary education is an ever-increasing expansion of facilities. Owing to increased primary enrolments, a large demand for secondary places will be created in three to four years' time. It has been decided to tie expansion of the present academic system to the proportion of the population which would benefit from this type of education. However, primary school children must continue their education until they have reached an age for work and the Department is considering a new type of junior secondary school to assist in meeting the demand for secondary education. No details have been fixed as yet.

The two main problems of the Department are space for building and the size of the population. Hong Kong is already highly urbanized, and very little space exists for future school buildings. Much ingenuity has been shown in developing difficult sites, previously barred owing to the nature of the terrain, but even such sites will become scarce in the future. The second problem is caused by the influx of refugees into the territory. The local population itself undergoes the rapid increase associated with Asia; when an influx of refugee children is added the problem becomes almost insurmountable. Finally finance is restricted owing to the territory's limited capacity to produce an income. These facts explain why the present system has evolved as a means of supplying the maximum education within the financial resources available.

[*Text prepared by the Education Department, Hong Kong, in June 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 2,748,000.
Area: 391 square miles; 1,013 square kilometres.
Population density: 7,028 per square mile; 2,713 per square kilometre.

Summary of school statistics, 1953–57. In the school year 1957/58 total enrolment in schools and colleges including evening classes was nearly 278,500 students representing 11 per cent of the total population. Of the total enrolment, 79 per cent was in primary schools, nearly 18 per cent in general secondary schools, 2 per cent in technical schools and the remainder in teacher training colleges and university courses. Girls made up over 41 per cent of primary and general secondary school enrolment and were well over half the enrolment in teacher training courses. At university level, however, girls represented only 27 per cent of those enrolled. The total teaching staff in primary and secondary schools numbered over 11,800 of whom 49 per cent were women. Compared with 1953/54, enrolment in primary schools had increased by 77 per cent, in general secondary schools by 28 per cent, in technical schools by 38 per cent, in teacher training colleges by 379 per cent and in universities by 295 per cent. The average pupil-teacher ratio in primary schools in 1957/58 was 25 compared with 20 in 1953/54, the corresponding figures for secondary schools being 18 and 15. (See Table 2.)

Examination results in secondary education, 1953–57. The number of passes in the General Certificate of Education examination increased by 160 per cent between 1955 and 1957. The Chinese School Certificate was awarded to 1,194 students in 1957, an increase of 72 per cent compared with 1953. The output of trained teachers also increased steadily over the period under review. Technical examinations are incompletely reported but certificates were awarded to 804 students in 1957 compared with 658 in 1955. (See Table 3.)

Educational finance, 1957/58. Total public expenditure on education in the fiscal year beginning April 1957 amounted to 65.1 million Hong Kong dollars, or about $25 per inhabitant. Details of the substantial expenditure on education made by bodies other than the Central Government are not available. Capital expenditure ($12,203,930) was 19 per cent of the total spent by the Government. The distribution of recurring expenditure by level and type of education is given in Table 1.

Sources. Hong Kong: Education Department, annual reports.

1. EDUCATIONAL FINANCE, 1957/58 (in Hong Kong dollars)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure[2]	**52 901 233**	**100.0**
Central administration	3 773 155	7.1
Primary education	27 005 360	51.1
Secondary education	10 639 910	20.1
Vocational education	1 713 080	3.2
Teacher training	1 979 214	3.7
Higher (grants to Hong Kong University)	5 934 900	11.2
Other education	1 855 614	3.5

1. Official exchange rate: 1 Hong Kong dollar = 0.175 U.S. dollar.
2. Refers to educational expenditure made by the Central Government only.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, unaided private						
	Total	**1957/58**	**209**	**756**	**755**	**18 559**	**8 088**
	,,	1956/57	...	...	...	19 068	8 302
	,,	1955/56	...	...	...	18 893	7 976
	,,	1954/55	...	...	...	18 367	7 821
	,,	1953/54	...	...	...	16 487	...
Primary	Primary schools, public	1957/58	42	893	595	[1] 25 883	[1] 10 435
	Primary schools, grant-aided private	1957/58	17	195	161	[1] 6 028	[1] 4 532
	Primary schools, subsidized private	1957/58	365	2 934	1 537	[1] 88 850	[1] 40 331
	Primary schools, unaided private	1957/58	685	4 862	2 615	[1] 136 090	[1] 55 424
	Total[2]	**1957/58**	**1 109**	**8 884**	**4 908**	[3] **219 088**	[3] **89 974**
	,, [2]	1956/57	1 108	[4] 8 662	[4] 4 982	[3] 191 251	[3] 76 748
	,, [2]	1955/56	1 090	[4] 8 152	[4] 4 790	[5] 194 811	[5] 81 339
	,, [2]	1954/55	830	[4] 7 377	[4] 4 081	[3] 137 964	[3] 53 168
	,, [2]	1953/54	803	[4] 6 318	[4] 3 661	[3] 123 613	[3] [6] 54 556
Secondary *General*	Secondary schools, public	1957/58	10	[7] 300	[7] 123	[8] 5 097	[8] 1 797
	Secondary schools, grant-aided private	1957/58	19	554	302	[8] 11 255	[8] 6 194
	Secondary schools, subsidized private	1957/58	11	[7] 91	[7] 30	[8] 2 126	[8] 1 460
	Secondary schools, unaided private	1957/58	190	[7] 2 031	[7] 427	[8] 37 597	[8] 12 498
	Total[9]	**1957/58**	**230**	[7] **2 976**	[7] **882**	[3] **48 641**	[3] **20 052**
	,, [9]	1956/57	213	2 766	808	[3] 44 439	[3] 18 023
	,, [9]	1955/56	237	2 804	803	[8] 48 983	[8] 18 340
	,, [9]	1954/55	[7] 293	[7] 2 669	[7] 785	[3] 40 738	[3] 16 120
	,, [9]	1953/54	[7] 263	[7] 2 848	[7] 718	[3] 37 875	[3] 14 698
Vocational	Technical schools, public	1957/58	2	...	...	650	269
	Technical and vocational schools, subsidized	1957/58	4	...	...	409	205
	Technical and vocational schools, unaided private	1957/58	52	...	...	[10] 4 191	[10] 1 095
	Total	**1957/58**	**58**	**...**	**...**	[10] **5 250**	[10] **1 569**
	,,	1956/57	59	234	54	[10] 4 160	[10] 1 608
	,,	1955/56	55	255	55	[10] 5 374	[10] 1 911
	,,	1954/55	...	...	...	[10] 3 714	[10] 1 572
	,,	1953/54	...	...	...	[10] 3 799	[10] 1 669
Higher *Teacher training*	Teacher training colleges, public						
	Total	**1957/58**	**2**	**...**	**...**	[11] **1 115**	[11] **644**
	,,	1956/57	2	...	...	[11] 720	[11] 438
	,,	1955/56	2	...	...	[11] 693	[11] 395
	,,	1954/55	2	...	...	[11] 242	[11] 144
	,,	1953/54	2	...	...	[11] 233	[11] 137
General and technical	University of Hong Kong	1957/58	1	...	...	1 011	269
	Technical college, public	1957/58	1	...	...	[12] 465	[12] 27
	Post-secondary general colleges, private	1957/58	10	...	...	2 896	867
	Total	**1957/58**	**12**	**...**	**...**	**4 372**	**1 163**
	,,	1956/57	10	...	...	2 827	743
	,,	1955/56	13	...	...	3 040	763
	,, [13]	1954/55	2	...	...	1 074	228
	,, [13]	1953/54	2	...	...	1 105	238
Special	Schools for handicapped children						
	Total	**1957/58**	**...**	**...**	**...**	**547**	**...**
	,,	1956/57	...	...	...	508	...
	,,	1955/56	...	...	...	397	...
	,,	1954/55	...	...	...	...	...
	,,	1953/54	...	...	...	...	...

1. Including enrolment in evening classes.
2. Numbers of schools and teachers refer to regular school course (day schools), evening classes, and special afternoon classes.
3. Enrolment in regular school course (day schools) only.
4. Including pre-primary education.
5. Including enrolment in evening classes.
6. Including girls in kindergarten classes.
7. Including teachers in vocational education.
8. Including students enrolled in basic courses (evening schools) numbering 7,434 (F. 1,897) in 1957/58.
9. Number of schools and teachers refers to normal school course (day schools) and to basic courses (evening schools).
10. Including part-time students who numbered 2,670 (F. 483) in 1957/58.
11. Including part-time students numbering 448 (F. 220) in 1957/58.
12. Enrolment in day courses (full- and part-time) only.
13. University of Hong Kong and technical college only.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Adult	Courses, public and private						
	Total	**1957/58**	...	...	...	**75 545**	**34 728**
	"	1956/57	...	...	...	71 067	...
	"	1955/56	...	...	...	[14]26 072	...
	"	1954/55	...	...	...	60 546	...
	"	1953/54	...	...	...	[15]43 764	...

14. Not including evening classes in primary and secondary schools.

15. Not including special afternoon classes in primary schools.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year				
	1953/54	1954/55	1955/56	1956/57	1957/58
General Certificate of Education	...	...	316	439	821
English School Certificate	1 007	1 242	1 322	[1]1 517	1 860
Chinese School Certificate	694	841	947	1 173	1 194
Hong Kong Matriculation	...	...	...	280	310
Teacher Training Certificate	138	149	187	233	338
City and Guilds of London Institute—Technological examination	...	...	434	560	472
Technical examinations[2]					
Associate Membership of the Institute of Mechanical Engineering	...	...	12	21	13
London Chamber of Commerce	...	...	212	317	319

1. Including 175 attending evening schools for English language only.

2. There are also examinations held by the Marine Department, General Post Office and the Associated Board of the Royal School of Music.

NORTH BORNEO

North Borneo occupies the northern corner of the island of Borneo. It was formerly administered by the British North Borneo Company under royal charter but in 1946 the sovereign rights and assets of the company were transferred to the Crown. The island of Labuan, which lies six miles off the north-western coast of Borneo and which had previously been administered separately, was included in the new Colony. The Governor is assisted by a Legislative Council and an Executive Council.

The native inhabitants of the Colony are Dusuns, Bajaus, Bruneis, Muruts, Suluks and several smaller tribes; these peoples speak languages akin to Malay. The largest non-indigenous group are the Chinese, who make up nearly one quarter of the total population. The official languages of the country are English and Malay.

THE EDUCATIONAL SYSTEM

Education is provided in state schools and independent schools. State schools are entirely maintained and controlled by the Government; they are nearly all Malay-language primary schools but they include a few primary and post-primary institutions where English or Chinese is the main medium of instruction. In some areas local authorities have assumed a measure of responsibility for the operation of government primary schools. The two largest groups of independent schools are those run by the Christian missions and by the committees of Chinese communities throughout the colony. Both groups offer primary and secondary education. Mission schools for the most part use English as the medium of instruction, while most teaching in the Chinese schools is in Mandarin, although English is a compulsory subject. There are also a few native voluntary schools providing primary education in Malay or English in communities where state schools have not yet been established, and some estate schools established by the management of commercial undertakings for the children of their employees. The Government assists independent schools with grants-in-aid to help meet building costs and recurrent expenditure. Most independent schools charge fees. Compulsory education has not yet been introduced.

The principal executive officer of the Government is the Chief Secretary. The Director of Education, as head of the Education Department, is responsible to the Chief Secretary for the general control and supervision of the educational system. He exercises this authority by virtue of the Education Ordinance No. 164 of 1956, which consolidated and amended previous legislation. *Inter alia* the ordinance requires the registration of all schools, school managers and teachers, defines the rights and duties of those concerned with education and provides for the inspection of schools. The Education Regulations 1957, drawn up under the ordinance, cover school premises, health and sanitation, discipline, fees, holidays, grants-in-aid, school records and accounts, etc.

The Colony is divided into 15 school areas, each having its own local education committee drawn from persons representing the whole range of educational interests of the community.

In matters of educational policy for all levels and types of school, the Government is advised by a Board of Education established in 1956 to replace the Advisory Committee created under the 1954 ordinance. The board is composed of seven senior government officials, three legislative councillors, three representatives of the missions, two men and two women teachers, and ten persons who are members of local education committees.

Government expenditure on education is financed from the ordinary budget of the Colony and from the development budget (mainly for constructing new schools). Expenditure by voluntary agencies is financed mainly by grants received from the Government, by income received from school fees and by collections and subscriptions.

The duties of the administrative staff of the Education Department include inspection of all types of schools and of teachers, arrangements for examinations, demonstration lessons, general advice and encouragement.

The basis of the school system is a 6-year primary course for children in the 6–12 years age group. Primary schooling has three major divisions—Malay, English and Chinese language education. Although the content and standards of these types of school varied greatly in the past they are now becoming more uniform. Post-primary education is selective. In the English medium it is provided in secondary schools either with 5- or 6-year 'full' courses or with 3-year 'junior' courses. Chinese secondary education, provided in 'middle schools', comprises a 3-year junior middle course followed, in the principal towns, by a 3-year senior middle course. Pupils who have completed a Malay or Chinese language primary course may transfer to English-medium education by entering special English preparatory classes of one or two years' duration which are attached to some secondary schools. Pupils from all types of primary school may enter the trade school, which offers a 2-year course. Various kinds of vocational training and apprenticeship schemes are provided by other government departments. The minimum educational qualification for entry to the teacher training college is three years' successful secondary schooling for the English- and Chinese-medium sections, and six years' primary schooling for the Malay section. There are no institutions of higher education.

THE DEVELOPMENT OF SECONDARY EDUCATION

After World War II secondary education expanded rapidly, the number of pupils rising from 93 in 1947 to 1,607 in 1953. At a time when the most urgent task of the authorities was to develop primary education as a sound basis for the whole system, this growth of secondary schools was a matter for some concern. Of the few trained primary teachers available the best were often transferred to secondary classes, and other resources were similarly diverted. Even then there were not enough teachers competent to teach the academic type of secondary course which alone was provided, and the education in some schools was secondary only in name. For some time therefore the Education Department discouraged the unplanned and inadequately prepared spread of secondary education.

In recent years the situation has improved. Since the opening in 1952 of Kent College, a teacher training college at Tuaran, there has been an increasing number of qualified primary teachers trained in methods suited to the needs of the Colony. The improvement in the quality of primary education and the great increase in the number of children completing the primary course created a justifiable demand for the extension of secondary education.

In order to ensure that new secondary schools established in response to this demand should be of a satisfactory standard, the Board of Education studied the problem during 1957 and laid down certain conditions which school managements have to fulfil before opening secondary courses. These conditions require that there should be a minimum number of qualified pupils wishing to enter the course (15 for a 3-year or junior course, 18 for the 5- or 6-year or full secondary course), minimum staffing arrangements, and suitable accommodation. The opening of a junior course must have the approval of the local education committee and the Director of Education, and the opening of a full secondary course that of the Board of Education;

in either case the course must be accepted for registration under the ordinance. Finally, the opening of a secondary course must in no way be detrimental to the quality of work in the primary department.

The above conditions apply to both English- and Chinese-medium schools. A further step towards uniformity in the provision of secondary education has been the issuing of departmental syllabuses for the junior secondary course in both types of school with a view to ensuring that the same standard is reached regardless of the language of instruction. Similarly, there is now a common external examination for all pupils who complete the junior secondary course. This examination, as well as the primary leaving examination, is set by the North Borneo Examinations Board comprising representatives of all the different types and levels of school, the training college, and the Education Department.

In 1957 the first government secondary school was opened at Jesselton. This school is intended mainly for selected native pupils from rural areas and pays particular attention to the teaching of science classes to enable pupils to matriculate at overseas universities. Most of the independent secondary schools are attached to primary schools, and the question of the administration of secondary education is covered by the information given in the preceding section on the educational system as a whole.

The number of pupils enrolled in secondary schools in 1958 was 3,019.

TYPES OF SECONDARY EDUCATION

General secondary schools

The educational qualification for entry is the completion of six years' primary schooling; selection of pupils is guided by the results obtained in the external North Borneo Primary Six examination. As described above, some English secondary schools have preparatory language classes for pupils seeking to enter from schools using other media.

The policy in respect of the junior secondary courses is that these should provide a reasonable basis of general education coupled with an aptitude for environmental pursuits. The syllabus of the Junior Certificate examination has been made sufficiently wide to cater for this, but difficulties in training specialist teachers and in providing workshops and equipment restrict the present development of this policy.

The full secondary course has been adapted to the syllabus of the Cambridge Oversea School Certificate examination, and an improvement in the recruitment of science teachers and in the equipment of laboratories has resulted in all the larger schools including science in their curricula. A special effort is now being made to provide good facilities for instruction in home economics for girls.

Emphasis is also being placed on the development of physical education and of games and a number of teachers are receiving special training for this overseas.

Reference has already been made to the institution of a post-School Certificate science course to prepare pupils for university entrance, and an effort is now being made to establish a post-School Certificate arts course for the Colony in a mission school in 1960. The new government school at Jesselton has a bias towards science and has facilities for practical instruction in woodwork, metalwork and domestic science.

Increased attention is being given to bilingualism, i.e., the teaching of English in Chinese schools and of either Chinese or Malay in English schools. For the junior (3-year) course, both English and Chinese schools now use syllabuses prepared by the Department and prepare pupils for the North Borneo Junior School Certificate. The long course in English schools prepares for the Cambridge Oversea School Certificate, and in Chinese schools for the Senior Middle School Certificate, though it is hoped that pupils from the Chinese schools will soon be sufficiently proficient in English to enter for the Cambridge examination. Scholarships for higher education overseas are granted by various bodies.

Extra-curricular activities include all standard team games and athletics, badminton, etc. Inter-school competitions are held. Recreational activities, such as stamp clubs, chess clubs, Boy Scouts, Girl Guides, and first-aid groups, are also encouraged. The Education Department has encouraged the development of libraries, especially for secondary schools. The Department of Broadcasting and Information also provides libraries, including the book-box system for outstations, educational cinema shows and radio programmes.

Teachers holding senior posts in English secondary schools are usually expatriate staff. Recently, selected secondary graduates have been sent to universities and training colleges overseas to prepare for a career in secondary teaching and some of these are now returning. In the past, teachers in Chinese secondary schools have had to be recruited from overseas. It is now planned to staff these schools with North Borneo Chinese, and a number of successful middle school pupils have been sent to Hong Kong for college training.

Vocational and technical schools

The government trade school in Jesselton offers 2-year courses in carpentry or motor mechanics and a 2½-year course in electricity. Subjects taught include mathematics, machine drawing and English. The school is well equipped with lathes, tools and sectionalized apparatus.

The Public Works Department offers apprentice training and higher-level courses for technical assistants. After initial training the latter are sent at the Department's expense to the Kuala Lumpur Technical College, Federation of Malaya. Courses in welding and locomotive maintenance, etc., are conducted by the North Borneo Railway. The Forestry Department trains its own forest guards. Courses in general and mental nursing, midwifery and public health are provided by the Medical Department; apprenticeship training for artisans in shipbuilding and marine engineering, by the Marine Department; and overseas and local training for air traffic control assistants, by the Civil Aviation Department.

Teacher training schools

The training college at Tuaran still accepts Malay-medium

students whose educational qualification is Primary 6. In all cases these students have had some experience as practising teachers. It is hoped soon to bring the entrance requirement into line with that for English- and Chinese-medium students, so that all teacher training will be at post-junior secondary level.

TRENDS AND PROBLEMS

In addition to the urgent problem of providing universal primary schooling, the Education Department is concerned with planning the expansion of secondary education so that a proper balance is maintained with other types and levels of schooling, and so that the education provided is in relation to the needs and resources of the country. It is intended to make provision in a few selected rural areas for central schools where academic instruction will be supplemented by vocational interests, and in particular by the formation of Young Farmers' Clubs.

The demand for new textbooks written especially for North Borneo pupils has so far resulted in the production of three books on social studies. In this respect and in the fields of curriculum planning and administration the Department is continuing its efforts to bring the three different language systems into a national school system. Thus, while catering for the different needs and backgrounds of a multi-racial society, the system will maintain uniform standards and turn out people who will recognize themselves as fellow-citizens of North Borneo.

A matter of particular interest is a widespread demand for the use of English rather than Malay in rural primary schools. Although of fairly wide application as a lingua franca, Malay is not the mother-tongue of the great majority of the indigenous peoples, and these peoples believe that their children must have a sound background of English if they are to progress. Accordingly, the Department has drawn up plans, with the help of outside agencies, to endeavour to convert the government primary schools to the medium of English over the next five years.

[*Text revised by the Director of Education, Jesselton, in June 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 409,000.
Area: 29,388 square miles: 76,115 square kilometres.
Population density: 14 per square mile; 5 per square kilometre.

Summary of school statistics, 1953–57. In 1957 there were 300 schools at primary and secondary levels with a total enrolment of about 34,250 pupils, representing approximately 9 per cent of the total population. The proportion of girls enrolled in primary schools was 37 per cent, and in secondary schools 30 per cent. The number of primary school teachers was about 1,040, of whom 35 per cent were women, and the average pupil-teacher ratio was 30. The pupil-teacher ratio in general secondary schools was 25. (See Table 1.)

Examination results in secondary education, 1953–57. In 1957 candidates for the Cambridge Oversea School Certificate numbered 124, including 20 girls, compared with 31, including only 1 girl, in 1953. There were, in addition, 113 candidates for the Chinese Junior Middle School Certificate and 15 candidates for the Chinese Senior Middle School Certificate in 1957. The North Borneo School Leaving Certificate was instituted for the first time in 1957 with 17 successful candidates of whom 2 were girls. In 1957, 71 students successfully completed teacher training.

Educational finance, 1957. Total expenditure for education in the fiscal year beginning January 1957 was 5,131,450 Malayan dollars or approximately $12.8 per inhabitant. Of this total, 43 per cent came from territorial revenue, 16 per cent from United Kingdom funds, 2 per cent from local authorities, 13 per cent from voluntary agencies and the remainder from Chinese school boards and the Liberation Educational Trust. Capital expenditure amounted to $1,456,270 or 28 per cent of the total spent. (See Table 2.)

Sources. North Borneo: Education Department, annual reports.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	84	294	51	7 767	1 617
	Primary schools, aided private	1957	197	747	314	23 953	8 932
	Total	**1957**	**281**	**1 041**	**365**	**31 720**	**10 549**
	„	1956	282	907	304	29 967	9 791
	„	1955	258	[1]969	...	24 771	7 966
	„	1954	244	[1]856	[1]266	[2]24 426	[2]7 454
	„	1953	229	[1]831	[1]243	[2]22 498	[2]6 765
Secondary							
General	Secondary schools, public	1957	2	7	1	138	27
	Secondary schools, aided private	1957	23	86	29	2 221	673
	Total	**1957**	**25**	**93**	**30**	**2 359**	**700**
	„	1956	20	76	22	2 013	513
	„	1955	[3]2	...	...	2 070	554
	„	1954	[3]3	...	...	1 858	508
	„	1953	[3]2	...	...	1 489	447
Vocational	Trade school, public						
	Total	**1957**	**1**	**5**	–	**37**	–
	„	1956	1	3	–	29	–
	„	1955	1	...	...	29	–
	„	1954	1	...	...	20	–
	„	1953	1	...	...	29	–
Teacher training	Teacher training college, public						
	Total	**1957**	**1**	**13**	**4**	**135**	**47**
	„	1956	1	12	3	135	48
	„	1955	1	(10)	...	129	42
	„	1954	1	...	...	116	30
	„	1953	1	...	...	89	14

1. Including secondary, vocational and teacher training schools.
2. Including kindergarten classes.
3. Not including primary schools with secondary classes (13 in 1953, 14 in 1954).

2. EDUCATIONAL FINANCE, 1957 (in Malayan dollars)[1]

A. RECEIPTS BY SOURCE

	Amount	
Total receipts		**5 131 450**
Central Government		3 053 280
Territorial revenue	2 218 571	
United Kingdom funds	834 709	
Local authorities		125 170
Other		1 953 000
Liberation Educational Trust	75 000	
Missions	*668 000	
Chinese schools	*1 210 000	

B. EXPENDITURE BY PURPOSE

	Amount
Total expenditure	**5 131 450**
Recurring expenditure	3 675 180
Capital expenditure	1 456 270

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure	**3 675 180**	**100.0**
Central administration	276 623	7.5
Primary education	2 712 803	73.8
Secondary education	429 111	11.7
Vocational education	67 350	1.8
Teacher training	189 293	5.2

1. Official exchange rate: 1 Malayan dollar = 0.327 U.S. dollar.

Sarawak lies in the north-western part of Borneo. The coastal region is a swampy alluvial plain and communications are provided for the most part by river transport. The country is sparsely populated by peoples of different origins, languages and cultures and at different stages of economic and social development. The indigenous population is made up of Sea Dayaks and Land Dayaks, the Malays and Melanaus, and a number of small groups such as the Kayans, Kenyahs, Muruts, Kelabits and Bisayas: these peoples speak distinct but related languages. Among the non-indigenous inhabitants the Chinese are by far the largest group, comprising about 30 per cent of the total population. The official languages of the country are English and Malay. There is no lingua franca, although Malay is widely understood.

Originally the southern province of the Brunei sultanate, Sarawak became in the nineteenth century an independent state with a British subject as Rajah. This form of government, in which the Rajah was assisted by British administrators, continued until 1 July 1946 when Sarawak was ceded to the British Crown and a Governor was appointed. The constitution grants legislative and financial jurisdiction to the Council Negri.

THE EDUCATIONAL SYSTEM

The Constitution Ordinance of the Colony provides for the development and improvement of educational services. The Education Department itself directly maintains and manages only a small number of schools, its chief contribution to the provision of educational facilities taking the form of aid to local authorities and voluntary agencies. Local government schools are mostly primary schools for the indigenous peoples, in which the vernacular is used in the lower grades and English in the higher. The principal voluntary agencies providing education are Christian missions, Chinese boards of management and village committees. The missions have rural schools for non-Malay indigenous pupils which resemble the local authority schools in curriculum and medium of instruction; nearly all their urban schools teach in English, but a few use Chinese. The schools established by the Chinese community use Kuo-yu as the teaching medium. 'Village committee' schools are native primary schools. There are also a few private schools run by trading companies for the children of their employees.

The Director of Education, who exercises general control over the whole system, is assisted by an advisory committee and may also appoint *ad hoc* committees to investigate and report on particular aspects or problems. Administration is regulated by the Education Ordinance 1950, which provides for the registration of schools, managers and teachers, and for the inspection of schools by officers of the Education Department. It has not yet been found practicable to introduce compulsory education. Although tuition fees are charged in both primary and secondary schools, the rates in aided schools are fixed by the Department and in certain cases may be remitted. A number of scholarships are also available.

All non-government schools which meet the conditions laid down in the Grant Code (Regulations) 1956 receive financial assistance. This means that their approved recurrent expenditure, after deduction of income received from fees, is met in full from government funds. For approved capital expenditure half the cost is met by the Government and half by the school management. Expenditure on recurrent grants to schools is met from the annual budget of the country but capital grants are paid from the development plan fund.

The normal minimum age for starting primary school is 6. The full course lasts 6 years and is divided into 4 years of lower primary (primary 1–4) and 2 of higher primary (primary 5–6). The secondary course is divided into junior and senior stages. In English-medium schools the former comprises forms 1 to 3 and the latter forms 4 to 6, the sixth form being divided into lower and upper. In the Chinese language system secondary schools are called middle schools and the classes are known as junior middle 1, 2 and 3, and senior middle 1, 2 and 3. There are teacher training centres which provide 2-year courses at two levels: at the lower level most entrants have had some secondary schooling and the higher level have completed a full secondary course of 5 or 6 years.

A regular schools broadcasting service began in 1959. Its first aim is to assist untrained or poorly trained teachers in remote primary schools, where supervision is difficult because of communications, but expansion of the service to include other primary schools and eventually secondary schools is planned.

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary education has been in the past, and still is, almost entirely in the hands of the Christian missions and the Chinese school boards. The curricula, textbooks, general orientation and discipline of the mission schools and the Chinese schools differ widely and one of the main problem for the authorities is how to bring about unity in aims without destroying the distinctive character of the different types of schools.

Until 1956 the only government institutions at secondary level were a junior secondary school for Malay pupils in Kuching, the capital, and a teacher training centre at Batu Lintang to which were attached some academic classes for selected boys of the indigenous races. In that year, however, government policy in regard to secondary education was reconsidered. The chief factor influencing the authorities was the need to provide secondary education

for the increasing number of pupils in the interior of the country who complete the primary course. The principal secondary schools run by voluntary agencies are situated in urban areas, and while mission schools have limited accommodation for boarders, Chinese middle schools usually have none at all. Moreover, voluntary agencies have found it difficult to finance the building and equipment of new secondary schools.

It was therefore decided to establish new secondary boarding schools for boys and girls of all races living mainly in rural areas, and the allocation of funds for the establishment of a nucleus of such schools throughout the country was approved in 1956. The first of these, the Tanjong Lobang school, began to function in 1957, a second was opened at Kanowit in 1958 and a third at 24th Mile on the Kuching-Serian road in 1959.

In 1957 the Government also opened a new teacher training centre at Sibu, for teachers in Chinese schools. Both the Batu Lintang and Sibu centres are residential and admit men and women students.

A Supervisor of Technical Education was appointed in 1958 to develop this branch of training.

TYPES OF SECONDARY EDUCATION

General secondary schools

English-medium schools. Since 1957 there has been a common entrance examination for all English-medium schools. On the results of these examinations pupils are divided into two groups, 'selected' and 'unselected'. The former study for the recognized examinations (or will enter technical courses when these are organized); 'unselected' pupils do not have to take the examinations and more suitable courses are being devised for them.

Some secondary schools provide only a 3-year course leading to the Sarawak Junior Certificate examination. The larger schools prepare for the Cambridge Oversea School Certificate examination, which is taken in the fifth form, and a few have sixth forms where candidates are prepared for the Cambridge Higher School Certificate and university entrance. The curriculum is academic, and before World War II was purely literary. The syllabus for the Sarawak Junior Certificate now includes general science, woodwork, metalwork, needlework and cookery, and some schools have science laboratories and domestic science rooms built with Colonial Development and Welfare funds. Increasing attention is also being paid to the teaching of Malay to native pupils and Kuo-yu to Chinese pupils. The complete course leads to higher education but this must be taken overseas; a number of scholarships are available, provided by the Governments of Sarawak, the United Kingdom, Australia and New Zealand, and by other organizations.

Chinese-medium schools. The Chinese Common Primary Leaving examination is sometimes used as an entrance test, not so much to exclude candidates as to indicate their level of attainment. Pupils take a common examination at the end of the junior middle course, i.e., after three years of secondary schooling, and at the end of the senior middle course after a further three years. The curriculum is academic, with English as a subject, but owing to the low standard of English teaching, opportunities for further education are restricted. Some secondary graduates continue their studies in institutions on the Chinese mainland, or in Taiwan, Hong Kong, or Singapore. The Government of Australia offers scholarships for courses in Australia and pupils are prepared for these by intensive instruction in English.

Teaching staff. It is difficult to obtain a sufficient number of teachers for senior secondary forms. Some of the new government schools have staff members supplied by the Australian, Canadian and New Zealand Governments under the Colombo Plan. A number of Chinese graduate teachers have been recruited from Hong Kong.

Since the introduction of the new Grant Code in 1956 teachers in aided schools have received salaries in accordance with government scales. They also have a provident fund and important medical privileges. They cannot be appointed, transferred or dismissed without the approval of the Director of Education.

Vocational and technical schools

A nautical school is to be opened to train engine and deck crews for the coastal shipping on which Sarawak's communications greatly depend.

An artisan training scheme is in preparation consisting of a trades training course of two to three years in a special school, followed by two to three years' controlled apprenticeship.

In view of the limited present needs for higher grade technicians the use of training facilities outside Sarawak seems to be the most suitable solution.

A commercial class, training students who have completed English-medium secondary education, was opened in Kuching in 1959.

Teacher training schools

Teachers in Sarawak are classified by grades: Grade I is for teachers with a university degree, Grade II for those with at least junior secondary qualifications, and Grade III for those below junior secondary. Teacher training courses at present available in the Colony prepare for certificates at Grade II and Grade III levels.

English-medium training. At the Batu Lintang centre the minimum standard for admission to the Grade III course is Primary 6, though most entrants have now had one or more years of secondary education. The course lasts 2 years and train teachers for vernacular primary schools. For entry to the Grade II course, which trains students for teaching in higher primary or junior secondary classes, the Sarawak Junior Secondary Certificate (9 years of formal schooling) is still accepted although most candidates now have the Cambridge Oversea School Certificate (11 years of schooling). Both courses include the study of English and some academic subjects, as well as a practical introduction to teaching principles and methods and of school organization. Emphasis is also laid on the need to maintain and

develop traditional skills and other aspects of indigenous cultures. The centre also trains teachers of English for Chinese schools.

Chinese-medium training. The Sibu centre offers a 2-year course in which students are trained as teachers for Chinese primary and junior middle schools, and as teachers of Chinese in English schools. All entrants have completed the full six years of middle school.

Out-of-class activities

In most secondary schools there are pupil organizations for extra-curricular activities and variations of the prefect system. These provide training in leadership, responsibility and co-operation. There is growing interest in organized games, particularly football, basket-ball and badminton, and in athletic sports. In a few boarding schools under mission or government management magazines are regularly produced, and there are groups such as photographic clubs, debating societies, chess clubs, etc.

TRENDS AND PROBLEMS

One of the basic problems is that of planning. In the present period of rapid expansion of the whole educational system the growth of secondary enrolments needs to be controlled to ensure that increased expenditure on this section does not encroach upon the funds necessary for the spread of primary education.

At present secondary schools contain a large number of over-age pupils who are not able to benefit from the academic type of curriculum and who are allowed to stay on and repeat classes several times. The introduction in 1957 of the secondary entrance examination and the division of pupils into examination and non-examination groups was intended as a first step towards meeting this difficulty. The next step will be the organization of 'streams' according to aptitude and ability.

Another major task is to bring together the different school systems into one national system. This is an essential step towards achieving the Education Department's aim of developing among all the peoples 'a sense of common citizenship, brotherhood and loyalty, . . . and of orientating the interests and attachments of pupils of immigrant races towards Sarawak, the country of their birth and upbringing'. The Department's policy is not to eliminate diversity or experimentation but to see that all schools have a sense of common aims and a greater degree of uniformity in the curriculum. The Grant Code has provided the financial and administrative framework for a national system of schools and steps are now being taken towards integration of the English and Chinese curricula and the provision of common syllabuses and textbooks.

[*Text revised by the Director of Education, Kuching, in August 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 655,000.
Area: 47,500 square miles; 123,025 square kilometres.
Population density: 14 per square mile; 5 per square kilometre.

Summary of school statistics, 1953–57. In 1957 the total number of children in school was over 79,500, representing about 12 per cent of the total population. Of this total nearly 90 per cent were in 676 primary schools with the remaining 10 per cent in 36 general secondary schools and 2 teacher training centres. There were in addition 107 students from Sarawak studying at universities and educational institutions abroad. The proportion of girls enrolled was 42 per cent in Chinese schools and 29 per cent in vernacular and English schools. There was an increase in total primary school enrolment of 60 per cent between 1953 and 1957 and enrolment of girls increased by about 76 per cent over the same period. In 1957 the number of primary school teachers was over 2,250, of whom 30 per cent were women, and the pupil-teacher ratio in primary schools was 32. Total enrolment in general secondary schools increased by 75 per cent between 1953 and 1957 and enrolment of girls by over 105 per cent. Over 60 per cent of secondary enrolment was in Chinese schools. The pupil-teacher ratio in general secondary and teacher training centres was 26 in 1957 compared with 23 in 1954. (See Table 1.)

Educational finance, 1957. Total expenditure on education in the fiscal year beginning January 1957 amounted to 12,388,000 Malayan dollars, or about $19 per inhabitant. Of the total spent, about 73 per cent came from central colonial revenue, 0.2 per cent from United Kingdom funds, 4 per cent from local authorities and the remainder from voluntary agencies. Capital expenditure amounted to $1,887,000 or 15 per cent of the total. (See Table 2.)

Sources. Sarawak: Education Department, annual reports.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Vernacular and English schools, Government	1957	3	5	–	129	9
	Vernacular and English schools, local authority	1957	270	2 197	650	17 182	4 400
	Vernacular and English schools, aided private	1957	128			14 247	4 852
	Chinese schools, aided private	1957	241			38 087	15 882
	Primary schools, unaided private	1957	34	54	29	1 769	731
	Total	**1957**	**676**	**2 256**	**679**	**71 414**	**25 874**
	„	1956	605	1 980	591	61 852	21 982
	„	1955	563	1 714	523	53 257	18 021
	„	1954	[1]541	1 547	497	47 543	16 046
	„	1953	[1]512	[1 2]1 609	[1 2]494	44 499	14 689
Secondary *General*	Vernacular and English schools, Government	1957	3	[1]13	[1]3	335	57
	Vernacular and English schools, aided private	1957	17	303	71	2 634	882
	Chinese schools, aided private	1957	14			4 920	1 666
	Secondary schools, unaided private	1957	2	3	1	104	28
	Total	**1957**	**36**	**[1]319**	**[1]75**	**7 993**	**2 633**
	„	1956	33	[1]287	[1]75	7 174	2 333
	„	1955	34	236	62	6 271	1 958
	„	1954	...	[1]232	[1]41	5 245	1 550
	„	1953	...	...	...	4 573	1 283
Teacher training	Teacher training centres, public						
	Total	**1957**	**2**	...	...	**260**	**56**
	„	1956	1	...	...	153	26
	„	1955	1	...	...	105	17
	„	1954	(1)	...	...	120	17
	„	1953	(1)	...	...	97	10

1. Including teacher training centres.

2. Including secondary schools.

2. EDUCATIONAL FINANCE, 1957 (in Malayan dollars)[1]

A. RECEIPTS BY SOURCE

	Amount	
Total receipts		**12 388 000**
Central Government		9 016 000
Territorial revenue	8 995 000	
United Kingdom funds	21 000	
Local authorities		452 000
Voluntary agencies		2 920 000
Chinese schools	2 060 000	
Missions	850 000	
Others	10 000	

B. EXPENDITURE BY PURPOSE

	Amount
Total expenditure	**12 388 000**
Recurring expenditure	10 501 000
Capital expenditure	1 887 000

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure	**10 501 000**	**100.0**
Central administration	300 000	2.9
Primary education	7 211 000	68.7
Secondary education	2 113 000	20.1
Teacher training	378 000	3.6
Other education	499 000	4.8

1. Official exchange rate: 1 Malayan dollar = 0.327 U.S. dollar.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year				
	1953/54	1954/55	1955/56	1956/57	1957/58
Cambridge Oversea School Certificate	62	62	111	113	...
Cambridge Higher School Certificate	2	1	2	10	...
Sarawak Junior School Certificate	...	209	237	233	360
Chinese Junior Middle Certificate	...	421	463	478	636
Chinese Senior Middle Certificate	...	30	74	88	124
Teacher Training Certificate					
Grade III	34	40	1—	27	68
Grade II	7	16	12	3	24

1. The duration of the course of training was lengthened in 1955.

SINGAPORE

THE EDUCATIONAL SYSTEM

There is now only one ordinance relating solely to schools, the Education Ordinance, 1957. This establishes an Education Finance Board and an Educational Advisory Council, both being consultative bodies only. The regulations issued under the ordinance specify requirements regarding school buildings and premises, classroom accommodation and equipment, cleanliness and health, discipline, time tables and curricula and emergency drill. They further regulate the use of school premises, school fees and accounts, and collections and subscriptions, besides empowering the prohibition of undesirable textbooks.

The main languages of Singapore are English, several dialects of Chinese, Malay and Tamil. The vast majority of schools use English, Kuo-yu (Mandarin), Malay or Tamil as their teaching medium, although at present only the first two languages are being used at secondary level. There are several main cultures represented by these linguistic groups and several great religions, but these are not factors which obstruct the provision of education. In English schools (so-called from the medium of instruction) are pupils of all ethnic, linguistic, cultural and religious groups.

The Ministry of Education runs schools in each of the four linguistic groups. These serve as a guide to the aided schools which absorb rather more pupils than the government schools. The former may be run by Christian or other missions, guilds or groups of philanthropic persons. Aid is granted to all schools which are non-profit-making and conform to the standards laid down in the ordinance.

The general policy of the Government is for primary education to be free whether in a government or an aided school, and for the parent to have the choice of language (out of the four official languages) in which his child is to be instructed.

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary education in Singapore really dates from 1891 when a standard 7 was added to the existing system of primary 1 and 2, and standards 1 to 6. The system expanded up to standard 9 and became geared to the Junior Cambridge and Senior Cambridge examinations organized by the Cambridge Examination Syndicate which were taken in standard 8 and standard 9 respectively. The examination syllabuses have been progressively modified to suit the particular needs of Malaya and the standards have evolved to the present organization of classes, namely, primary school —primary 1 to 6; secondary school—forms 2 to 5. Since the second world war a further 2-year course has been added for university preparation; these standards are known as lower form 6 and upper form 6. In 1939 the Junior Cambridge examination was dropped and now the Cambridge Higher Certificate is taken at the end of the form 6 course. Before 1941 there were only two government English secondary schools for boys and one for girls. There

were several English secondary schools run by missions and a few Chinese middle schools (secondary schools) run by groups of philanthropic persons. Since the war the number of secondary schools has multiplied, but only in the English and the Chinese medium. A Malay secondary school is expected to be established in 1961.

The original secondary schools were of an academic type and it is only since the second world war that two secondary technical schools and one secondary commercial school have been established.

Administration

Educational policy is laid down by the Minister, directed by the Council of Ministers. Overall planning is in the hands of a Permanent Secretary assisted by a Director of Education. There are two deputies, one for administration and one for professional matters. The administrative section decides from the statistics of population in various parts of Singapore where schools are to be built, taking into account the future envisaged in the master plan. The professional section looks after the curriculum and syllabuses.

Control passes direct from the Ministry to the principal of the school in the case of government schools. Both the Deputy Secretary/Administration and the Deputy Director/Professional deal directly with principals on matters affecting their sections. The Principal Staff Officer, although working under the Deputy Secretary/Administration also deals directly on matters of staffing. In most matters these three officers also deal directly with principals of schools managed by boards of governors, but if a matter of policy is concerned, the approach is generally through the chairman of the Board of Governors.

No other public authorities administer schools.

Relations are very good between the aided schools and the Ministry and there are no very marked differences between the type of education obtained in an aided school and that in a government school. Both types of school mix freely in extra-curricular activities of all kinds.

Private schools, not in receipt of grant-in-aid, are controlled to a certain extent. Their staffs must have certain qualifications and the schools are liable to inspection by the Ministry. They also have to conform to the regulations laid down in the ordinance.

Supervision and inspection. There are specialist inspectors in the major secondary school subjects—science, mathematics, history and geography, domestic science, art—who assist the Chief Inspector of Schools in the inspection of secondary schools. Specialist inspectors are graduates.

Some secondary schools have parent-teacher associations which meet periodically to discuss mutual problems but cannot do more than advise.

Finance. Sources of revenue are school fees and the Education Rate (raised from 2 per cent to 4 per cent in 1959).

The estimated figure for education revenue in 1959 is $4,409,000 and for education expenditure is $63,539,180. The difference is met from Singapore state revenue.

Government school buildings are put up by the Public Works Department and the equipment is bought from the Ministry of Education vote. The Government contributes a capital grant of 50 per cent of the total cost to aided schools in respect of new school buildings and extensions and equipment for the same.

Assistance may be given to parents in the form of scholarships to deserving children and free textbooks or remission of fees in cases of hardship.

Buildings and equipment. The standard secondary school building consists of 17 classrooms, 22 feet by 30 feet; three classrooms, 30 feet by 30 feet for history, geography and art; plus a teachers' common room, teachers' work room, book store, prefects' room, medical room, principal's office and six storerooms. The combined assembly hall, stage and library has an overall floor space of 75 feet by 112 feet. The science block has three laboratories 36 feet by 40 feet, and three storerooms. Girls' schools also have a domestic science block. A tiffin shed or tuck-shop is also provided in all schools.

School welfare services. Medical and dental inspections of children are carried out approximately once a year and children showing symptoms of illness may be sent to school clinics by principals of schools at any time. Poor children may be supplied with free spectacles and, as noted elsewhere, these children can have free places and free books.

School principals try to give guidance to pupils on the choice of a career and in some schools there are parent-teacher associations to encourage co-operation between school and home for the child's welfare.

TYPES OF SECONDARY EDUCATION

Secondary education is available in the following types of schools: secondary grammar schools (English- and Chinese-medium)—these form the bulk of the secondary schools at present; secondary technical schools (English-medium); secondary commercial schools (English-medium); junior trade schools (English-medium); vocational schools (English- and Chinese-medium); special evening classes (English-medium); secondary evening classes for over-age pupils (English- and Chinese-medium).

Secondary school leavers can enter: the University of Malaya, on results of Higher School Certificate; the Nanyang University, on passing entrance examination; the Singapore Polytechnic, on results of Cambridge Oversea School Certificate or Government Senior Middle examinations; or the Teacher Training College (English or Chinese section), on results of Cambridge Oversea School Certificate or Government Senior Middle examinations.

The school year runs from January to December and is divided into three terms; the actual opening and closing dates may vary for the different types of schools (English, Chinese, Malay, Tamil). Certain other holidays are given in term time for national religious festivals. Most schools have a five-day week (Monday to Friday), but a few add Saturday. Secondary school hours are normally from 7.45 a.m. to 1.15 p.m.

General secondary schools

English secondary (grammar) schools. The aim is to give

pupils a good grounding in general subjects for four years, culminating in the Cambridge Oversea School Certificate examination.

Selection is by the Secondary School Entrance examination taken by all pupils in Primary 6 of the English primary schools. Pupils are allocated in order of their performance in the entrance examination. If they cannot be allocated to the school of their preference, they are, as far as possible, sent to the school nearest their home. In some schools principals group pupils into streams by general ability, while in others they are grouped by age.

Subjects generally taught are English, English literature, mathematics, a local language, history, geography, ethics (or religion if parents wish and if feasible), science. Science is generally taught for the first two years as general science with later specialization in physics, chemistry, biology for certain streams. Not more than two science subjects can be taught up to School Certificate level, partly owing to shortages of science staff and partly to the need for a broad based education. In form 6 a greater choice of subjects is given to the pupil and he is encouraged to do more individual reading in his subjects.

Most secondary schools conduct two internal examinations every year. Owing to pressure from below, promotion is automatic as a general rule from form 2 to form 3. A certain amount of weeding-out is done at form 3 level, but pupils reaching form 4 are generally allowed to go on to take the Cambridge examination.

Teaching staff in secondary schools should be graduates. In Singapore, university graduates with a diploma in education are accepted into the Singapore Education Service and are posted to secondary schools. Those not possessing a diploma may be accepted as teachers and can take a part-time diploma course of 3 years' duration. However, not enough graduates are entering the service yet and secondary school staffs include teachers trained in the certificate courses or normal courses of the Teacher Training College who have the academic ability to teach the lower classes of secondary schools. Such teachers are in the main trained for primary work, but because of the existing shortage of secondary school teachers some of these trainees are selected after one year of training to do a course leading to secondary school teaching.

Chinese middle schools. The main purpose of these schools is to give pupils a good grounding in general subjects for six years (three years junior middle and three years senior middle), culminating in the Government Senior Middle examination, after which further avenues open up parallel to those for English school pupils.

Selection of pupils is made by the individual schools, except that the bigger government Chinese schools run a common entrance examination. Pupils are mostly streamed into classes on the basis of both age and ability. There is no streaming for individual subjects. Many pupils do not go beyond the three years of junior middle school.

Subjects generally taught are Chinese, Chinese literature, English history, geography, mathematics, science and art.

A large proportion of teachers in these schools have had no professional training and much of the teaching is in the form of lecturing. Most pupils follow the same course and there is little individual choice of subject.

School work is tested and pupils are reported on every term, i.e., three times a year. Pupils cannot be retained in a class for a second year if they thereby become over-age for that class.

Many of the staff of the middle schools are graduates of Chinese universities, but such graduates cannot normally be recruited owing to the restrictions on immigration. As a result the graduate staff is fairly thinly sprinkled over the schools and certificated and normal-trained teachers instruct many of the lower forms, as is the case in English schools. From 1960 the Nanyang University should begin to make up the shortage.

Secondary evening classes for over-age pupils (English and Chinese). These classes are run on the same lines as the respective types of school, English and Chinese, and offer the same subjects, but with less choice. The classes are held in secondary school buildings in the afternoons and the teachers are morning school teachers. These teachers are allowed to take up to six hours a week extra work in addition to their morning school duties.

Vocational and technical schools

Secondary technical schools (English-medium). The aim is to give pupils a fairly general grounding in school subjects with a bias towards the technical aspects of science and mathematics. The course lasts for 4 years full-time, culminating in the examination for the General Certificate of Education conducted by the Associated Examining Board.

Selection is by the Secondary School Entrance examination as for grammar schools and those successful pupils who opt for technical education are drafted to technical schools. The numbers opting for these schools are well distributed through the pass list and the demand exceeds the supply of places.

Subjects taught are mainly the same as in grammar schools with rather less time spent on English literature, history and geography, in order to make time for studying mechanical drawing, workshop practice, handicraft, etc. Achievement testing is carried out as in grammar schools.

Staff with the qualifications for teaching in technical schools are very few at present but steps are being taken to train handicraft teachers by sending already qualified teachers to the Singapore Polytechnic to learn handicraft, either wood or metal. In respect of subjects common to both, these schools have to compete for staff with other secondary schools. For the technical schools' own particular subjects a few teachers are abroad on Departmental scholarships. In time to come it is hoped that most technical teachers will be trained through the Polytechnic.

Junior trade schools (English-medium). The aim is to train boys in trades up to a level enabling them to enter apprenticeship schemes. The course lasts for 3 years full-time.

Selection is by an entrance test and pupils must have completed the primary school course. Generally the applicants are those who have failed the Secondary School Entrance examination. The average age of entrance is about 14.

Subjects taught are general mechanics, electrical and

general building construction in addition to further work in the basic primary school subjects.

Boys are tested in their trade and other subjects twice a year and at the conclusion of the 3-year course are awarded a trade school certificate by the school.

Teaching staff for the ordinary school subjects have the same qualification as those teaching in the lower classes of secondary schools. A few of the trades teachers are recruited from among those having City and Guilds of London Institute qualifications but many are recruited as tradesmen and have no paper qualifications.

Girls' vocational schools (*English-, Chinese- and Malay-media*). The aim is to provide girls with a career based on practical ability in vocational subjects.

Pupils are recruited at the end of form 3, i.e., after two years of secondary school work. All pupils in the English-medium school take English language, a local language, arithmetic and music. They also branch out into various channels, taking commercial subjects, child welfare courses, laundry-work or ante- and post-natal care courses. Some of these courses are to help them as future parents or as assistants in clinics, social welfare centres and kindergartens. In these schools practical ability is emphasized above academic attainment.

At the end of its 2-year courses the school issues its own certificates which, it is hoped, will in due course find official recognition.

Teachers of general subjects have the ordinary qualifications of teachers in the lower classes of secondary schools. There is a shortage of specialist teachers.

At present there is only the nucleus of Chinese and Malay vocational schools.

Secondary commercial schools (*English-medium*). These schools prepare for the examinations at various levels of the London Chamber of Commerce. They follow fairly closely the teaching programme of the general secondary schools, except that commercial subjects take the place of the sciences. Staffing follows the pattern of the general secondary schools for the general subjects, but the qualifications of the specialist staff are not as high as is desirable.

Boys' handicraft schools (*English- and Malay-media*). These are schools which give boys some practical knowledge of handicrafts (wood and/or metal). They conform to no particular pattern. The English-medium school gives part-time training at one centre to boys already in English primary schools, merely to enable them to use their hands and with no special vocational intent. It is not strictly a secondary school. The Malay-medium school gives a full-time course of two years' practical work in woodwork and metalwork to pupils.

Teacher training schools

There is one teacher training college in Singapore whose prime function is to train teachers for primary schools in the English, Chinese and Malay media. The first two media offer two courses: 2-year Certificate of Education (full-time) and 3-year Normal Certificate (part-time). Pupils are taken into these courses with a Cambridge Oversea School Certificate qualification or Government Senior Middle Certificate of specified standard.

For the Malay medium there are two courses: (a) 3-year Normal Certificate (part-time), and (b) 3-year course (part-time) at a lower level. Course (a) is training staff for new Malay secondary schools to start in 1960 and (b) trains Malay primary school teachers. The qualification to enter (a) is a Cambridge Oversea School Certificate with a credit in Malay, whereas entrance into (b) comes after primary 7 in a Malay school. It is therefore only course (b) which may be considered to be at secondary level.

The staff of the training college is drawn from the schools themselves and consists of graduates, certificated teachers and normal-trained teachers who show ability in teacher training. The majority of the staff are full-time, but for some subjects part-time staff are employed.

Other specialized schools

These include schools of music, art, dancing and ballet, and embroidery (Malay native costumes).

There are also language schools teaching Hindi, Gujerati and Arabic; these institutes are registered and sponsored by their respective communities to propagate their languages and maintain their cultures. A number of correspondence schools, most of them proprietary registered private schools, provide various kinds of cultural and vocational courses for adults.

Out-of-class activities

Every English secondary boys' or girls' school has a school prefect system under the guidance of a Prefectorial Board consisting of the Principal, the senior master in charge of discipline, and senior prefects. As a rule prefects are chosen from among the senior form pupils who are best both in conduct and academic performance. They help the school authorities in maintaining general discipline and in performing various other duties such as the running of extra-mural activities and cultural and social functions.

In most secondary schools, there are at least one or two youth organizations in existence which aim at developing the moral character and leadership qualities of their pupils: School Cadet Corps, Boys' Brigade, Boy Scouts and Cubs, Girl Guides, Red Cross, St. John's Ambulance Corps, Girls' Life Brigade, etc.

Every encouragement is given to all pupils to take part in some form of sports activity (football, cricket, tennis, athletic sports, swimming, etc.) either through inter-class or inter-house competition. Although the object is to cater for all pupils, the best performers in each sport form a combined schools side and these are either trained by the Ministry's own coaches or invited coaches, or with the help of the various governing bodies.

Inter-school and combined school fixtures are arranged by the school sports councils in co-operation with the various governing bodies. The chief aim is to strengthen the unity that has been built up amongst all the various schools in Singapore through sports. The Ministry is also anxious to foster good will and understanding with the neighbouring states and thus touring teams in the various games are encouraged, and visiting teams are welcomed.

Most English secondary and Chinese middle schools have various cultural clubs embracing literary and dramatic work, debating societies, music and gramophone clubs, school choirs, orchestras and bands, photographic societies, art and sketching clubs and geographical and historical societies.

TRENDS AND PROBLEMS

In the past, the importance of Singapore has resided in its trade and commerce. In the light of this the aim of almost every pupil has been to acquire sufficient academic qualifications to work in the great commercial firms and government agencies. The School Certificate has therefore been the goal of almost every school pupil.

With the recent development of trading facilities in the surrounding territories and with the rapid increase in population it has now become quite clear that Singapore can no longer rely on trade alone for survival. Attention has been turned towards finding other sources of employment for the younger generation. The possibilities for industrialization have constantly occupied the minds of the Government and private enterprises. Future educational policy therefore will depend very much on the future economic policy of the Government.

The future trend of secondary education is summarized in the 1953 education report as follows: 'The bulge due to the post-war increase in the birth-rate will not reach the secondary school until 1960, and the period of most rapid expansion of the secondary school might reasonably be expected to be from 1960 to 1964. But it is quite clear that the Colony cannot yet undertake to give every child a secondary education and that admission to the secondary school must be determined by some form of selection. The difficulty is that the numbers admitted to the academic secondary school depend to some extent on the needs of the community for students with the School Certificate four or five years later, as well as on the number and ability of the pupils seeking admission. The present policy of the Department is to admit to a government secondary school every child who has a reasonable hope of passing the School Certificate examination before he leaves. Later on, as more and more children leave the primary school each year, it will be possible to set a higher standard of admission to the academic secondary school, and at the same time to increase the number of technical and modern schools. But it must be emphasized that there will be few of these schools at first and they are largely experimental, and that at this stage there can be no question of a secondary school place for every child.'

In the case of Chinese middle schools, the position is not so acute. Every pupil completing the primary school course has a reasonable chance of also receiving secondary education. Those who leave school immediately or some time after completing the final primary school year do so because of family economic ties rather than lack of accommodation in schools.

However, the demand for secondary education has been steadily increasing. People are no longer satisfied with a primary education alone; there seems to be a thirst for as high an education as possible. This has naturally resulted in increased expenditure for education, amounting today to a quarter of the national budget. It is also worthy of note that the type of grammar school education which so far has been given in both English and Chinese is gradually giving way to a type of education which will prepare pupils for the economic and industrial life of the island.

Since the opening of the Polytechnic in 1958, there has been an increased demand for technical education. To prepare post-primary pupils for entry into the Singapore Polytechnic it would be desirable in the near future to streamline the education system to suit the economic needs of the island. It is therefore hoped that more and more schools teaching trade skills will be opened.

[*Text prepared by the Ministry of Education, Singapore, in January 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 1,515,000.
Area: 224 square miles; 580 square kilometres.
Population density: 6,763 per square mile; 2,612 per square kilometre.

Summary of school statistics, 1953–57. In 1957 total enrolment at all levels of education from primary schools to the University of Malaya was 264,897, representing about 18 per cent of the total population. Of the total enrolled, 84 per cent were pupils in primary schools, 14 per cent in general secondary schools and about 2 per cent in teacher training colleges and universities. The proportion of girls was 42 per cent in primary schools, 36 per cent in general secondary schools, 45 per cent in teacher training colleges and 22 per cent at universities. The teaching staff at primary and secondary levels numbered 9,371, of whom over 46 per cent were women. The average pupil-teacher ratio was 29 in primary and 25 in general secondary schools. Compared with 1953 enrolment had increased by 56 per cent in primary and by 102 per cent in general secondary schools. (See Table 2.)

Examination results in secondary education, 1953–57. In 1957/58, 2,303 candidates passed the Cambridge Oversea School Certificate compared with 925 in 1953/54. The proportion of girls increased from 27 per cent to 34 per cent over the period under review. In 1957, 54 candidates, including 9 girls, were awarded the Cambridge Higher School Certificate compared with only 2 successful candidates in 1953/54.

Educational finance, 1956. Total expenditure on education

in the fiscal year beginning January 1956 amounted to 42,216,988 Malayan dollars or about $29 per inhabitant. Of this sum, 93 per cent ($39,252,581) came from territorial revenue, 4 per cent ($1,571,377) from local authorities and the remaining 3 per cent ($1,393,030) from voluntary agencies. Capital expenditure in 1956 ($5,374,201) was about 13 per cent of the total. The distribution of recurring expenditure by level and type of education is given in Table 1.

Sources. Singapore: Department of Education, annual reports.

1. EDUCATIONAL FINANCE, 1956 (in Malayan dollars)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure	**36 842 787**	**100.0**
Central administration	1 403 673	3.8
Primary education	24 548 823	66.6
Secondary education	8 105 173	22.0
Vocational education	262 074	0.7
Teacher training	1 874 751	5.1
Other education	648 293	1.8

1. Official exchange rate: 1 Malayan dollar = 0.327 U.S. dollar.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	230	3 421	1 343	90 531	36 140
	Primary schools, aided private	1957	258	3 962	2 198	121 846	52 310
	Primary schools, unaided private	1957	79	400	285	10 235	4 337
	Total	**1957**	**567**	**7 783**	**3 826**	**222 612**	**92 787**
	,,	1956	545	6 979	3 294	203 163	81 514
	,,	1955	528	6 391	3 022	176 233	67 313
	,,	1954	519	5 371	2 522	156 762	57 758
	,,	1953	456	4 549	2 186	142 877	50 931
Secondary							
General	Secondary schools, public	1957	[1]27	445	110	10 538	2 954
	Secondary schools, aided private	1957	[2]55	848	356	21 780	8 893
	Secondary schools, unaided private	1957	[3]28	148	32	3 939	1 201
	Total	**1957**	**[4]110**	**1 441**	**498**	**36 257**	**13 048**
	,,	1956	[4]94	1 218	411	31 034	10 589
	,,	1955	65	1 048	394	27 522	9 286
	,,	1954	59	897	334	20 840	6 906
	,,	1953	58	[5]806	286	17 927	5 937
Vocational	Technical schools, public	1957	2	46	–	681	–
	Trade schools, public	1957	2			251	–
	Trade school, aided private	1957	1	20	–	196	–
	Total	**1957**	**5**	**66**	–	**1 128**	–
	,,	1956	4	22	–	655	–
	,,	1955	2	32	–	399	–
	,,	1954	2	34	–	356	–
	,,	1953	2	...	–	294	–
Higher							
Teacher training	Teacher training colleges						
	Total	**1957**	**2**	**81**	**37**	**2 175**	**971**
	,,	1956	2	63	29	2 186	931
	,,	1955	1	61	25	1 842	714
	,,	1954	1	...	...	1 688	728
	,,	1953	1	...	...	838	236
General	University of Malaya	1957	1	...	...	1 825	424
	Nanyang University	1957	1	...	...	900	189
	Total	**1957**	**2**	**...**	**...**	**2 725**	**613**
	,,	1956	2	...	...	2 154	...
	,,	1955	1	...	...	1 220	230
	,,	1954	1	...	...	1 043	216
	,,	1953	1	...	...	954	184

Note. In addition, in 1957, there were adult evening classes with 13,334 students, evening classes at the junior trade schools with 1,605 pupils, Arabic schools with 863 (F. 416) pupils, and other, mainly vocational, schools with 11,824 (F. 4,536) pupils.

1. Including one primary school with secondary departments.
2. Including 41 primary schools with secondary departments.
3. Including 22 primary schools with secondary departments.
4. Including primary schools with secondary departments.
5. Including teachers in trade schools.

BAHAMAS

The Bahamas are a chain of islands stretching from the coast of Florida to Haiti. The principal island, New Providence, contains the capital, Nassau, and some 40 per cent of the total population. Government is vested in a Governor, Executive and Legislative Councils appointed by the Crown, and a House of Assembly elected by the people.

THE EDUCATIONAL SYSTEM

Education is administered under four separate Acts and the respective amendments: the Primary Education Act, 1908; the Secondary Education Act, 1926; the Secondary School Act, 1927; and the Industrial Schools Act, 1928.

Under the Primary Education Act, as amended in 1951, a Board of Education of five members, appointed by the Governor, is responsible for all public elementary education, teacher training, vocational, technical and adult continuation classes. The Director of Education is the chief executive officer of the board. He is assisted by a Chief Inspector of Schools and the usual departmental staff. The Act provides that education shall be compulsory for children between the ages of 6 and 14.

The Acts of 1926 and 1927 place secondary schools directly under the Governor-in-Council.

The Industrial Schools Act refers to the education of delinquents. There is one such school for boys, which does not come under the jurisdiction of the board.

Public funds for education are derived mainly from colonial revenue. The Government grants aid to private or denominational schools which meet certain requirements. Education is free in primary schools maintained by the board.

The full course in Board of Education primary schools is divided into three stages: two years' preparatory (classes I to IV, with promotion every half year); three years' junior (grades 1 to 3); and three years' senior (grades 4 to 6). The senior classes, which in urban areas are usually organized as separate schools, may be considered to be at lower secondary level (ages 11+ to 15 or 16) and will be referred to again in the section dealing with the various types of secondary education available in the Bahamas. Post-secondary education has been limited to teacher training and various technical courses. For higher education students attend universities and colleges abroad, usually in the United Kingdom, Canada and the United States of America; a number of scholarships are provided.

THE DEVELOPMENT OF SECONDARY EDUCATION

A government secondary school was founded in 1804 and another in 1839 but both institutions were short-lived. In the second half of the nineteenth century schools were founded by various religious organizations and still today the majority of the secondary schools are denominational, most of them having their own primary departments. The present Government High School was established in 1925.

As already mentioned, the Board of Education exercises no control or supervision over secondary schools, which come directly under the Governor-in-Council. The Government High School is managed by a committee appointed by the Governor. Under the 1926 Act 'to encourage and assist secondary education in the Colony', government grants are payable to approved schools. Annual grants are calculated on the basis of the number of pupils in attendance and the number and qualifications of the staff. There are also special grants which take the form of assistance towards the travel costs of staff recruited overseas. The Act further provides that any person authorized by the Governor shall have the right 'at all reasonable times' to inspect a secondary school which is receiving a grant.

All secondary schools are fee-paying; every year the Government awards eight scholarships tenable at the Government High School.

As regards technical and vocational education, some of the more important developments have been the provision by the Education Department, beginning in 1947, of evening classes in technical and domestic science subjects, and the opening of the Government Technical School in 1949.

TYPES OF SECONDARY EDUCATION

The Government High School recruits pupils at the age of 11+ by means of a competitive entrance examination. Private and denominational secondary schools make their own admission arrangements. The secondary course prepares for the Cambridge Oversea School Certificate and Higher School Certificate examinations, and curricula are largely determined by the requirements of these certificates.

Senior schools offer a more practical type of course with needlework and cookery for girls and technical subjects for boys. Elementary agriculture is also taught in most schools. On completing the course, pupils take a local school certificate examination.

Continuation classes for pupils who have left school are held in general, commercial and technical subjects. The last-named follow the syllabus laid down by the City and Guilds of London Institute and include courses in telecommunications engineering, electrical engineering, practical and mechanical engineering design. There are also classes in domestic subjects (housewifery, cookery, table waiting, hotel service, etc.) at the Dundas Civic Centre, a government-aided institution not under the Board of Education.

Out-of-class activities. The schools encourage participation in athletics, swimming and team games, and activities such

as the Junior Red Cross, Boy Scouts, Girl Guides, social and cultural clubs, etc.

TRENDS AND PROBLEMS

The Deputy Educational Adviser of the Colonial Office recently carried out a survey of education in the Bahamas and his report is now under consideration by the Government of the Bahamas.

Administratively, one of the main problems is the nature of the present educational legislation of the Colony, and a proposal to replace it by a single comprehensive ordinance is under consideration.

Educationally, the training and supply of teachers is perhaps the greatest problem, and expansion of teacher training is envisaged in 1960. Attention is also being given to the review of policy and planning of technical education. A special problem exists in the scattered nature of the Colony, and the difficulties of transportation; in 1959 the headquarters staff of the Education Department was increased and reorganized to make possible more effective supervision of schools.

[*Text revised by the Director of Education, Nassau, in February 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 133,000.
Area: 4,400 square miles; 11,396 square kilometres.
Population density: 30 per square mile; 12 per square kilometre.

Summary of school statistics, 1953–57. In the school year 1957/58 enrolment in all schools totalled 22,358 pupils, representing about 19 per cent of the total population. About 95 per cent of enrolment was in primary schools, 4 per cent in general secondary and vocational schools and the remainder in teacher training colleges. Girls made up over 50 per cent of enrolment at primary and secondary levels, and 66 per cent of enrolment at the teacher training college. The teaching staff numbered 475 in 1957/58 of whom nearly 60 per cent were women. The pupil-teacher ratio was 51 in primary and 18 in general secondary schools in 1957/58. Compared with 1953/54, enrolment in primary schools did not increase but the number of pupils in secondary schools rose by 29 per cent. (See Table 2.)

Educational finance, 1958. Total public expenditure on education in 1958 amounted to 450,926 pounds sterling, or approximately £3.4 per inhabitant. This total included £12,247 for capital expenditure. A breakdown of recurring expenditure by level and type of education is given in Table 1.

Sources. Colony of the Bahamas: Board of Education, annual reports.

1. EDUCATIONAL FINANCE, 1958 (in pounds sterling)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure[2]	**378 679**	**100.0**
Administration and inspection	15 780	4.2
Primary education	218 004	57.6
Secondary education	48 453	12.8
Teacher training	8 336	2.2
Higher education	2 128	0.6
Other education	17 961	4.7
Industrial school[3]	16 961	4.48
Dundas Civic Centre[4]	1 000	0.26
Other recurring expenditure	68 017	18.0
Scholarships	7 428	2.0
Maintenance of buildings and land, rents, etc.	33 073	8.7
Miscellaneous, including examinations, office supplies, cleaning, etc.	27 516	7.3

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.
2. Public expenditure only.
3. School for delinquents.
4. Vocational centre.

2. SUMMARY OF SCHOOL STATISTICS, 1953-57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	139	[1]414	[1]247	16 169	8 160
	Primary schools, aided private	1957/58	–	...	...	207	107
	Primary schools, unaided private	1957/58	43	...	...	4 933	2 537
	Total	**1957/58**	**182**	**[1]414**	**[1]247**	**21 309**	**10 804**
	"	1956/57	181	[1]351	[1]173	21 119	10 682
	"	1955/56	171	...	...	20 434	10 232
	"	1954/55	...	...	...	...	...
	"	1953/54	...	...	...	21 486	11 050

1. Public schools only. Not including pupil teachers and monitors.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Secondary *General*	Secondary schools, public	1957/58	1	14	7	242	155
	Secondary schools, aided private	1957/58	3	26	15	379	204
	Secondary schools, unaided private	1957/58	3	12	11	320	165
	Total	**1957/58**	**7**	**52**	**33**	**941**	**524**
	,,	1956/57	8	...	...	813	426
	,,	1955/56	8	...	...	902	463
	,,	1954/55	...	...	...	...	...
	,,	1953/54	...	...	...	731	368
Vocational	Technical course, public						
	Total	**1957/58**	**1**	**5**	**2**	**36**	**21**
	,,	1956/57	1	5	2	8	6
	,,	1955/56	...	...	...	...	...
	,,	1954/55	...	...	...	...	...
	,,	1953/54	...	...	...	...	...
Higher *Teacher training*	Teacher training college, public						
	Total	**1957/58**	**1**	**4**	**2**	**72**	**46**
	,,	1956/57	1	4	2	68	38
	,,	1955/56	1	4	2	35	20
	,,	1954/55	1	...	...	...	...
	,,	1953/54	1	...	...	31	17

BERMUDA

THE EDUCATIONAL SYSTEM

Under the provisions of the Education Act, 1954, the general administration of education is the responsibility of the Board of Education, the members of which are appointed by the Governor. The board supervises the expenditure of funds placed at its disposal by the legislature. Its official adviser and chief executive officer is the Director of Education. In addition to the Director, the staff of the Education Department consists of two inspectors of schools, two supervisors, an organizer of physical education, and clerical staff.

Administratively, schools are classified as 'vested', 'non-vested', and private. In the vested schools, the management is vested in local committees or governing bodies, to whom the Board of Education makes annual grants under certain conditions. The non-vested schools are administered directly by the Board of Education and there is no committee between the school and the board. Private schools receive no government aid.

The educational ladder comprises pre-primary, primary and secondary schooling, the latter including academic, practical, technical and vocational courses. There are no facilities for higher education or teacher training, but a considerable number of scholarships, public and private, are available for study abroad. Education is compulsory from age 7 to under 13, and children over 5 and under 16 have the right to free primary schooling. All schools except four are co-educational. English is the medium of instruction in all schools.

THE DEVELOPMENT OF SECONDARY EDUCATION

During the eighteenth and the first half of the nineteenth century there were several attempts to provide post-elementary education. Some, like Bishop Berkeley's project to found a college for the sons of North American settlers and Indians, had to be abandoned, while others resulted in the opening of short-lived institutions such as Devonshire College (1829–35) and a college for Coloured people (1853–56). However, by the present century the various parishes had developed schools (now vested schools) most of which catered for children of all ages and thus provided both primary and secondary classes. To meet the increasing demand for secondary places, the board has opened additional secondary schools or secondary departments of schools. Moreover, whereas the secondary

curriculum of the older vested schools tends to follow as closely as possible the model of the English grammar schools, the board has sought to cater for the non-academic pupil by providing 'secondary practical schools'. An important landmark in the broadening of educational provisions was the opening of the Bermuda Technical Institute in 1955. In 1958 a vocational school for girls (needlework trades) became a secondary practical school.

Fees are charged in secondary schools (and some of the primary schools), the rates varying according to the type of school and in some instances according to the position of the pupil in the school. The highest fee payable, i.e., in the top form of one of the general secondary schools, is about £60 per annum, exclusive of the cost of books and stationery. The fees at the secondary practical schools are £5 a term, and at the Technical Institute £9 a term. Twelve scholarships tenable at local secondary schools are awarded annually by the Board of Education. The period of tenure is for four years but may be extended to five years on the recommendation of the principal of the school. The scholarships include the cost of fees and textbooks. There are also a number of scholarships provided by private individuals, by parent-teacher associations, and from endowments.

TYPES OF SECONDARY EDUCATION

The basic primary course lasts 6 years but as many children begin school before they reach the compulsory attendance age of 7, the age at which pupils transfer from the primary to the secondary stage varies. Pupils awarded Board of Education scholarships tenable at the secondary schools are between the ages of 11 years 4 months and 12 years 4 months. These scholarships are awarded on the results of a written examination in English and arithmetic, an intelligence test and an interview. In the schools which have both primary and secondary departments, promotion to the secondary departments is based upon internal examinations. The admission of pupils to other schools providing secondary education is, in most cases, by means of attainment and intelligence tests. In certain instances there are special aptitude tests.

There are seven schools under the administration of the Board of Education and two others that provide secondary education up to Cambridge Oversea School Certificate standard, and at four of these schools pupils are prepared for the Cambridge Higher School Certificate examination. The curriculum followed is mainly designed to meet the requirements of these examinations. Commercial courses are provided at seven of these schools.

The new secondary practical schools provide a 3-year course, with 2 further years for those who desire to take certain subjects of the London General Certificate of Education, Royal Society of Arts, or City and Guilds examinations. Pupils are normally transferred from the primary schools at the age of 13, although younger pupils who have reached a certain standard are also eligible for admission.

At the Technical Institute one stream pursues a technical course while the other and more numerous group follows the trades course. The institute also has a programme of evening extension classes which include both the teaching of workshop practices and the preparation of adults for the GCE examinations. The staff of the institute is drawn partly from the United Kingdom and partly from local sources.

In all secondary schools the traditional English games form a well-established part of the curriculum.

TRENDS AND PROBLEMS

The board's policy of providing secondary education for all has advanced to the point where only the western parishes are in need of further facilities, and it is anticipated that by 1961 it will be possible to accommodate all those over 13 who wish to attend.

The very provision of secondary schooling for pupils differing widely in their abilities and aptitudes has, however, brought attendant problems. Instruction with a practical bias has been offered as the best complement to the established 'academic' curriculum, bearing in mind the particular needs of the Colony. As the great majority of pupils in secondary schools will not be going on to institutions of higher education but will be seeking employment commensurate with their abilities, the problem of how to provide a wide differentiation of courses will become more and more urgent.

[*Text revised by the Director of Education, Hamilton, in January 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 43,000.
Area: 20 square miles; 53 square kilometres.
Population density: 2,150 per square mile; 811 per square kilometre.

Summary of school statistics, 1953–57. In the school year 1957 there were 9,578 pupils enrolled representing nearly 23 per cent of the total population. Primary schools accounted for 83 per cent of total enrolment, general secondary schools 13 per cent, and vocational schools 4 per cent. Girls were enrolled in about the same proportion as boys in primary and general secondary schools but outnumbered boys considerably in vocational schools. Women teachers represented 87 per cent of the total teaching staff in primary schools and 50 per cent of staff in general secondary schools. The average pupil-teacher ratio in primary schools was 24 and in general secondary schools 14. Enrolment of boys and girls in general second-

ary schools increased by about 50 per cent between 1953 and 1957. (See Table 2.)

Educational finance, 1957. Total public expenditure on education in the fiscal year beginning January 1957 amounted to 474,832 pounds sterling, or about £11 per inhabitant. All this money was derived from territorial revenue. Capital expenditure (£32,009) was about 7 per cent of the total. The distribution of recurring expenditure by level and type of education is given in Table 1.

Sources. Bermuda: Director of Education, annual reports.

1. EDUCATIONAL FINANCE, 1957 (in pounds sterling)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure[2]	**442 823**	**100.0**
Central administration	12 118	2.7
Primary education	266 100	60.1
Secondary education	113 353	25.6
Vocational education	18 687	4.2
Teacher training	13 693	3.1
Other education	[3]18 872	[3]4.3

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.
2. Central Government only.
3. Includes expenditure for the Junior Training School (for young delinquents) and scholarships for study abroad.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	20	259	227	6 122	2 968
	Primary schools, aided private	1957	6	47	36	904	480
	Primary schools, unaided private	1957	16	32	32	926	469
	Total	**1957**	**42**	**338**	**295**	**7 952**	**3 917**
	,,	1956	39	333	290	7 897	3 912
	,,	1955	38	316	270	7 938	3 910
	,,	1954	35	312	269	7 609	3 768
	,,	1953	33	305	268	7 310	3 701
Secondary *General*	Secondary schools, aided private	1957	9	76	36	1 000	515
	Secondary schools, unaided private	1957	4	13	9	229	128
	Total	**1957**	**13**	**89**	**45**	**1 229**	**643**
	,,	1956	13	83	41	1 256	682
	,,	1955	13	82	45	997	553
	,,	1954	10	[1]89	[1]56	949	511
	,,	1953	10	[1]79	[1]51	812	441
Vocational	Vocational schools, aided private	1957	8	23	15	344	233
	Vocational schools, unaided private	1957	1	1	1	53	40
	Total	**1957**	**9**	**[2]24**	**[2]16**	**397**	**273**
	,,	1956	8	[2]21	[2]14	331	215
	,,	1955	6	[2]13	[2]13	214	195
	,,	1954	1	[3]...	[3]...	[4]212	[4]195
	,,	1953	1	[3]...	[3]...	[4]210	[4]190
Special	Schools for delinquents						
	Total	**1957**	**2**	**...**	**...**	**34**	**4**
	,,	1956	2	...	...	36	4
	,,	1955	2	...	...	32	2
	,,	1954	...	...	...	...	...
	,,	1953	...	...	...	...	...

Note. Teacher training. The number of students abroad was 38 (F. 25) in 1957, 39 (F. 23) in 1956 and 51 (F. 34) in 1955.

1. Including teachers of vocational schools.
2. Does not include nine specialist teachers employed at the centres for handicrafts and home economics.
3. Included with general secondary schools.
4. Including pupils enrolled in vocational courses of general secondary schools.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year				
	1953	1954	1955	1956	1957
Cambridge Oversea School Certificate . . .	42	53	61	44	50
Cambridge Higher School Certificate	1	5	7	6	6
General Certificate of Education	...	...	...	7	17
City and Guilds of London Institute	...	...	...	...	8
Royal Society of Arts	...	...	...	...	35

Note. Results include candidates with part certificates in the Cambridge Oversea School Certificate and Higher School Certificate examination.

BRITISH GUIANA

THE EDUCATIONAL SYSTEM

The Director of Education is responsible for the administration and supervision of education and for the training and certification of teachers. He is assisted by some 17 senior officers of the Department, and is advised by the Education Committee, a statutory body reconstituted in February 1957 with 15 members.

The Minister of Community Development and Education exercises responsibility for matters affecting education. The Director of Education continues to perform the duties of Permanent Secretary of the Ministry of Education, which is merged with the Education Department.

Primary schools in the Colony are divided into three groups: government schools, government-aided, and unaided private schools. Most of the government-aided schools are owned by the various religious denominations, to which the Government makes annual grants for the provision of equipment, maintenance of buildings and the payment of teachers' salaries. There are also non-denominational schools which qualify for similar grants; they are usually located on sugar estates and mining settlements. Government schools are entirely under the control of the Education Department and are managed by the education officers of the districts in which the schools are located or by district commissioners and other senior government officers. All government and government-aided schools are supervised by the education officers of the Education Department, who visit the schools from time to time. Non-aided private schools are run by private individuals or organizations and do not come under the supervision of the Government. The Government provides free education for children between the ages of 5 to 16 years. The compulsory age range is from 6 to 14 years.

Secondary education is now provided in two government-owned secondary schools, nine government-aided secondary schools, and in approximately twenty privately run secondary schools known to the Education Department.

The Carnegie School of Home Economics and the Government Technical Institute provide vocational training at the post-primary level for students and teachers in training.

Since the opening of the University College of the West Indies in 1948, the Colony has made an annual financial contribution towards it, and students from the Colony are eligible for the annual award of scholarships and exhibitions at the college.

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary education was first provided by grammar schools started as private secondary schools, usually under the auspices of religious denominations. Only after 1900 was any progress made in the attempts to relate education to training for life. In the period under review there have been, however, significant developments in practical education and in the intensification of efforts to offer special courses in handicrafts, home economics and agriculture in schools.

The two government secondary schools, Queen's College for boys and Bishops' High School for girls, were founded

as private secondary grammar schools. The former was established in 1844, and in 1876 the Government assumed full responsibility for it. Bishops' High School was founded as a diocesan (Anglican) secondary grammar school for girls in the early 1870s. Other private secondary schools established before 1900 included three Roman Catholic schools. All these schools were in the capital city, Georgetown.

After 1900 secondary schools were established by the Canadian Mission Council in areas outside Georgetown. The Berbice high schools for boys and girls were started in 1916 in the town of New Amsterdam, and Corentyne High School, a co-educational school, was opened in 1938 on the Corentyne Coast.

The Government first granted aid in the form of a block grant to the Berbice high schools in 1920 (boys) and 1923 (girls). St. Stanislaus College (Roman Catholic) was first granted a government subsidy in 1952. A new scheme of government aid as outlined in the Memorandum on Secondary Education was approved by the Government in 1957. Fifteen private secondary schools, including the two aided schools, applied to be considered for government aid to be granted in accordance with the Secondary Schools Regulations, 1957. It was suggested in the memorandum, and accepted by the Government, that the two government secondary schools, Queen's College and Bishops' High School, should be fully integrated with the national educational system and come within the general control and supervision of the Ministry and Department of Education.

As from January 1958 the Government has provided grants to nine private secondary schools including two schools that were hitherto in receipt of block grants. This aid has taken the form of salaries grants and practical subject grants for science, woodwork and home economics. Thus 3,700 additional pupils immediately enjoyed a grammar school education under a grant-aided system which had hitherto been limited to about 1,100 pupils. Significant developments in these aided schools include a reduction in the size of classes, improvement in the quality of staff recruited, the establishment of new laboratories and the provision of additional equipment for existing laboratories and thereby the expansion of facilities for the teaching of science to more secondary school pupils. Non-recurrent special grants have been made to seven schools to help defray the costs of provision of new classrooms, science laboratories, libraries and home economics rooms. The preparatory forms at the two government secondary schools were discontinued as from July 1958. This made possible the admission of an additional stream of boys and girls of the 11+ age group.

The Carnegie Trade School for Women, now the Carnegie School of Home Economics, was opened in 1933, and the Government Technical Institute in 1951.

Legal basis

The principal laws and regulations governing secondary education (general and vocational) are:

Secondary Schools Regulations No. 18 of 1957 made under the Education Ordinance (chapter 91), setting out the conditions of government aid.

Government Technical Institute Regulations No. 26 of 1955, vesting the management in a board of governors and fixing the minimum age for admission to evening classes at 14.

Carnegie Trade School for Women Regulations, 1939.

Industrial Training (Apprenticeship) Regulations No. 7 of 1955 made under the Industrial Training Ordinance, which state that the minimum age at which a young person may enter into an (apprenticeship) agreement shall be 15 years and that no person shall be registered by the Board of Industrial Training as an artisan until he has reached the age of 20 years.

Administration

The two government secondary schools are managed by boards of governors appointed by the Governor to advise the Ministry and Department of Education on all matters of general policy and finance relating to these schools. The boards of governors of the nine aided secondary schools are executive bodies in whom are vested control and management of these schools; they submit any statistical returns and estimates that may be required by the Director of Education, including annual estimates of income and expenditure and audited statements of income and expenditure for each school year.

The government-owned vocational schools are similarly administered and controlled by advisory boards, and government approval of estimates is necessary.

The curricula (with time analyses) of every government and aided secondary school are submitted to the Director of Education for approval. Subject to this approval the principals are free to organize their curricula and use such textbooks and methods of instruction as they think fit. There are no textbooks or curricula prescribed by the Government for use in secondary schools.

Periodical inspections are carried out by the Director of Education, the Assistant Director of Education (Post-Primary) and other education officers with training and experience as graduate teachers in secondary schools or teacher training colleges.

Finance. The government secondary schools are financed directly from government revenue. Their annual estimates of expenditure have to be approved by the Legislature. The principals are subject to the same financial regulations as senior officers in other government departments, and the accounts of the schools are audited by government officers. Fees paid by pupils are lodged in the Treasury as revenue accruing to the Government. This form of financing also holds good for the government vocational schools.

The boards of governors of aided secondary schools receive salaries grants and practical subjects grants from the Government. The salaries grants, which are paid monthly, do not cover total salaries, but represent the differences between a fixed contribution by the boards to the salaries of graduate and non-graduate teachers and the salaries to which the teachers are entitled by academic qualifications and teaching service according to a basic minimum salary scale. Practical subjects grants are paid quarterly by the Government for maintenance and

equipment and for expendable supplies in science laboratories, home economics and woodwork rooms. Non-recurrent special grants may be provided to help the boards of aided schools improve premises, buildings or sanitation or to provide special workrooms, laboratories or libraries.

Fees are charged at all aided secondary schools and are used to help provide the schools' contributions to salaries of staff and other items of school expenditure.

A number of government scholarships are provided annually for children between the ages of 10 and 13 years on the basis of a competitive examination. These scholarships provide for free tuition for five years at an approved secondary school, government or aided, and an allowance to assist in the purchase of books and in the maintenance of the scholar. The cost of tuition and of maintenance allowances is borne by the Government.

TYPES OF SECONDARY EDUCATION

Secondary education is mainly of the grammar school type. Pupils from some secondary schools attend classes at the Government Technical Institute with a view to offering technical subjects, together with their general educational subjects in the General Certificate of Education examination at Ordinary level.

The vocational type of secondary education is supplied by the Government Technical Institute and the Carnegie School of Home Economics in Georgetown, at the Bookers Training Centre at Port Mourant and the Demerara Bauxite Company Trade School at Mackenzie.

Pre-vocational or pre-apprenticeship courses have been recently introduced in the woodwork centres and departments where boys of the 13+ age group who are still attending primary schools are given instruction over a 2-year period in technical subjects of the preliminary craft course syllabus devised by the Technical Institute. If successful, these boys may, on leaving school, enrol in apprenticeship courses in crafts of their choice.

No organized help or direction is given to the pupil or parents in choosing the type of secondary education. Individual head teachers of primary schools may of their own accord offer advice to parents.

The types of further education open locally to secondary school pupils include courses in commercial education at schools run by private individuals, training as teachers at the Government Training College for Teachers, as nurses, dispensers, sanitary inspectors, chemists and druggists at government hospitals and the Medical Department, training as agricultural instructors at the Agriculture Department, and in various craft and technician courses at the Government Technical Institute and two trade schools run by Bookers Estates and the Demerara Bauxite Company. Training as land surveyors is provided by the Lands and Mines and Public Works Departments and as mates and pilots for coastal and intercolonial steamships by the Transport and Harbours Department and Government Technical Institute.

The secondary school year comprises 36 weeks or three terms of an average duration of 12 weeks. The school week is five days and the school day normally consists of seven periods of 40 minutes each. The school year normally runs from September to July. There are schools from which pupils are entered for the Cambridge Oversea examinations which are held in December. The principals of these schools tend to admit new pupils in September of one year and again in January of the succeeding year.

General secondary schools

These schools, which are mainly of the grammar school type, aim at providing a general education over a 5-year course leading to the Oversea examinations of the London or Oxford and Cambridge General Certificate of Education Ordinary level or the School Certificate of the Cambridge Examination Syndicate. The more able pupils remain at school for another two years to follow a higher course of training usually in three subjects to the Advanced level of the London General Certificate.

Pupils are usually selected on the basis of entrance examinations set by the principals of the schools to which they are seeking admission. These examinations usually consist of attainment tests in English and arithmetic. Winners of government county scholarships are normally exempt from these entrance tests.

On admission to these schools pupils are normally grouped in classes or streams according to the levels of attainment reached by them in the entrance examinations. In the course of the first year or two there may be transfers between streams as pupils prove themselves to possess greater or less ability than was measurable by the attainment entrance tests.

At Queen's College, the larger of the two government secondary schools, pupils are taught in 'sets' according to their ability in languages and mathematics. In their third year at this school the pupils are streamed according to their aptitudes into classical, general and modern streams. The more able pupils from the classical and modern streams usually form the nucleus of arts and science sixth forms respectively, where they pursue a 2-year course of study to the Advanced level of the General Certificate of Education.

Subjects taught at these general secondary schools include religious knowledge, English, history, geography, Latin, French, Spanish, mathematics, chemistry, physics, biology, art, music, home economics, woodwork and commercial subjects. Science has until recently been taught only at the two government secondary schools and at three aided schools. Non-recurrent special grants have been made to aided schools to help meet the cost providing laboratories.

In most schools there are at least two end of term tests in the school year, with the test at the end of the third term serving as the basis of promotion from one class to the other. Teachers are free to arrange for any periodic testing in their subjects. End of term reports on pupils' work and conduct are sent home to parents by principals of all schools. Fortnightly, three-weekly or monthly reports may also be forwarded to parents.

The teaching staffs at the two government secondary cshools are good in number and quality. The majority of members of staff are graduates of universities in the United Kingdom with good honours or general degrees. It is now becoming the practice to acquire a diploma or post-graduate certificate in education. With the increase in the

number of locally qualified graduates as a result of the award of conditional scholarships to universities in the United Kingdom and of scholarships and exhibitions to the University College of the West Indies, a smaller number of graduate teachers is being recruited from overseas. The aided secondary schools were not so fortunate with the number or quality of their staffs. There has, however, been an increase in the number of graduates and better undergraduate teachers in these schools as a result of the grants-in-aid made to them in 1958. There is no provision locally for the training of teachers for secondary schools.

Vocational and technical schools

The Government Technical Institute was founded to provide technical, scientific and commercial education for students in various local industries and government departments. At present the bulk of the courses are run on a part-time day release or evening basis, but an increasing number are being arranged on the block release principle, that is, periods of full-time study alternating with periods in industry; this not only increases the training time but enable students in remote areas to attend courses. In addition to regular courses, special short courses are arranged from time to time.

The emphasis is now placed on the training of craftsmen with particular reference to apprenticeship, but recently a scheme of co-operation with the secondary schools has been introduced and the foundations for future developments for technicians and technologists are being soundly laid.

The concept of apprenticeship, in the true sense of the term, is new in British Guiana. Under legislation introduced a few years ago, however, a Board of Industrial Training was set up, and an organized scheme of apprenticeship now operates under regulations prescribed by this board. Many boys in the Georgetown area have been indentured in the engineering and building trades. Under the terms of indenture they are released by their employers on one day per week to attend classes at the Technical Institute throughout the whole five years of the apprenticeship.

The scope of the work of the Technical Institute may now be briefly described as follows:

Preliminary courses. As elsewhere in the British Caribbean territories, it has been found that many students embarking upon technical courses are handicapped by lack of general education. The Technical Institute has therefore provided pre-vocational or pre-apprenticeship courses of one year's duration. For these courses, which may be part-time, day or evening, the minimum age of admission is 15; the curriculum includes English, mathematics, drawing and elementary science. They are also offered at four extra-mural centres in the Colony and at approved woodwork centres and departments in primary schools.

Trade apprenticeship courses. Before admission to these courses students are required to have successfully completed the appropriate preliminary course or to give other evidence of a satisfactory standard of general education. The trades for which courses are at present being provided are carpenter, mason, fitter, machinist, welder, motor mechanic and electrician. The courses, which occupy one day per week, are designed to lead to Intermediate examinations of the City and Guilds of London Institute.

Evening craft courses. These provide a wide range of craft and technical subjects for students who are not able to obtain day release and include a number of trades for which day courses are not at present being provided, for example, plumbing and radio-servicing.

A healthy outcome of the growth of the apprenticeship scheme has been a demand for short intensive refresher courses for established workers who are anxious to improve or revive their skills. It is encouraging to see that these are being pursued with considerable enthusiasm. They should have the effect of inducing in the older workers an interest in the training of the apprentices and an appreciation of the work of the Institute.

Secondary technical courses. A recent development is a scheme of co-operation with seven secondary schools whereby boys who opt to take technical subjects together with their general educational subjects in the General Certificate of Education examination at Ordinary level attend the Technical Institute on one day per week. The subjects of study at the institute are geometrical drawing, a craft subject (woodwork or metalwork) and science (if not taken at school).

Teacher training. An effort is being made to extend the teaching of practical subjects in the primary schools, and various emergency schemes for the training of teachers have been instituted. At the Georgetown Handicraft Centre in 1957/58 and 1958/59 two batches of 20 teachers each have pursued a one-year course of training in woodwork together with a little metalwork and technical drawing. These teachers attend the Technical Institute on one day per week where members of the staff conduct a course on the teaching of technical subjects. On completion of their courses many of these teachers will start preliminary craft courses in their schools and thus relieve the Government Technical Institute of much pre-vocational training.

Miscellaneous courses. Courses are being offered in a considerable range of subjects other than those mentioned above. It is also the policy of the institute to offer each year, in addition to the regular courses, a programme of special short courses of evening lectures. The programme for 1958/59 comprised courses under the following titles: staircase construction, wood machining, painting and decorating, building today, owner drivers, tractor maintenance.

The Bookers Training Centre and the Demerara Bauxite Company provide sandwich courses over a full-time three-year period for study leading to the standard of the Intermediate examinations of the City and Guilds of London Institute.

Internal examinations to test attainment of students and for purposes of promotion from one stage of a course to another stage are conducted by members of staff.

The Carnegie School of Home Economics provides a general home economics training for girls of the 14 to 18 age group with a view to raising the standard of living. During the course a girl can learn enough to help her earn a living by dressmaking, cooking and possibly catering. The course also provides an excellent foundation for further training to become nurses. Students are selected by test and interview from applicants who are mostly primary school girls.

TRENDS AND PROBLEMS

The problems of secondary education or what may be more correctly termed post-primary education in British Guiana at present are to provide a liberal and more meaningful education for those pupils of the post-primary age group (11+) in the all-age primary schools, to broaden the curricula of existing secondary grammar schools, and to establish in rural areas bilateral secondary schools which will provide, in addition to the usual grammar school curriculum, courses of a pre-vocational bias in agricultural and technical subjects.

The provision of a broader education for pupils over the age of 11, unable for financial or other reasons to gain admission to existing secondary schools, may involve the inclusion in the curricula of more primary schools of preliminary craft courses as a form of pre-vocational training; these courses would lead to apprenticeship training. In a community that is essentially agricultural, agricultural courses would be another useful type of pre-vocational training for the post-primary age group in primary schools. Action is already being taken to increase the number of departments in primary schools or centres which cater for pupils from primary schools for practical work in woodwork, metalwork and home economics.

Attempts are at present being made in existing secondary grammar schools to cater for those pupils who may not be able to cope with or to derive the greatest benefit from a curriculum which was originally designed as a preparation for entry to the university. Boys from these schools are attending courses in technical subjects at the Government Technical Institute and it is hoped that on leaving school they may continue training as technicians. Some of these students may be expected to continue their studies to the technological level. One result of the proposed establishment of a Faculty of Agriculture of the University College of the West Indies in Trinidad may be the entry to this faculty of a greater number of students from secondary schools in British Guiana.

Pre-vocational training for careers in agricultural or technical fields will involve the provision of facilities for teaching science in more secondary schools. The recent grants-in-aid by the Government to secondary schools include recurrent maintenance grants for practical subjects such as science, woodwork and home economics. The provision of non-recurrent special grants for providing the laboratories and workrooms in which these subjects may be taught may also be regarded as a step in the right direction.

Further consideration may be given to the introduction of commercial courses in secondary grammar or bilateral secondary schools. These courses should then form part of a varied educational programme designed to help pupils 'to realize and develop their potentiality as persons and citizens'.

[*Text prepared by the Director of Education, Georgetown, in June 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 532,000.
Area: 83,000 square miles; 214,970 square kilometres.
Population density: 6.4 per square mile; 2.5 per square kilometre.

Summary of school statistics, 1953–57. In the school year 1957/58 total enrolment at all levels of education was over 118,000 pupils, representing about 22 per cent of the estimated population. This figure excludes unaided secondary schools. Of total school enrolment, 94 per cent was in primary, nearly 4 per cent in general secondary and 2 per cent in vocational schools. There were in addition 58 students, of whom half were women, training to be teachers. The proportion of girls was 49 per cent at the primary level but only 28 per cent in general secondary schools. The number of primary school teachers was over 2,750 in 1957/58 and the pupil-teacher ratio 40, as compared with 42 in 1953/54. In general secondary schools the teaching staff numbered 157, of whom one third were women, and the pupil-teacher ratio was 29.

Between 1953/54 and 1957/58 enrolment in primary schools increased by 26 per cent, in general secondary schools by 176 per cent and in vocational schools by 98 per cent. (See table.)

Examination results in secondary education, 1957/58. In 1957/58 there were 1,229 candidates for the General Certificate of Education at Ordinary level and 370 candidates at Advanced level. In addition 238 candidates passed the Cambridge Oversea School Certificate. Successful candidates for professional and technical certificates numbered 17 in the Royal Society of Arts examinations, 28 in the City and Guilds and 24 in the London Chamber of Commerce.

Educational finance, 1957. Expenditure on education in 1957 amounted to approximately 7,278,000 British West Indian dollars. (Official exchange rate: 1 B.W.I. dollar = 0.583 U.S. dollar.)

Sources. British Guiana: Education Department, annual reports. United Kingdom: Information transmitted to the United Nations on Non-Self-Governing Territories.

SUMMARY OF SCHOOL STATISTICS, 1953-57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	21	187	98	8 438	4 146
	Primary schools, aided private	1957/58	290	2 570	1 331	102 738	50 207
	Total	**1957/58**	**311**	**2 757**	**1 429**	**111 176**	**54 353**
	,,	1956/57	304	2 382	1 101	105 911	51 110
	,,	1955/56	302	[1]2 548	[1]1 366	101 514	49 524
	,,	1954/55	295	2 365	1 234	94 536	45 751
	,,	1953/54	333	2 093	1 124	88 186	42 695
Secondary *General*	Secondary schools, public	1957/58	2	59	23	1 077	429
	Secondary schools, aided private	1957/58	8	98	32	3 503	862
	Total	**1957/58**	**[2]10**	**157**	**55**	**[2]4 580**	**[2]1 291**
	,,	1956/57	4	85	29	1 826	565
	,,	1955/56	4	90	26	1 734	530
	,,	1954/55	4	82	25	1 615	582
	,,	1953/54	4	[3]105	[3]46	1 654	520
Vocational	Vocational schools, public	1957/58	2	25	15	2 255	851
	Vocational schools, aided private	1957/58	1	6	6	54	54
	Total	**1957/58**	**3**	**31**	**21**	**2 309**	**905**
	,,	1956/57	3	48	25	3 127	627
	,,	1955/56	3	45	15	3 102	727
	,,	1954/55	3	45	21	2 905	763
	,,	1953/54	3	[3]...	[3]...	1 164	388
Higher *Teacher training*	Teacher training college, public						
	Total	**1957/58**	**1**	**5**	**2**	**58**	**29**
	,,	1956/57	1	5	2	60	30
	,,	1955/56	1	5	2	57	26
	,,	1954/55	1	4	1	57	26
	,,	1953/54	1	4	1	50	19

1. Including data on nursery schools.
2. In 1957/58 there were 20 unaided secondary schools with approximately 3,000 pupils.
3. Teachers in vocational schools are included with those in general secondary education.

BRITISH HONDURAS

British Honduras is perhaps unique among British colonies in the Western Hemisphere in view of the diversity of races represented; yet there are no major racial difficulties. All schools are open to all members of the community. No fewer than six languages are spoken—English, Spanish, Carib, North Maya, Southern Maya, and Ketchi—English and Spanish being predominant. The medium of instruction in the schools is English. Education in British Honduras has from the beginning been closely associated with the Christian denominations.

THE EDUCATIONAL SYSTEM

The administration of education is, under the Education Ordinance of 1926 (No. 14), the responsibility of the Board of Education and the Department of Education. The board consists of the Governor, who is president, the Colonial Secretary, the Member for Social Services of the Colony's Executive Council, and not more than seven other persons, not government officials, who are nominated by the Governor and of whom one at least must be a woman and one a representative of the teachers. The managers of denominational schools are usually represented on the board. The Director of Education, who is not a member of the board, acts as its secretary and adviser.

The board has executive powers. It makes rules which form the Education Code and advises the Government on educational matters within its purview, mainly on primary education.

All government, government-aided and private primary and secondary education in the country is subject, in

varying degrees, to the control of the Director of Education who receives advice and recommendations from the board and who, in matters of policy, is associated with the member of the Executive Council appointed by the Governor to deal with educational and other social services. The Director also seeks approval for financial expenditure from the Legislature. In the district capitals the District Commissioner represents the Director of Education in educational matters.

The primary school course comprises two infant classes, or sub-standards, and six standards, and leads to the Primary School Certificate examination; the compulsory age-range is from 6 to 14, although children may enrol at 5 and a number under 5 are accepted, especially in the towns. At ages 12 to 14 selected children pass to the secondary schools or the technical college, government scholarships being awarded on the basis of a competitive examination. Opportunities for post-secondary education are provided by two training colleges with 2-year full-time courses and by government departments which offer apprenticeships. There is also a scheme of pupil teacher training. For university education, secondary leavers go abroad, mainly to other Commonwealth countries or the United States, or take courses of the extra-mural department of the University College of the West Indies.

THE DEVELOPMENT OF SECONDARY EDUCATION

An attempt to introduce secondary education into the country was first made in the year 1845, when the Honduras Free School was made a grammar school; the headmasters were clergymen of the Church of England. Mention is made in the Blue Book for 1866 of a private school conducted by a Mr. Dunbar; it is referred to as 'the only school in which Latin was taught'. The following are the secondary schools at present in existence.

Wesley College. Established in the year 1882 as the Wesleyan High School for Boys. From 1932 to 1937 was merged in St. George's College under the joint management of the Methodist and Anglican bodies, but in January 1938 resumed under the present name and under the control of the Methodist body. It is now co-educational and has also a preparatory department for infants.

St. Catherine's Academy. Established in January 1883; conducted by the Sisters of Mercy from the United States of America.

St. John's College. A day and boarding school for boys, under the direction of the Society of Jesus, which originated in a school established in Belize in 1887. The college is now housed at Landivar.

St. Hilda's College. Founded in January 1897 as the Diocesan High School for Girls.

St. Michael's College. May be regarded as a continuation of the Diocesan High School for Boys which was first established in 1921.

Pallotti High School. Was started in 1957 by the Sisters of the Pallotti Order from Germany. Offers courses in cookery, needlecraft, handwork, shorthand and typing, leading to certificates of the General Certificate of Education.

Lynam College. In 1957 the Roman Catholic Mission, recognizing the importance of agriculture to the economic future of the country, set up this institution to provide teaching in agriculture with emphasis on practical instruction. Recognized as a secondary school in 1958.

Austin High School and Muffles College. Secondary schools run by the Roman Catholic Mission in the district capitals of Stann Creek and Orange Walk respectively. Austin High School offers a full course leading to the Cambridge Oversea School Certificate, while the more advanced students at Muffles College complete their courses at St. John's College, Belize.

Belize Technical College. Proposals for the development of technical education date back to 1935, when the Easter Report recommended that the Government should set up a Central Institution for manual training and home economics. The purposes of the college are to provide: (a) for boys and girls of secondary school age, a type of education alternative to the wholly academic type offered at the existing secondary schools, and in which the emphasis is on science and pre-vocational studies, thereby laying a sound foundation for the training of craftsmen and technicians; (b) for ex-secondary school pupils, teachers and others, evening classes in science and technical subjects; (c) classes in manual training and home economics for teachers.

After the first year of operation, a revised scheme was adopted according to which no more than 30 boys should be admitted each year for a period of three years, during which an increasing amount of practical work should be done. A limited number of boys who completed the course satisfactorily would be selected for a further course of two years, leading to the School Certificate. There would be no provision for girls other than facilities for instruction in domestic science at part-time day classes and evening classes. The emphasis would be rather on the training of skilled craftsmen and on a close association between the school and industry.

Admission to the school is by competitive examination consisting of written tests in English and arithmetic, and an aptitude test and interview. The examination is open to boys between the ages of 12 and 14, without distinction of race or religion. No promising pupil who qualifies for admission has been excluded because of inability on the part of his parent or guardian to pay the full fee. Maintenance grants are also paid to deserving pupils from the out-districts on the same terms as bursaries are awarded to government scholars attending the five other secondary schools in Belize. In 1953 the University of Cambridge Local Examinations Syndicate gave formal approval for the school to enter candidates for Certificate A in the School Certificate examination.

Evening classes were begun on 14 March 1952, when 15 students were accepted for a grouped course in science and mathematics. Since then the range of subjects offered has widened with the increasing demand, and there are now courses in chemistry, physics, mathematics, home economics, woodwork and building construction, commercial subjects, plumbing, auto-engineering and electrical installation and repair.

The school has a well-equipped physics and chemistry laboratory, at present the only such laboratory in British Honduras, which has been approved by the Cambridge Local Examinations Syndicate for the holding of their

examinations in these two subjects. There are also workshops for woodwork and metalwork and an adequately equipped home economics section. From funds supplied from the British Government under Colonial Development and Welfare a new and well equipped workshop block was opened in 1959.

Administration

The more general aspects of educational administration have been described above.

Up to 1956 all the secondary schools except the Technical High School were almost wholly denominational schools organized, financed and run by the various religious denominations. In 1957 the three non-Roman Catholic secondary schools were given grants-in-aid; since April 1958 government grants to these schools have taken the form of part-payment of the salaries of the graduate members of the staff. In 1958 the Government gave a grant to one other secondary school and made loans to two more.

The secondary schools charge fees ranging between $65 and $100 per year. There is a system of government scholarships tenable at secondary schools and bursaries are paid by the Government to deserving pupils from the districts to enable them to attend schools in Belize.

As regards buildings and equipment, some of the older secondary schools in Belize had to be completely or partially rebuilt after the hurricane of 1931. In general, school buildings are overcrowded, but plans for extension of all schools will be put into effect very soon.

TYPES OF SECONDARY EDUCATION

The following types of secondary education exist: (a) academic courses leading to the Cambridge Oversea School Certificate and Higher School Certificate examinations; (b) commercial courses leading to the Royal Society of Arts and the London County Council examinations in shorthand, typing, etc.; (c) technical day and evening courses leading to the General Certificate of Education, City and Guilds, and the Royal Society of Arts examinations in science subjects, metalwork, woodwork, cookery, needlework, etc.

Except for the advice given directly or indirectly by teachers, there is little help or direction given to pupils or parents in choosing the type of secondary education they should follow.

Normally the school year begins in January and ends in December with three terms, January-April, June-August, September-December. Regular school days are Monday to Friday.

In all schools there is a 'head pupil', elected annually by the school, and a number of prefects who carry out various responsibilities. Students take part in sports and join such organizations as the Boy Scouts, Girl Guides, Red Cross, etc. Field days are held annually.

TRENDS AND PROBLEMS

Educational authorities, fully alive to the growing demand and need for secondary education, have during the past year increased the number of government scholarship awards and bursaries by approximately 40 per cent and 60 per cent respectively. Large government loans and grants to secondary school managers for building classroom extensions also show the government's and the community's awareness of the need to provide the necessary facilities for secondary education.

Hitherto the students leaving the secondary schools were not qualified for entry into higher educational institutions or for the various jobs that are open to them without further education. Efforts are, however, now being made to improve the standard of teaching at secondary schools and to extend secondary instruction to include science subjects at examination level. Better qualified staff, better remunerated, were employed during 1958.

In the field of technical education the new policy, proposed by the new Director of Education, who is also acting principal of the Belize Technical College, includes part-time day classes for young men employed by government departments and private business firms, day classes in science for secondary school pupils and evening classes in cookery, needlework, shorthand, typewriting, English, woodwork, metalwork, physics, etc. The scheme is designed to provide the technical skills needed for the economic, social and political development of the country.

[*Text prepared by the Education Department, Belize, in June 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 85,000.
Area: 8,866 square miles; 22,963 square kilometres.
Population density: 10 per square mile; 4 per square kilometre.

Summary of school statistics, 1953–57. In 1957 there were about 19,950 pupils enrolled in all schools, representing approximately 24 per cent of the population. Of total enrolment 93 per cent was in primary, 6 per cent in secondary general and under 1 per cent in vocational and teacher training institutions respectively. Girls represented about half the enrolment in primary and general secondary schools and two-thirds at the teacher training centre. Enrolment in primary schools increased by 26 per cent between 1953/54 and 1957/58. There were 383 primary school teachers in 1957/58, of whom nearly two-thirds were women, and the average pupil-teacher ratio was 49, compared with 54 in 1953/54.

Total enrolment in the eight general secondary schools increased by 23 per cent between 1953/54 and 1957/58 and

the number of girls by 11 per cent over the same period. In the vocational school, enrolment increased from 65 to 105 pupils in the period under review. The number of teachers in general secondary schools rose by 43 per cent between 1953/54 and 1957/58 and the pupil-teacher ratio fell from 20 to 17 over the same period.

Students in the post-secondary teacher training college rose from 18 in 1954/55 to 27 in 1957/58 of whom 15 were women. (See Table 2.)

Examination results in secondary education, 1953–57. The number of successful candidates for the London General Certificate of Education was 28 in 1957 compared with only 3 in 1954; in addition 54 candidates were awarded the Cambridge Oversea School Certificate and 7 the Cambridge Higher School Certificate in 1957. There were also 30 successes in the London Chamber of Commerce and 14 in the Royal Society of Arts examinations. In 1956/57, 18 students passed the teacher training final examination and in 1957/58, 13.

Educational finance, 1957. Total expenditure on education by the Central Government in the fiscal year beginning January 1957 was 758,619 British Honduras dollars or approximately $90 per inhabitant. Of this sum, 76 per cent ($573,133) came from territorial resources and the remaining 24 per cent ($185,486) from United Kingdom funds. Capital expenditure amounted to $117,120 or 15 per cent of the total. The distribution of recurring expenditure by level and type of education is given in Table 1.

Sources. British Honduras: Education Department, annual reports.

1. EDUCATIONAL FINANCE, 1957 (in British Honduras dollars)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure[2]	**641 499**	**100.0**
Central administration	42 547	6.6
Primary education	500 143	78.0
Secondary education	25 463	4.0
Vocational education	40 553	6.3
Teacher training	16 758	2.6
Other education	16 035	2.5

1. Official exchange rate: 1 British Honduras dollar = 0.70 U.S. dollar.
2. Central Government only.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	2	[1]4	[1]3	289	146
	Primary schools, aided private	1957/58	97	[1]332	[1]216	16 954	8 397
	Primary schools, unaided private	1957/58	33	47	24	1 394	755
	Total	**1957/58**	**132**	**[1]383**	**[1]243**	**18 637**	**9 298**
	,,	1956/57	128	[1]362	[1]217	16 099	8 040
	,,	1955/56	118	[1]336	[1]213	15 542	7 891
	,,	1954/55	122	[1]288	[1]192	15 071	7 500
	,,	1953/54	119	[1]272	[1]226	14 779	7 241
Secondary *General*	Secondary schools, unaided private						
	Total	**1957/58**	**8**	**70**	**33**	**1 189**	**535**
	,,	1956/57	8	68	31	1 092	548
	,,	1955/56	8	53	23	1 084	521
	,,	1954/55	8	49	23	1 102	541
	,,	1953/54	8	49	17	964	483
Vocational	Technical college, public						
	Total	**1957/58**	**1**	**[2]7**	**[2]1**	**[3]105**	**[3]28**
	,,	1956/57	1	[2]5	[2]1	[3]87	[3]31
	,,	1955/56	1	[2]5	[2]1	[3]88	[3]16
	,,	1954/55	1	[2]4	[2]1	[3]92	[3]19
	,,	1953/54	1	[2]4	[2]1	[3]65	[3]19
Higher *Teacher training*	Training college, public	1957/58	1	[2]4	[2]1	18	12
	Training college, unaided private	1957/58	1			9	3
	Total	**1957/58**	**2**	**[2]4**	**[2]1**	**27**	**15**
	,,	1956/57	2	[2]4	[2]2	29	17
	,,	1955/56	2	[2]2	[2]2	33	21
	,,	1954/55	2	[2]2	[2]2	18	12
	,,	1953/54	–	–	–	–	–

1. Not including pupil teachers or probationers.
2. Not including part-time staff.
3. Not including pupils in evening classes who numbered 70 (F. 22), 121 (F. 31), 168 (F. 22), 200 (F. 100) and 123 (F. 53) in the years 1953/54 to 1957/58 respectively.

BRITISH VIRGIN ISLANDS

The British Virgin Islands form the eastern extremity of the Greater Antilles and are geographically part of the Leeward Islands group. In 1956, each of the four presidencies (Antigua, Montserrat, St. Christopher-Nevis-Anguilla, and Virgin Islands) which at that time formed the Federation of the Colony of the Leeward Islands, became a separate colony by the Leeward Islands Act. The first three of these colonies are now part of the Federation of the West Indies, established on 3 January 1958, but the Virgin Islands have not joined the Federation.

The British Virgin Islands are administered by an Administrator assisted by an Executive Council and by a Legislative Council of 10 members (excluding the President), 6 of whom are elected.

THE EDUCATIONAL SYSTEM

Most of the schools are primary schools owned and operated by the Anglican and Methodist churches, but assisted by the Government which provides equipment and salaries. There are also a few 'assisted community schools'; these are small schools conducted by private persons, which receive grants-in-aid. There is one unaided school and a government secondary school, the only secondary school in the Colony.

The educational system is governed by the Education Ordinance (No. 11 of 1955). General control and supervision is exercised by the Education Officer, who is responsible to the Administrator of the Colony. There is also an advisory body, the Board of Education.

The primary school course lasts 9 years and caters for children in the 5 to 15 age range. The schools have been re-organized into infant departments (5–7), primary departments (8–12) and post-primary departments (12–15). A new curriculum has been circulated for use in the infant and primary departments and includes religious knowledge, language, mathematics, social and environmental studies, art and craft, and aesthetic subjects.

Primary school pupils between the ages of 11 and 14½ may sit the entrance examination to the government secondary school, which provides a 5-year course (forms 1 to 5), leading to the Cambridge Oversea School Certificate examination. The curriculum is largely dictated by the requirements of this examination.

For other types of formal schooling, pupils from the Virgin Islands attend institutions outside the Colony, notably Erdiston Teacher Training College, Barbados, and the Leeward Islands Teacher Training College, Antigua.

TRENDS AND PROBLEMS

A committee was appointed towards the end of 1956 to review the educational system of the Colony. As regards secondary education, the committee recommended *inter alia* the establishment of a secondary school committee to help with the management and general progress of the school. The committee also recommended that the method of selecting pupils and the curriculum be made more flexible. A common course should be devised for forms 1, 2 and 3. Form 4 should be divided into A and B streams, the former for the academic group, the latter for the non-academic group which would take vocational subjects in addition to English and a choice of other general subjects.

Work is proceeding on a new curriculum for the post-primary departments (12–15) which will give greater recognition to the needs of children in this age group, and provide in the initial stage a 2-year course leading to a local Post-Primary School Leaving Certificate.

[*Text revised by the Education Officer, Tortola, in August 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 8,000.
Area: 67 square miles; 174 square kilometres.
Population density: 119 per square mile; 46 per square kilometre.

Summary of school statistics, 1953–56. In the school year 1956 there were 2,109 children enrolled in 17 primary and 1 general secondary school. Enrolment represented over a quarter of total estimated population. The proportion of girls to total enrolment in primary schools was about 50 per cent and in the secondary school 78 per cent. There were 69 primary school teachers of whom 57 were women and the average pupil-teacher ratio was 29. In the secondary school there were 7 teachers and the average pupil-teacher ratio was 15. (See Table 2.)

Examination results in secondary education, 1956. In 1956 there were 13 candidates for the Cambridge Oversea School Certificate compared with 5 in the previous year.

Educational finance, 1955. Total expenditure on education by the Central Government in the fiscal year beginning January 1955 amounted to 82,091 British West Indian dollars, or approximately $10.3 per inhabitant. Of this

total, 98 per cent ($80,219) was derived from territorial revenue and the remainder from United Kingdom funds. Capital expenditure by the Central Government was nil. The distribution of recurring expenditure by level and type of education is given in Table 1.

Sources. Virgin Islands: Education Department, annual reports. United Kingdom: Colonial Office, Virgin Islands annual report, 1954.

1. EDUCATIONAL FINANCE, 1955 (in British West Indian dollars)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure[2]	**82 091**	**100.0**
Central administration	247	0.3
Primary education	57 849	70.5
Secondary education	18 467	22.5
Teacher training	[3] 3 583	4.4
Other education	1 945	2.4

Note. Expenditure by missions is not available.

1. Official exchange rate: 1 B.W.I. dollar = 0.583 U.S. dollar.
2. Central Government only.
3. Includes $1,872 from United Kingdom funds.

2. SUMMARY OF SCHOOL STATISTICS, 1953–56

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools						
	Total	**1956**	**17**	**69**	**57**	**2 006**	**1 011**
	"	1955	16	64	54	1 974	978
	"	1954	16	61	...	1 886	959
	"	1953	15	61	28	1 819	910
Secondary *General*	Secondary school						
	Total	**1956**	**1**	**7**	**2**	**103**	**81**
	"	1955	1	6	2	106	75
	"	1954	1	7	2	113	79
	"	1953	1	5	2	119	85

FALKLAND ISLANDS

The Falkland Islands, the only considerable group in the South Atlantic, consist of East Falkland, West Falkland, and upwards of 100 small islands. All the territory outside Stanley, the capital, is known as the Camp. The inhabitants of the Camp are mainly engaged in sheep-farming and live in scattered settlements. The remoteness of many settlements, the fact that some shepherds frequently move from one settlement to another and the difficulty of the communications have always been serious obstacles to the development of education. English is the only language spoken in the Falklands.

THE EDUCATIONAL SYSTEM

Under the Education Ordinance of 1947 parents are required to have their children educated wherever there is a recognized school and wherever classes are held by a recognized teacher. At present education is compulsory between the ages of 5 and 14, but school attendance is not required of Camp children between 5 and 7 if they live more than one mile from a school or of Camp children of any age if they live more than two miles away.

All schools are maintained by the Government. Stanley

has an infant school for children aged 5 to 7, and a senior school comprising junior classes for ages 7 to 11, senior classes for ages 11 to 14, and a continuation class offering two years of voluntary study after the statutory leaving age. In the Camp there are two boarding schools and a number of one-room settlement schools situated at farm settlements and staffed by travelling teachers. The Camp schools are all-range schools for children aged 5 to 14. Tuition is free in both Stanley and the Camp but parents of children attending boarding school pay £12 a year for accommodation and half the transport costs by sea or air.

The school system is administered for the Legislative Council by the Superintendent of Education who also acts as inspector of schools. He receives a report on each child three times a year and makes an annual supervisory visit to schools in the Camp. Education is financed from colonial revenue supplemented by grants from Colonial Development and Welfare funds.

THE DEVELOPMENT OF SECONDARY EDUCATION

Schools in the Falklands are organized so as to provide a course covering the period of compulsory education (5 to 14), and of this period the last three years may be considered to be at secondary level. Thus children who go on to complete the voluntary 2-year continuation course attain a standard comparable with the Ordinary level of the United Kingdom General Certificate of Education in a limited number of subjects. The curriculum of the Falkland Islands schools includes religious knowledge, English, arithmetic, history, geography, nature study, arts, music, games and physical education. Infants and lower juniors take arts and crafts, girls over the age of 8 take needlework and boys over the age of 8 take handwork and woodwork. In Stanley evening classes are held in winter, the subjects taught being shorthand, typewriting, mathematics, English, crafts and Spanish; attendance at these classes is compulsory for all government employees under 18 years of age. As yet there is no provision for technical education or training. Teacher training for a few girls who have completed the continuation class is conducted by a qualified teacher on the staff of the Stanley school.

Children in the continuation class learn to accept responsibility through the prefect system. All children have a games period once a week and there is limited provision for sports and other competitions.

Assistance is available for parents who wish to have their children of secondary school age educated outside the colony. Two scholarships are offered each year for education at boarding grammar schools in Dorset (United Kingdom); the scholarships cover the passage to England, board and lodging, and tuition. Government allowances are payable in respect of children between the ages of 11 and 18 who are being educated in any part of the British Commonwealth outside the Falklands, or in South America. The allowances are paid for five years—£150 in the first year and £100 in succeeding years.

TRENDS AND PROBLEMS

The main obstacle to the expansion and improvement of secondary education in Stanley is the difficulty of obtaining qualified staff. Certificated teachers holding senior posts are recruited in the United Kingdom, but the lower salaries in the Falklands make it difficult to compete with other colonies and the United Kingdom schools. The provision of secondary education for children in the Camp is linked with the development of boarding establishments. In this connexion there are plans for a new senior school in Stanley which will provide such accommodation.

[*Text revised by the Superintendent of Education, Stanley, in July 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 2,000.
Area: 4,618 square miles; 11,961 square kilometres.
Population density: 0.4 per square mile; 0.2 per square kilometre.

Summary of school statistics, 1953–57. In 1957 there were 301 children enrolled in 11 all-range schools which provide a course of education from 5 to 14 years. The proportion of girls enrolled was approximately 50 per cent. Teachers numbered 28, of whom half were women, and the pupil-teacher ratio was only 11 owing to the scattered settlements with small schools in the Islands. There is no recent information on the breakdown of enrolment at primary and secondary levels enrolment within the all-range schools. (See table.)

Educational finance, 1956/57. Total public expenditure on education in the fiscal year beginning April 1956 was 28,462 pounds sterling representing about £14.2 per inhabitant. Of this sum £953 was contributed from the Colonial Development and Welfare funds and the remainder was derived from territorial revenue. Recurring expenditure amounted to £18,132, and an amount of £9,377 was reported as 'special expenditure'. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.

Sources. Falkland Islands: Education Department, annual reports. United Kingdom: Information supplied by the Colonial Office, London.

SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary and secondary	All-range schools, public						
	Total	1957	11	28	14	301	149
	"	1956	11	24	11	329	170
	"	1955	11	28	16	330	172
	"	1954	6	24	15	301	142
	"	1953	9	28	17	330	158

ST. HELENA AND DEPENDENCIES

The island of St. Helena lies in the Atlantic Ocean, about 1,000 miles south of the Equator and 1,200 miles off the coast of Africa. It is only 10½ miles long and has a maximum width of only 6½ miles, but because of the rugged and mountainous terrain some of the settlements are relatively isolated. The local population is of British, African and Asian descent. English is the only language spoken. The Governor alone issues ordinances, since there is no legislative body.

THE EDUCATIONAL SYSTEM

Since the Education Ordinance of 1941 all schools in St. Helena have been maintained by the Government through its Education Department. The school system provides education for children of compulsory age, i.e. between 5 and 15. This 10-year course is divided into 6 years of primary schooling, comprising infant and junior classes, and 4 years of secondary schooling taken in senior schools or at the secondary selective school. All institutions are co-educational; two of them are all-range schools having infant, junior and senior sections, the others are organized as primary or secondary schools. The Education Department also runs voluntary classes in a few vocational subjects for young people beyond the statututory school age and adults, and makes provision, based on the pupil-teacher system, for teacher training. The Department of Agriculture and Forestry, the Public Works Department and the Health Department have vocational training schemes which fit into the school programmes.

The school system is administered and controlled by an Education Officer who is responsible to the Governor of the Colony for the organization of education, the management and inspection of schools, and the training of teachers. He is advised by a Board of Education appointed by the Governor and comprising representatives of the Church and prominent citizens; in practice the board interprets government policy and formulates rules which are administered by the Education Officer. Departmental staff responsible for administration and teacher training are recruited from overseas.

All educational expenditure is met from government funds. Textbooks and essential equipment are provided by the Education Department. Standardization of school furniture was introduced in 1955; most of the children have individual desks and chairs made locally from termite-proof hardwood. The Public Works Department is responsible for designing and building schools and for their maintenance and repair.

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary education in St. Helena is coterminous with the last four years of compulsory schooling. At the senior schools emphasis is on practical education while the secondary selective school offers a more 'academic' curriculum. Selection of pupils for the latter type of course is guided by the results of the Secondary Selective examination, which is taken by all children between 10½ and 11½ years. This examination comprises papers in English, arithmetic and general knowledge.

Subjects taught at secondary level include English, arithmetic, history, geography, general knowledge, music, art, domestic science, lace-making, needlework, dress-making, woodwork, ropework, aloework, gardening and physical training. Religious instruction is given in all schools. Curricula and schemes of work are drawn up on the basis of a main scheme agreed by head teachers in January 1959, but which permits local variations determined by head teachers' special knowledge of their children and

districts. The schools have an adequate supply of textbooks, which are obtained from the United Kingdom.

All children over 14 sit for the St. Helena General Schools examination, which consists of papers in the first five subjects listed in the preceding paragraph. Certificates are awarded at two levels: 'pass' and 'pass with distinction'.

Facilities available for formal education beyond this certificate are limited to vocational and teacher training. Classes in woodwork, aloework, needlework and typing are provided by the Education Department, and in 1959 evening classes were started to prepare a small number of pupils for the examinations of two United Kingdom bodies —the Union of Educational Institutes and the Royal Society of Arts. The Health Department trains nurses and midwives, and there are apprenticeship schemes run by the Department of Forestry and Agriculture and the Public Works Department. The latter trains apprentices in carpentry, surveying, plumbing, maintenance of combustion engines, and metalwork. Teacher trainees at present start at 15+ as pupil teachers; they receive formal instruction for three hours each week and during holidays. It is intended that pupil teachers should continue full-time attendance at school until 16, at which age they would commence teaching. Since 1953 one locally trained teacher has been sent each year to a training college in England. In other fields, scholarships for study overseas are sometimes granted under the Colonial Development and Welfare Scheme.

To assist secondary school leavers in choosing an occupation and finding a job, the Employment Officer, in conjunction with the Social Welfare Officer, keeps a register for young people (15 to 18 years). He has access to school record cards and receives the collaboration of head teachers and local employers. As a rule, candidates for the more responsible posts in the Colony—teachers, apprentices, and clerks, etc., in Government offices and local firms are ex-pupils of the secondary selective school.

Among the extra-curricular aspects of secondary school life, emphasis is placed on the prefect system, the wearing of school uniforms and badges, and corporate activities which build up a sense of responsibility, initiative and co-operativeness. The playing of outdoor team games is handicapped by the lack of level ground; also, the time taken by many of the children to reach their homes makes it difficult for them to participate in activities after school hours. Transport is provided for all children living beyond a two-mile radius from their school, but even then some children at the secondary selective school have a further long walk over hilly roads. In addition to free transport, other social services for schoolchildren include free milk and fish oil capsules (supplied by Unicef), free meals for about a third of the children, and medical and dental supervision by officers of the Health Department.

TRENDS AND PROBLEMS

The main aim is to raise teaching standards through teacher training courses and the raising of the age at which pupil teachers commence work. Young teachers are also being encouraged to take external examinations, as are pupils in the secondary selective school.

The chief problem is to diminish the flow of experienced teachers from the Island.

TRISTAN DA CUNHA

Tristan da Cunha, a small group of islands midway between the Cape of Good Hope and South America, had a population in 1958 of 257.

Education is free, the salary of one of the two teachers being met from a Colonial Development and Welfare grant, and of the other from the Administration Fund which is partly financed by the Tristan da Cunha Development Company.

ASCENSION

Ascension, an island 700 miles to the north-west of St. Helena, had a population in 1958 of 326.

Daily tuition is provided free by Cable and Wireless Limited for the few children living there. The Government makes an annual contribution towards costs.

[*Text revised by the Director of Education, Jamestown, in October 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 5,000.
Area: 162 square miles; 419 square kilometres.
Population density: 31 per square mile; 12 per square kilometre.

Summary of school statistics, 1953–57. From 1954 to 1957 total enrolment in primary and secondary schools increased from 1,231 to 1,270 pupils; this increase was almost entirely due to the rise in the number of girls enrolled. (See Table 2.)

Examination results in secondary education, 1957. In 1957, 72 candidates successfully passed the St. Helena General Schools Certificate which is a lower general secondary examination taken by children aged 14 years or over.

1. EDUCATIONAL FINANCE, 1957 (in pounds sterling)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure	**13 758**	**100.0**
Central administration	1 554	11.3
Instructional	12 204	88.7
Salaries to teachers	8 771	63.8
School equipment and materials	1 534	11.1
Vocational education	611	4.4
Other instructional	1 288	9.4

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.

Educational finance, 1957. In the fiscal year beginning January 1957 total expenditure on education amounted to 13,991 pounds sterling, including £233 for capital expenditure. All this money was derived from United Kingdom funds, except £42 contributed by voluntary agencies. Apart from this expenditure, £32,730 had been allotted for a school building programme, of which £16,416 had been earmarked by the end of 1957. The distribution of recurring expenditure by level and type of education is given in Table 1.

Source. St. Helena: Education Department, annual reports.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Infant school, public	1957	1			123	61
	Primary schools, public	1957	5	[1]42	[1]35	589	294
	All-age schools, public	1957	3			255	129
	Total	**1957**	**9**	**[1]42**	**[1]35**	**967**	**484**
	"	1956	9	38	33	953	463
	"	1955	9	[1]42	[1]34	943	450
	"	1954	9	[1]43	[1]33	947	457
	" [2]	1953	12	[1]67	...	1 223	...
Secondary[3] *General*	Senior schools, public	1957	2	[1]24	[1]14	237	124
	Selective secondary school, public	1957	1			66	34
	Total	**1957**	**3**	**[1]24**	**[1]14**	**303**	**158**
	"	1956	3	18	9	307	158
	"	1955	3	[1]20	[1]9	314	163
	"	1954	3	[1]18	[1]9	284	149
	" [4]	1953	(1)	...	...	(45)	...

1. Including pupil teachers and part-time teachers. In 1957 there were 21 pupil teachers (F. 19) and 1 woman part-time teacher in primary schools, and 4 pupil teachers (F. 2) and 2 women part-time teachers in secondary schools.
2. Including secondary schools.
3. In addition there were a number of vocational courses and part-time teacher training courses. In 1957 the former enrolled 79 pupils (F. 62) and the latter 67 (44 teachers and 23 pupil teachers).
4. Selective secondary school only.

FEDERATION OF THE WEST INDIES

THE EDUCATIONAL SYSTEM

Free primary education is provided in elementary schools which cater for pupils between the ages of 7 or 8 and 14 or 15. Infant schools exist in comparatively small numbers. Many secondary (grammar) schools possess a preparatory department which may contain both infant and primary sections; most of them contain only the latter.

At secondary level the grammar schools provide the majority of entrants to university and supply the needs of the civil service and the professions. Grammar school education involves the payment of fees, though a large number of scholarships are available. Pupils are recruited by competitive examination from the elementary schools between the ages of 9 and 13 or from the preparatory department of the grammar schools themselves. In Jamaica, the Government provides about 2,000 free places annually. Everywhere there are government-assisted as well as private schools. The majority of government-assisted schools are owned by religious denominations; some are in connexion with old endowments.

Elementary schools are being increasingly reorganized and provided with facilities, so that suitable post-primary education may be given either in separate schools or in senior departments of all-age schools. In the larger territories there are technical institutions which cater for older pupils. In Jamaica and Trinidad higher vocational education is provided in technical and agricultural colleges.

The standard of entry to these colleges may be a (grammar) school certificate or some other evidence of adequate general education. In general, and with the possible exception of Barbados, the number of pupils leaving secondary schools is below the needs of the territories.

Education is provided under the law in all territories, and as they advance constitutionally the subject is more and more being placed under the supervision of a Minister responsible for policy. All education is conducted in English, which is the language of the Federation, though a handful of people in St. Lucia use a French patois. Public education is provided without reference to race, religion or class. Education is the responsibility of Central Governments; local authorities may provide scholarships and assist in health education and in certain minor requirements. Private agencies are free to establish schools provided they conform to certain minimum standards.

The structure of the school system is shown in the diagram on page 1326.

THE DEVELOPMENT OF SECONDARY EDUCATION

Secondary education, emerging through voluntary action, has been influenced by the concept that it was something quite distinct from elementary education and serving a different social class. Thus in Jamaica and Barbados the oldest schools which today have the greatest prestige began two centuries ago as schools for white children (often the poor of the district). As time went on these schools became fee-paying and taught a curriculum which included the classics, mathematics, science and foreign languages. Distinct form was given to the education in those schools (and in others for which they became the prototypes) with the introduction of the Cambridge Oversea School Certificate examinations in the early 1880s. It is only recently that secondary education has been thought of in terms of child development, and the term 'secondary' is still widely understood as 'grammar'. Late in the nineteenth century many secondary schools were placed under some measure of government direction, and received government assistance, while remaining under private control. Some government-owned schools were established. For a long time—and in most territories up to the present day—the administration of secondary education was entirely separate from the administration of elementary education.

The provision of vocational education began in the elementary schools with the study of practical agriculture and handicraft. Technical schools are of comparatively recent development. The Kingston Technical School (Jamaica) was, however, opened before 1900.

The legal foundation of secondary education was laid well before 1900, and since the turn of the century there has been a gradual expansion in the provision of schooling to catch up with the increasing population. After the first world war, there was some recognition of the importance of science and of the need for practical subjects like domestic science and handicraft, though even today schools exist which make no provision for these subjects on any satisfactory scale. Since the second world war efforts have been made to bring education more into line with environmental needs, an aim more successfully realized in the vocational and general types of secondary education than in the academic; the West Indies are still in the midst of this development. In recent years, in order to meet the needs of industry and the Civil Service, there has been a rapid expansion of both academic and technical education.

Legal basis

Barbados. The principal act is that of 1890.

Trinidad and Tobago. The Education Ordinance of 1870 established the basis on which all secondary (grammar) schools were to become entitled to grants-in-aid from public funds. The present basis for secondary education, however, is the 1933 Ordinance which extended the powers and responsibility of the boards of management, particularly in regard to the assisted schools which form the great majority of secondary schools in Trinidad.

Jamaica. Law 34 of 1879 is the basic secondary education ordinance; it defined the government of secondary schools and provided for the better application of endowments for education.

Windward and Leeward Islands. Acts for the establishment of secondary education in one form or another have been passed in the Windward and Leeward Islands at various times since the middle of last century (in 1857 an act was passed in Grenada, in 1878 in St. Vincent).

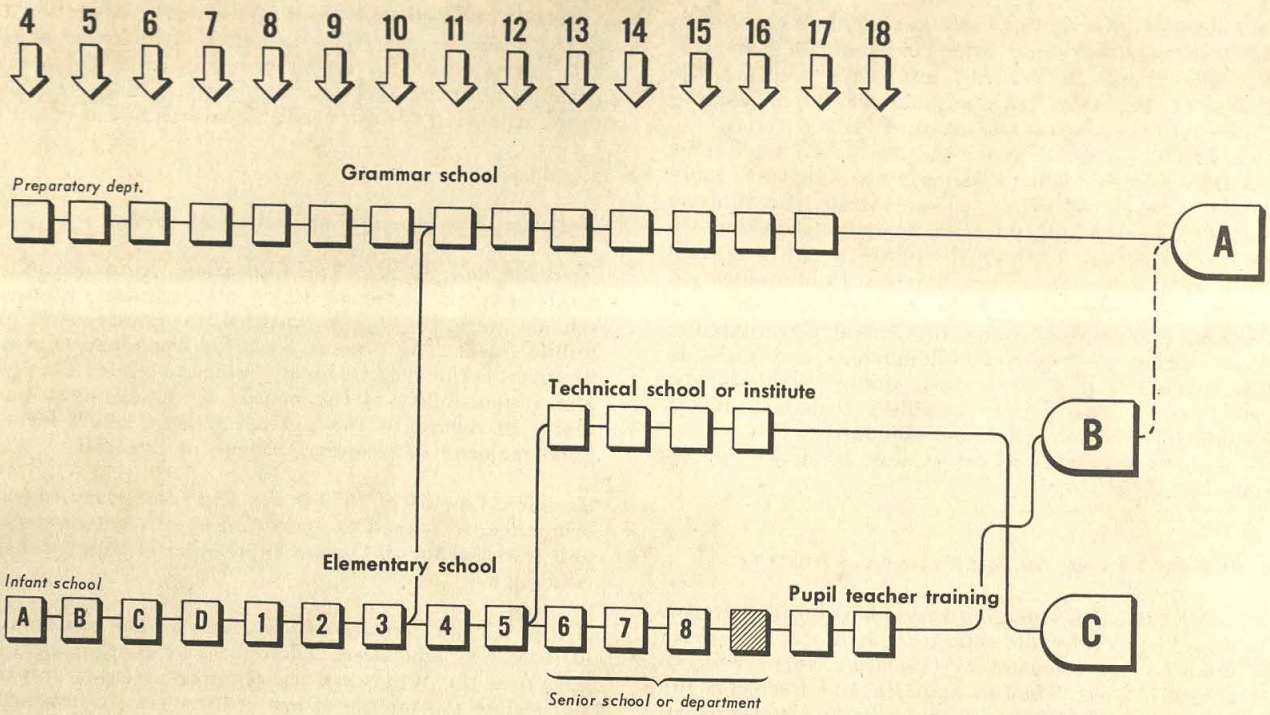
Laws about compulsory education have been on the statute books of various West Indian territories from the 1880s (Grenada 1888, the Leewards 1890, Jamaica 1892, Trinidad 1921); nowhere, however, has compulsion been adequately enforced. In all the territories there have of course been numerous amendments to the laws to increase the provision of scholarship for secondary schools and to bring school government into line with constitutional changes.

There is legal provision for apprenticeship along modern lines. Informal procedures are only slowly giving way to recognized contracts.

Administration

In government schools ultimate control rests with the Department of Education. In Trinidad the Department is assisted by an advisory body in running such schools but in some other territories a government school may be operated by a statutory board—the latter is the normal pattern in Jamaica. Government grants are paid to the managing bodies of assisted schools, whose accounts are carefully examined. The salaries of teachers in both government and assisted schools are guaranteed by the Government and are paid in accordance with government scales. In Jamaica there is a system of supervision and inspection of secondary schools; for schools of the general and vocational type there is regular inspection everywhere.

In all territories the educational policy is determined by the Minister of Education, who is assisted by his technical advisers and by advisory bodies. There is a minimum control of curriculum which is only in the broadest sense referred to in laws. The grammar schools follow the



GLOSSARY

NOTE. The accompanying diagram is intended to show the basic pattern of schooling throughout the Federation of the West Indies. Entry age and length of school life vary from territory to territory.

elementary school: originally an 'all-age' school providing a terminal course of general education for pupils not transferring to grammar schools; being reorganized into primary and secondary stages, the latter provided in separate *senior schools* or *senior departments* of all-age schools.

grammar school: general secondary school with academic type of course preparing for university entrance.

infant school: pre-primary school.

preparatory department: pre-primary and primary classes attached to a grammar school.

senior school or department: general secondary school with non-academic course based to some extent on environmental needs. (See *elementary school.*)

technical school or institute: vocational secondary school.

A. University education at the University College of the West Indies or in institutions overseas (United Kingdom, Canada and the United States of America).

B. Teacher training colleges.

C. Technical and agricultural colleges.

Cambridge Local (or the Oxford and Cambridge GCE) syllabuses, some of which were drawn up by bodies of local professionals. The secondary schools of a general character follow courses drawn up either by professional committees appointed by the Department of Education or by the school staff. Educational methods are worked out between government departments and the schools themselves, assisted by professional bodies. There is in Jamaica a recently established Schools Publications Branch working under the Ministry of Education.

Ministries and departments exercise control through personal contact with the schools, and through the boards of governors and heads of schools. Heads of schools are freely in charge of the day-to-day operation.

Supervision and inspection of academic schools is performed by men and women of good academic and professional qualifications and educational experience; such persons are recruited from school staffs or borrowed from the University College.

Public funds are provided by votes of the legislature in the case of government schools. When not directly administered by ministry officials sums of money are paid direct to governing bodies. Building and equipment are financed in accordance with specific regulations; generally speaking, assisted schools may be as well provided as government schools. In all academic secondary schools and in some technical schools pupils are required to pay nominal fees. Pupils may be assisted in the provision of books, mid-day meals, boarding, and in regard to general maintenance. Scholarships and free places are provided in each territory to the extent that may be possible.

As regards buildings and equipment, standards are high though varying with the circumstances of schools.

In a large number of non-academic schools free milk and

biscuits are distributed and some medical assistance is provided; most schools of this kind in Jamaica have a lunch canteen where hot meals are served daily; some grammar schools also provide this service.

TYPES OF SECONDARY EDUCATION

The following types exist: grammar schools; senior departments of elementary or all-age schools, or separate senior schools of the same kind where the education is general; vocational and technical schools. In the larger territories evening classes are available, where a wide range of subjects both academic and practical is provided.

In Jamaica and Barbados the school year begins in September with breaks at Christmas and Easter and a long summer vacation; in Trinidad the school year begins in January and there are two terms of 12 weeks and one of 13. Generally there are five days to the week. The length of the school day varies; school opening time ranges between 8 and 9.15 a.m. and the closing hours range from 1 to 3.30 p.m.

General secondary schools

The selection of grammar school entrants, the nature of the course provided and the destination of leavers have already been mentioned.

In Barbados grammar schools may be of the first or second grade. First grade schools have highly qualified staff and offer wide sixth form courses. In Trinidad an intermediate school takes some pupils beyond the general training associated with elementary schools, up to the Cambridge Oversea School Certificate.

The bulk of secondary education in the West Indies consists of senior (elementary) schools or departments which provide education of a general kind. An increasing number of such schools are developing academic sides for the brighter pupils where training leading either to a local certificate or to an overseas General Certificate of Education in a limited number of subjects may be possible. Growing attention is also being paid to the provision of courses in practical subjects including agriculture. There are a few vocational schools with a rural or a technical bias. These schools aim at standards equivalent to the overseas GCE. The use of individual record cards is growing.

The University College of the West Indies trains teachers for the secondary schools, the Department of Education offering a diploma course which is open to graduates.

Vocational and technical schools

In Trinidad, Jamaica and Barbados there are expanding opportunities for technical and commercial training. Part-time training is available through day release and evening classes. In Trinidad a peripatetic instructor takes classes for day release apprentices. There are schools for agriculture which embrace both secondary and post-secondary levels of work. Domestic science training is provided at vocational, secondary and professional (teaching) levels. Big private industrial concerns provide their own training systems. There is widespread use of informal apprenticeship, though provision for legalized apprenticeship under modern terms exists in the larger communities.

Teacher training schools

Teachers' colleges recruit students who have obtained an overseas School Certificate or some local equivalent and are therefore largely outside the scope of the present report. In some parts there is also a pupil-teacher system for teachers recruited direct from elementary schools.

Other specialized schools

There are one or two institutions where part-time tuition is given, e.g., the Jamaica School of Art and Crafts; similar courses (in drama, public speaking, literacy, academic subjects, etc.) are provided in various adult education schemes.

Out-of-class activities

There are numerous school clubs supervised by teachers and plenty of free experimentation in the participation of pupils in school government. The prefect system is widely used. Physical education and games are provided generally on an adequate scale and performance is often of a high order.

TRENDS AND PROBLEMS

Consideration is now being given to certain changes in the control of the overseas School Certificate examinations which in due course may have important repercussions upon the curriculum.

Local production of textbooks suitable for West Indian pupils is gradually increasing.

There is a growing realization of the need for schools to adjust themselves to the demands of political and constitutional changes.

[*Text prepared by the Ministry of Labour and Social Affairs, Port of Spain, Trinidad, in June 1959.*]

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STATISTICS: BARBADOS

Population (mid-year 1958 estimate): 235,000.
Area: 166 square miles; 431 square kilometres.
Population density: 1,416 per square mile; 545 per square kilometre.

Summary of school statistics, 1953–57. In 1956/57, enrolment in all educational institutions from primary to university level numbered some 41,000 pupils, representing about 18 per cent of the total population. Of total enrolment, over 90 per cent were pupils in primary schools, 8 per cent in general secondary schools, 1 per cent in vocational training centres and the remaining 1 per cent in higher educational institutions including the teacher training college. Girls made up about 49 per cent of primary school enrolment and one third of general secondary school enrolment. There is no recent information available on numbers of teachers employed at the different levels of education. Compared with 1953/54 enrolment had increased by 12 per cent in primary schools in 1957/58. Enrolment in general secondary schools appears to have declined substantially over the period under review. The number of students training to be teachers, however, increased from 34 in 1953/54 to 100 in 1956/57. (See table.)

Educational finance, 1957. The total reported expenditure on education in 1957 was 3,525,000 British West Indian dollars of which $2,727,000 was for recurring and $798,000 for capital expenditure. There was in addition a financial contribution to education from metropolitan government funds but no details are available. Official exchange rate: 1 British West Indian dollar = 0.583 U.S. dollar.

Sources. Barbados: Department of Education, annual reports. United Kingdom: Information transmitted to the United Nations on Non-Self-Governing Territories.

BARBADOS: SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools						
	Total	**1957/58**	...	...	...	[2]**37 978**	[2]**18 479**
	,,	1956/57	[1]116	...	...	[2]36 755	[2]17 945
	,,	1955/56	[1]120	...	...	[2]36 003	[2]17 699
	,,	1954/55	[1]124	...	...	[2]35 977	[2]17 688
	,,	1953/54	125	[4]1 044	[4]543	[2]34 005	[2]16 718
Secondary *General*	Secondary schools						
	Total	**1957/58**	...	...	...	...	...
	,,	1956/57	14	...	...	[3]3 431	[2]1 141
	,,	1955/56	[5]10	...	...	[3]3 249	[2]1 071
	,,	1954/55	[5]10	...	...	[3]3 159	[2]1 058
	,,	1953/54	19	...	...	[2]4 496	[2]2 050
Vocational	Vocational training centres, public						
	Total	**1957/58**	...	...	...	...	...
	,,	1956/57	3	...	...	280	...
	,,	1955/56	5	...	...	205	...
	,,	1954/55	4	...	...	204	...
	,,	1953/54	4	...	...	170	...
Higher *Teacher training*	Erdiston College, public						
	Total	**1957/58**	**1**	...	...	...	...
	,,	1956/57	1	...	...	100	...
	,,	1955/56	1	...	...	98	49
	,,	1954/55	1	...	...	36	18
	,,	1953/54	1	3		34	18
General and technical	Codrington College						
	Total	**1957/58**	**1**	...	...	...	...
	,,	1956/57	1	...	...	42	...
	,,	1955/56	1	...	...	...	...
	,,	1954/55	1	...	...	30	–
	,,	1953/54	1	...	...	28	–

1. Public schools only.
2. Enrolment in senior departments of primary schools is included under primary education.
3. Not including non-aided private schools.
4. Including secondary and vocational education.
5. Aided private schools only.

STATISTICS: JAMAICA

Population (mid-year 1958 estimate): 1,646,000.
Area: 4,677 square miles; 12,113 square kilometres.
Population density: 352 per square mile; 136 per square kilometre.

Summary of school statistics, 1953–57. Total estimated enrolment in public and aided primary and secondary schools in 1957/58 was about 254,000 pupils, representing some 16 per cent of the population. Data on unaided private schools are not available. Of these pupils nearly 95 per cent were in primary schools, under 5 per cent in general and teacher training secondary schools and about 1 per cent in technical secondary schools and agricultural centres. Girls made up half the enrolment at primary and general secondary schools and about three quarters of the enrolment in teacher training colleges. There were 566 students, of whom 202 were women, at the University College of the West Indies. Details of school teaching staff are incomplete; it appears that the pupil-teacher ratio in primary schools was unchanged at about 52 over the period 1953–57. In 1956/57 there were 559 teachers in all secondary schools of whom 60 per cent were women. The pupil-teacher ratio in 1956/57 was about 18 in general secondary and teacher training colleges and 23 in technical schools. Compared with 1953/54, enrolment in 1957/58 had increased by 10 per cent in primary schools, by 45 per cent in both general secondary schools and teacher training colleges and by 2 per cent in vocational education. (See Table 2.)

Examination results in secondary education, 1954/55. During 1954/55, the only year for which data are available, 892 students passed the Cambridge Oversea School Certificate, and 201 the Cambridge Higher School Certificate.

Educational finance, 1954. Total public expenditure on education in 1954 was 2,677,818 Jamaican pounds, or about £1.8 per inhabitant. Nearly 93 per cent of receipts (£2,485,029) were derived from territorial revenue, 5 per cent (£140,061) from United Kingdom grants, and the remaining 2 per cent (£52,728) from local authorities. About 12 per cent (£309,974) of the total spent was capital expenditure. Recurring expenditure by level and type of education is shown in Table 1.

Sources. Jamaica: Education Department, annual reports. United Kingdom: Information transmitted to the United Nations on Non-Self-Governing Territories; data supplied by the Colonial Office, London.

1. JAMAICA: EDUCATIONAL FINANCE, 1954
(in Jamaican pounds)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure[2]	**2 367 844**	**100.0**
Central administration	121 366	5.1
Primary education	1 160 001	49.0
Secondary education	199 250	8.4
Vocational education	186 405	7.9
Teacher training	41 516	1.8
Higher education	191 370	8.1
Scholarships (local and study abroad)	36 681	1.6
Other recurring expenditure	[3]431 255	18.2

1. Official exchange rate: 1 Jamaican pound = 2.80 U.S. dollars.
2. Public expenditure only.
3. Including £229,757 for board and lodging.

2. JAMAICA: SUMMARY OF SCHOOL STATISTICS, 1953–57[1]

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools						
	Total	**1957/58**	**707**	**4 650**	...	***241 000**	**123 000**
	,,	1956/57	705	*4 500	*3 650	*233 000	*119 100
	,,	1955/56	702	...	...	*225 000	*115 000
	,,	1954/55	721	4 339	3 425	222 018	113 655
	,,	1953/54	713	4 233	3 343	218 513	112 455
Secondary *General*	Secondary schools						
	Total[1]	**1957**/58	**34**	...	...	***11 500**	***6 600**
	,,	1956/57	28	*488	*285	*9 000	*5 000
	,,	1955/56	29	...	...	*8 645	*4 727
	,,	1954/55	37	488	280	8 174	4 466
	,,	1953/54	28	423	251	7 914	4 670
Vocational	Technical and agricultural schools						
	Total	**1957**/58	...	...	...	**1 890**	**707**
	,,	1956/57	7	71	23	1 655	648
	,,	1955/56	...	...	...	...	...
	,,	1954/55	...	...	...	1 701	667
	,,	1953/54	9	...	...	1 855	686

1. Data relating to public and aided private schools only.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Second. [cont.]							
Teacher training	Teacher training colleges						
	Total[2]	**1957/58**	...	...	...	**(460)**	**(350)**
	,,	1956/57	...	...	...	(454)	(347)
	,,	1955/56	...	...	...	(355)	(242)
	,,	1954/55	...	...	...	(340)	(231)
	,,	1953/54	4	...	...	(317)	(209)
Higher	University College of the West Indies						
	Total	**1957/58**	**1**	...	...	**566**	**202**
	,,	1956/57	1	...	...	494	169
	,,	1955/56	1	...	...	...	...
	,,	1954/55	1	...	...	...	...
	,,	1953/54	1	...	...	301	90

2. Data on teacher training are included with general secondary schools.

STATISTICS: LEEWARD ISLANDS (ANTIGUA, MONTSERRAT, ST. KITTS-NEVIS-ANGUILLA)[1]

Population (mid-year 1958 estimate): 129,000.
Area: 356 square miles; 921 square kilometres.
Population density: 362 per square mile; 140 per square kilometre.

Summary of school statistics, 1953–57. Total enrolment in all schools in Antigua, Montserrat and St. Kitts-Nevis-Anguilla was about 29,218 in 1957 representing 23 per cent of the estimated population. Girls made up about half the total enrolment in primary and general secondary schools. The teaching staff, including pupil teachers, numbered at least 735 in primary schools in 1956, the average pupil-teacher ratio being about 37. Two teacher training schools were reported in 1956 with 25 students, of whom 12 were women; data for 1957 are incomplete. (See Table 2.)

Examination results in secondary education, 1953–57. Details of candidates passing examinations are not complete for all years. From the figures available it appears that between 25 and 30 candidates pass the Cambridge Higher School Certificate each year and that the number of students awarded the Cambridge Oversea School Certificate increased from 87 to 130 between 1953/54 and 1956/57. Twenty-two teaching certificates were awarded in 1956/57. There were, in addition, a number of candidates for Matriculation Exemption, the General Certificate of Education of London University and examinations of the Royal School of Music.

Educational finance, 1956. Total expenditure on education in 1956 was 1,137,198 British West Indian dollars or about $9 per inhabitant. Nearly all this money was derived from territorial revenue, but approximately 7 per cent was contributed from United Kingdom funds and other sources. Capital expenditure amounted to about 3 per cent of the total spent. (See Table 1.)

Sources. Leeward Islands: Annual reports of the different Education Departments. United Kingdom: Information transmitted to the United Nations on Non-Self-Governing Territories.

1. For the British Virgin Islands, which are geographically part of the Leeward Islands but which have not joined the Federation of the West Indies, see pages 1319–20.

1. LEEWARD ISLANDS: EDUCATIONAL FINANCE, 1956 (in British West Indian dollars)[1]

A. RECEIPTS BY SOURCE

	Antigua	St. Kitts – Nevis – Anguilla	Montserrat	Total
Total receipts	**426 087**	**569 427**	**141 684**	**1 137 198**
Central Government	426 087	530 862	139 380	1 096 329
Territorial revenue	...	495 739	137 364	...
United Kingdom funds	...	35 123	2 016	...
Other sources	—	38 565	2 304	40 869

1. Official exchange rate: 1 B.W.I. dollar = 0.583 U.S. dollar.

B. EXPENDITURE BY PURPOSE

	Antigua	St. Kitts – Nevis – Anguilla	Montserrat	Total
Total expenditure	**426 087**	***569 427**	**141 684**	***1 137 198**
Recurring expenditure	426 087	534 340	141 684	1 102 111
Capital expenditure	—	*35 087	—	*35 087

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Antigua	St. Kitts – Nevis – Anguilla	Montserrat	Total	Per cent
Total recurring expenditure	**426 087**	**534 340**	**141 684**	**1 102 111**	**100.0**
Central administration	19 008	9 743	6 056	34 807	3.2
Primary education	340 907	382 563	94 692	818 162	74.2
Secondary education	36 565	86 217	33 300	156 082	14.2
Vocational education	5 431	6 014	–	11 445	1.0
Teacher training	9 900	9 450	4 766	24 116	2.2
Other education	14 276	40 353	2 870	57 499	5.2

2. LEEWARD ISLANDS: SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, Antigua	1957	41	332	227	[1]12 242	[1]6 002
	Primary schools, Montserrat	1957	16	[2]102	[2]79	3 304	1 638
	Primary schools, St. Kitts–Nevis–Anguilla	1957	...	...	...	[3]11 621	...
	Total	**1957**	[4]**57**	[4]**434**	[4]**306**	[5]**27 167**	**...**
	,,	1956	96	[5]738	[5]505	27 197	13 515
	,,	1955	94	[6]696	[6]470	[5]26 393	[5]13 195
	,,	1954	85	761	522	[5]25 872	...
	,,	1953	82	699	467	[5]25 650	[5]12 368
Secondary *General*	Secondary schools, Antigua	1957	6	77	56	[3]1 068	[3]675
	Secondary schools, Montserrat	1957	1	13	5	197	106
	Secondary schools, St. Kitts–Nevis–Anguilla	1957	5	...	...	[3]756	[3]433
	Total	**1957**	**12**	[4]**90**	[4]**61**	[6]**2 021**	[6]**1 214**
	,,	1956	12	[5]102	[5]63	2 571	1 466
	,,	1955	13	[4]84	[4]58	[5]2 507	[5]1 459
	,,	1954	12	116	74	2 224	1 311
	,,	1953	12	112	[7]70	2 181	1 287
Teacher training	Teacher training school, Antigua	1957	1	...	...	30	21
	Teacher training school, St. Kitts–Nevis–Anguilla	1957	...	...	...	...	...
	Total	**1957**	[8]**1**	**...**	**...**	[8]**30**	[8]**21**
	,,	1956	2	...	...	25	12
	,,	1955	2	[8]3	[8]2	22	10
	,,	1954	1	...	...	20	20
	,,	1953	1	...	...	16	16

1. Including 983 infants under 6 years (F. 488).
2. Including pupil teachers.
3. Public schools only.
4. Not including St. Kitts–Nevis–Anguilla.
5. Public schools only for St. Kitts–Nevis–Anguilla.
6. Public schools only for St. Kitts–Nevis–Anguilla and Antigua.
7. Not including Montserrat.
8. Antigua only.

STATISTICS: TRINIDAD AND TOBAGO

Population (mid-year 1958 estimate): 789,000.
Area: 1,980 square miles; 5,128 square kilometres.
Population density: 398 per square mile; 154 per square kilometre.

Summary of school statistics, 1953–57. Enrolment in 1957 in primary and secondary schools and teacher training colleges was about 183,100 pupils, representing some 23 per cent of the total population. Over 91 per cent of these pupils were enrolled in primary schools and 8 per cent in general secondary schools. Girls made up just under half the enrolment in primary schools and over 40 per cent in general secondary schools and teacher training colleges. The teaching staff in public and aided primary and secondary schools in 1957 numbered 5,129, over half being women. The average pupil-teacher ratio improved considerably over the period under review, being about 36 in primary schools and 26 in secondary schools in 1957, compared with nearly 41 in both types of schools in 1953. Compared with 1953, enrolment had increased in primary schools by 18 per cent and in general secondary schools by 35 per cent. (See Table 3.)

Examination results in secondary education, 1954–56. Candidates passing the Cambridge Oversea School Certificate numbered 1,452 in 1957, representing an increase of 20 per cent compared with 1954. There were also a considerable number of candidates for the Cambridge Higher School Certificate, the General Certificate of Education and for City and Guilds of London examinations. The number of students obtaining teaching certificates in 1957 was 12 per cent higher than in 1954. (See Table 2.)

Educational finance, 1956. Total expenditure on education in the fiscal year beginning in January 1956 amounted to 12,870,584 British West Indian dollars, representing about $17 per inhabitant. Of this sum $12,789,926 was derived from territorial revenue; under 1 per cent of the total was contributed by the Colonial Development and Welfare Fund ($75,613) and the Board of Industrial Training ($5,045). Capital expenditure was about 4 per cent ($455,958) of the total spent. The distribution of recurring expenditure by level and type of education is given in Table 1.

Sources. Trinidad and Tobago: Education Department, administration report 1956. United Kingdom: Information transmitted to the United Nations on Non-Self-Governing Territories; data supplied by the Colonial Office, London.

1. TRINIDAD AND TOBAGO: EDUCATIONAL FINANCE, 1956
(in British West Indian dollars)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure[2]	**12 414 626**	**100.0**
Central administration	347 868	2.8
Primary education	8 985 708	72.4
Secondary education	1 465 467	11.8
Vocational education	321 521	2.6
Teacher training	471 047	3.8
Other education	823 015	6.6
Scholarships	304 554	2.53
Adult education	32 140	0.26
Education extension courses	101 132	0.81
Subventions	385 189	3.10

1. Official exchange rate: 1 B.W.I. dollar = 0.583 U.S. dollar.
2. Expenditure by Central Government and Board of Industrial Training only.

2. TRINIDAD AND TOBAGO: EXAMINATION RESULTS IN SECONDARY EDUCATION, 1954–57

Type of diploma or certificate granted	School year			
	1954	1955	1956	1957
Cambridge Oversea School Certificate	1 206	...	1 495	1 452
Cambridge Higher School Certificate	131	...	165 (F. 50)	146
City and Guilds of London Institute	118	160	194	175
Teaching Certificate	92 (F. 44)	102 (F. 43)	109	103

3. TRINIDAD AND TOBAGO: SUMMARY OF SCHOOL STATISTICS, 1953–57[1]

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary[2]	Primary schools						
	Total	**1957**	**412**	**4 546**	**2 410**	**167 328**	**82 152**
	,,	1956	555	4 154	2 104	*162 291	79 715
	,,	1955	541	3 951	1 946	154 959	75 281
	,,	1954	495	3 782	1 784	144 622	70 472
	,, [3]	1952/53	519	3 532	1 677	142 378	70 052
Secondary							
General	Secondary schools						
	Total	**1957**	**37**	**575**	**261**	**15 294**	**6 661**
	,,	1956	37	326	124	14 054	6 776
	,,	1955	34	496	246	12 561	5 954
	,,	1954	33	474	220	11 387	5 332
	,,	1953	30	277	126	11 284	5 280
Vocational	Technical institute, public						
	Total	**1957**	**1**	**8**	–	**222**	–
	,,	1956	1	8	–	180	–
	,,	1955	1	8	–	131	–
	,,	1954	1	7	–	60	–
	,,	1953	1	4	–	85	–
Higher							
Teacher training	Teacher training colleges						
	Total	**1957**	**3**	**19**	**9**	**262**	...
	,,	1956	3	19	9	261	106
	,,	1955	3	18	9	240	95
	,,	1954	3	16	7	221	95
	,,	1953	3	16	7	218	100
General and technical	Imperial College of Tropical Agriculture						
	Total	**1956**	**1**	...	...	**93**	–
	,,	1955	1	...	...	83	–
	,,	1954	1	...	...	83	–
	,,	1953	1	...	...	84	–
Special	Orphanages	1956	2	...	...	820	...
	Industrial schools for youth offenders	1956	2	...	...	102	...
	Total	**1956**	**4**	...	...	**922**	...
	,,	1955	4	...	...	1 321	...
	,,	1954	4	...	...	1 284	...
	,,	1953	4	...	...	1 152	...

1. Public and aided private schools only.
2. Including intermediate schools and special schools for handicapped children.
3. School year beginning 1 September 1952 ending 31 December 1953.

STATISTICS: WINDWARD ISLANDS (DOMINICA, GRENADA, ST. LUCIA, ST. VINCENT)

Population (mid-year 1958 estimate): 330,000.
Area: 826 square miles; 2,138 square kilometres.
Population density: 400 per square mile; 154 per square kilometre.

Summary of school statistics, 1953–57. Total enrolment in primary and secondary schools in 1957 numbered 73,156 representing over 22 per cent of the estimated population. There were in addition pupils in certain private unaided schools for which details are not available. Of the total enrolled, over 94 per cent were in primary, 5 per cent in general secondary and less than 0.5 per cent in teacher training centres. Girls made up about half the enrolment in primary and secondary schools and nearly two thirds of enrolment in teacher training centres. The teaching staff in primary and general secondary schools numbered 1,793 in 1957, of whom 57 per cent were women. The average pupil-teacher ratio was 43 in primary and 22 in general secondary schools. Compared with 1953 enrolment had increased by 15 per cent in primary schools, by 33 per cent in general secondary schools and by 124 per cent in teacher training centres. (See Table 1.)

Examination results in secondary education, 1953–57. The information available on examination results is very incomplete for recent years. Nearly 200 pupils passed the Cambridge Oversea School Certificate in 1957 and 33 the Cambridge Higher School Certificate. These results exclude those for St. Lucia, which are not available. Twenty-four candidates from St. Vincent took the Royal Society of Arts examination in 1957 compared with only four in 1953. Teaching certificates were awarded to 84 candidates in 1953/54, the latest year for which complete data are available.

Educational finance, 1957. Total expenditure on education in 1957 was 2,358,736 British West Indian dollars, or approximately $7 per inhabitant. It appears from the limited data available that a major proportion of revenue for education was contributed from territorial resources. In Dominica, United Kingdom funds represented 7 per cent of the total spent and voluntary agencies contributed 13 per cent. In St. Vincent, over 99 per cent of the expenditure came from territorial revenues. The distribution of expenditure by level and type of education is available only for Dominica and St. Vincent. The figures are given in Table 2.

Sources. Windward Islands: Annual reports of the different Education Departments. United Kingdom: Information transmitted to the United Nations on Non-Self-Governing Territories.

1. WINDWARD ISLANDS: SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, Dominica	1957	57	316	219	12 988	6 697
	Primary schools, Grenada	1957	54	396	126	19 487	9 508
	Primary schools, St. Lucia	1957	53	431	318	[1]17 549	[1]8 975
	Primary schools, St. Vincent	1957	48	[2]468	[2]260	[1]18 855	[1]9 192
	Total	**1957**	**212**	**[2]1 611**	**[2]923**	**[1]68 879**	**[1]34 372**
	,,	1956	208	[2]1 566	[2]897	[1]65 638	[1]32 512
	,,	1955	199	[2]1 680	[2]986	[1]63 689	[1]31 535
	,,	1954	200	[2]1 461	[2]844	[1]62 060	[1]30 467
	,,	1953	194	[2]1 352	[2]699	[1]59 642	[1]29 559
Secondary *General*	Secondary schools, Dominica	1957	4	50	29	1 087	566
	Secondary schools, Grenada	1957	6	63	28	1 399	708
	Secondary schools, St. Lucia	1957	2	33	17	710	379
	Secondary schools, St. Vincent	1957	4	36	18	823	396
	Total	**1957**	**16**	**182**	**92**	**4 019**	**2 049**
	,,	1956	16	182	94	3 791	2 079
	,,	1955	16	[3]150	[3]76	3 542	1 875
	,,	1954	15	155	83	3 210	1 685
	,,	1953	15	146	70	3 031	1 590
Teacher training	Teacher training centres, St. Vincent						
	Total	**1957**	**3**	**...**	**...**	**258**	**151**
	,,	1956	3	...	...	211	121
	,,	1955	3	...	...	163	82
	,,	1954	3	...	...	104	60
	,,	1953	3	...	...	115	64

1. Public and aided schools only for St. Lucia. In 1957, there were 21 unaided private schools.
2. St. Vincent includes pupil teachers.
3. Not including St. Lucia.

2. WINDWARD ISLANDS: EDUCATIONAL FINANCE, 1957 (in British West Indian dollars)[1]

A. RECEIPTS BY SOURCE

	Dominica	Grenada	St. Lucia	St. Vincent	Total
Total receipts	***560 938**	**622 000**	**454 000**	**721 798**	**2 358 736**
Central Government	487 381	...	...	719 309	...
Territorial revenue	448 029			715 387	
United Kingdom funds	39 352			3 922	
Local authorities	196	...	...	1 265	...
Voluntary agencies	*73 361	...	...	1 224	...

1. Official exchange rate: 1 B.W.I. dollar = 0.583 U.S. dollar.

B. EXPENDITURE BY PURPOSE

	Dominica	Grenada	St. Lucia	St. Vincent	Total
Total expenditure	***560 938**	**622 000**	**454 000**	**721 798**	**2 358 736**
Recurring expenditure	*525 353	...	...	601 720	...
Capital expenditure	35 585	...	...	120 078	...

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Dominica	Grenada	St. Lucia	St. Vincent
Total recurring expenditure	**[2]409 696**	...	...	**601 720**
Central administration	20 639	...	...	20 662
Primary education	301 549	...	...	449 709
Secondary education	21 275	...	...	75 394
Vocational education	—	...	...	18 344
Teacher training	1 105	...	...	15 770
Other recurring expenditure	[3]65 128	...	...	21 841

2. Not including an amount of $115,657 for which the distribution is not known.

3. Including $22,012 for scholarships (local and study abroad).

CYPRUS

THE EDUCATIONAL SYSTEM

Education is the responsibility of the Central Government. It is administered by the Education Department, all the officers of which are government officials, in accordance with the provisions of the Elementary Education Law Cap. 203 of 1933, the English School Law Cap. 204 of 1935, and the Secondary Education Law Cap. 205 of 1936, and the regulations made under these three laws.

The provision of education in Cyprus is necessarily affected by the mixed population of the Island. This consists of Greek-Cypriots (78.8 per cent), Turkish-Cypriots (17.5 per cent), Maronites (0.5 per cent), Armenians (0.94 per cent) and others. At primary education level community schools are divided between these four communities. There are in addition a number of private elementary schools, some of them run by religious foundations, which accept children from all communities. At secondary level, there are Greek-Cypriot and Turkish-Cypriot schools, no Maronite schools, one Armenian school and a number of government and religious secondary schools which are inter-communal.

Pre-elementary school education is entirely in private hands, the age group 3–6 being covered by private nursery schools and kindergartens. Primary education, which covers the age range 6–12, is primarily based on a community system, separate schools, nominated school committees, and educational advisory bodies being maintained in connexion with Greek-Cypriot, Turkish-Cypriot, Maronite and Armenian education. Secondary education covers the age range 12–18, although older pupils may be found in the secondary schools, and again this is primarily organized on a community basis, with the qualifications noted above. The only post-secondary educational institution in Cyprus is the Teacher Training College, which accepts students who have completed a secondary school course and obtained certain qualifications for a 2-year course of training as elementary schoolteachers. Cypriot students who wish to continue their education beyond secondary school level, and who do not intend to train as elementary schoolteachers, have to go abroad to do so.

There is no compulsory education.

THE DEVELOPMENT OF SECONDARY EDUCATION

The history of elementary education in Cyprus since 1878 shows a steady advance of centralization, with its

accompanying homogeneity and progress. The history of secondary education is, however, very different. Prior to the British occupation there was on the Greek-Cypriot side a central secondary school with branches in Limassol and Larnaca and one Turkish-Cypriot secondary school in Nicosia. The Order of the Sisters of St. Joseph of the Apparition had also established a school in Larnaca in 1844.

The Pancyprian Gymnasium in its present form replaced the central secondary school of Nicosia in 1893, and its establishment was followed in due course by the establishment of Greek-Cypriot community secondary schools in the district towns of Limassol, Famagusta, Larnaca, Kyrenia and Paphos; and the last 50 years has seen a steady increase in the number of Greek-Cypriot secondary schools in towns and in the larger villages. On the Turkish-Cypriot side, a secondary school for girls was founded in Nicosia in 1901 and thereafter there was a similar expansion of Turkish-Cypriot secondary education in the larger towns and villages. A number of private schools, some with a commercial bias, were also founded in the latter part of the nineteenth century. These included the English School in Nicosia. In the early years of the twentieth century the Franciscans founded the Terra Santa schools in the main towns, and the missionaries of the Reformed Presbyterian Church of America established the American academies, one in Nicosia and one at Larnaca. In general the Government had little say in managing secondary schools.

The first step in the centralization of secondary education was taken in 1936 when the Secondary Education Law Cap. 205 was passed. Details of this law are given below. The next step was taken by the Government in 1952 when an amendment was made to the Secondary Education Law comprising an offer to every secondary school's governing body for their school to become a public-aided secondary school. This meant that the Government would pay the salaries and pensions of the teachers out of the public revenue, but that schools could fix fees higher than a given maximum.

Administration

Whereas the elementary schools are largely homogeneous in methods, finance, staffing, control and physical conditions, almost every secondary school is, for practical purposes, a law unto itself. A school may be in one grouping for curriculum, another for method of governing, and yet a third for finance, the only common denominator being that they all cater for children between the ages of 12 and 18. This wide variety has to be borne constantly in mind.

Planning and policy. Subject to the control exercised by the Education Department under the Secondary Education Law, noted below, planning and organization for secondary education is in the hands of the various school committees, except of course for government schools which are directed by the Department of Education. Most of the Greek-Cypriot schools are aligned to the organization of secondary schools in Greece so as to obtain recognition by the Greek Ministry of Education. They follow exactly the lines laid down by the Ministry in matters of curriculum, methodology, textbooks and syllabuses, and a Cypriot pupil who obtains the leaving certificate of a fully recognized gymnasium in Cyprus is admitted to Athens University without further examination. On the Turkish-Cypriot side there is a similar alignment with Turkey; the schools are recognized by the Turkish Ministry of Education, and follow closely the Turkish pattern. Private schools have a wide variety of curriculum and approach, on a purely individual basis.

Control. The Secondary Education Law Cap. 205 requires every secondary school to be registered by the Director of Education, and every secondary school teacher to be licensed by him. Before any school can be registered it must meet certain standards as regards physical conditions, staffing and financial arrangements. The director must also satisfy himself that there is need for such a school. Similarly, academic and professional qualifications are required before a teacher can be granted a licence to teach in secondary schools.

In the main towns, community secondary schools are administered by committees appointed by the Governor, and the powers and duties of these committees are prescribed by law. In community schools outside the main towns, and in all private schools, the control of the school is left in the hands of the committee concerned, subject to their maintenance of the standards required by law.

Government schools are controlled from the Department, normally through a board of management nominated by the Governor.

Supervision and inspection. There is at present a Chief Inspector of Schools, who deals with Greek-Cypriot and inter-communal schools, and a Chief Inspector of Turkish Schools. Each of these has an elementary school inspectorate and a secondary school inspectorate. The total strength of the Inspectorate of the Education Department is at present 40.

Inspectors are normally recruited from the teaching profession; some have United Kingdom qualifications, both graduate and non-graduate, and a number of specialist inspectors have graduate qualifications obtained in Greece and Turkey.

The function of the Inspectorate has been for years past the raising of the standard of teaching in the schools by regular visits and advice to teachers, combined with an elaborate system of vacation courses, the results of which are followed up in the schools. There has been, since 1956, a system of general inspections of schools, with the object of assessing the work of the school as an educational unit, in all its aspects.

Finance. Government inter-communal schools are financed entirely by the Central Government, which supplies the buildings, appoints and pays the teachers, and meets the running costs of the schools. Government assistance is given to secondary schools in two ways. Ten secondary schools are in receipt of an annual block grant from the Government, which was fixed in 1948. This is a limited form of financial assistance. The school committee appoints and pays its own teachers and is responsible for its own buildings and its running costs. Another 10 schools are public-aided secondary schools, where the Government

appoints and pays the teachers, and the school committee supplies and maintains the buildings and meets the running costs of the school.

Except in the case of government inter-communal schools, buildings and equipment are financed by the school committee concerned. Except in the government inter-communal schools and the public-aided secondary schools, teachers are appointed and paid by the different school committees.

In Cyprus all secondary education is fee paying, the amount of the fees and their method of computation varying widely between one school and another. Assistance to parents is given in some schools and not in others. Here again, there is no uniform system. In many of the Greek-Cypriot secondary schools there is a sliding scale of fees applied according to the parents' means, and in certain cases free places may be provided. In government inter-communal schools and in public-aided secondary schools 20 per cent of all school places are free.

Buildings and equipment. The standard of building and equipment varies greatly, although the most modern schools compare favourably with schools anywhere in the world. In recent years in particular, as a result of the political situation in Cyprus, overcrowding has become general. Another general fault is the lack of provision of practical rooms, special subject rooms, etc.

TYPES OF SECONDARY EDUCATION

The pupil who has completed the primary school proper either finishes his school career at that point or proceeds to a secondary school. In the latter event he has two main choices: either to go to a secondary school of his own community or to go to one of the inter-communal schools run by the Government or by the various religious foundations. A Greek-Cypriot, if he opts to attend a Greek-Cypriot community school, has a choice of two main types of secondary school. The first, and by far the most common, is the Greek gymnasium; alternatively, he may go to a commercial school, the majority of which in Cyprus are privately run.

A Turkish-Cypriot, if he elects to go to a Turkish-Cypriot secondary school, will follow the academic curriculum of the *orta okul* for the first three years of his course; thereafter, for a further three years, he has a choice of the *lycée* course, or the so-called 'college' course (described below).

An Armenian may, after leaving primary school, go to the Melkonian Institute, the only Armenian secondary school in the Island. This is essentially a Middle East school, offering a general education for Armenians from all countries of the Middle East.

The primary school leaver who does not propose to attend one of the secondary schools of his own community has three choices. He may attend one of the two government English schools, which offer a 6–7 year course on English grammar school lines leading to the local Cyprus Certificate of Education and working on to the Advanced level of the General Certificate of Education. Alternatively, he may attend one of the four government technical schools, now in process of development, which have both academic and trade streams. The third choice for the primary school leaver is attendance at one of the secondary schools run by religious foundations. These have no common denominator in curriculum and syllabus, although some of them now provide courses leading to the examinations of the Cyprus Certificate of Education. They offer a general education, in some cases a certain amount of commercial studies, aimed neither at Cyprus conditions, nor at specific external examinations.

All the types of secondary education mentioned above are full-time courses. Part-time secondary education consists only of evening classes usually in specific subjects of the Cyprus Certificate of Education or the General Certificate of Education run by the Government.

The organization of the secondary school year varies from school to school, even within the same community, as terms and holidays are frequently adjusted to meet local conditions. Broadly speaking, secondary schools begin the school year at various times between early September and early October, and close between mid-June and early July for the summer vacation. Greek-Cypriot, Armenian and inter-communal schools work a three-term year, with breaks at Christmas and Easter; the Turkish secondary schools work a two-term year with a break normally in February. Holidays vary from school to school; these are most often religious, and are affected by the number of Saints' days celebrated in the Island. In most cases schools in Cyprus work mornings only, but there is an increasing tendency to introduce afternoon classes, or at least afternoon extra-curricular activities.

General secondary schools

Greek gymnasia. These are patterned on the Greek gymnasia with certain minor adaptations to Cyprus conditions. Their aim is to provide a full general education. Pupils are now admitted without any process of selection. There is no grouping in courses, classes or streams by ability or aptitude.

The present curriculum of one of the largest gymnasia in the Island is shown in the first table on page 1338.

Teaching in the gymnasia is normally in Greek, the approach being theoretical and academic, and the emphasis being on memory work. Attainment testing is by daily oral examination, for which a mark is recorded each day, and three written examinations per annum. Reports on pupils are submitted to parents at a meeting, where parents may discuss particular points with staff. Promotion is in accordance with the detailed regulations of the Greek Ministry of Education.

A number of gymnasia attempt to supply elementary commercial education. This does not take the form of re-alignment of the curriculum but of the addition to it of, say, three periods of book-keeping per week and two periods of typewriting in each of the top two classes.

Greek commercial schools. These schools do not set out to be vocational; rather are they bilateral in character, and in most cases have a gymnasium stream. There is one such community school, the Pancyprian Commercial Lyceum in Larnaca, the other commercial schools being under private

TIME-TABLE FOR GREEK GYMNASIUM
(in periods per week)

Subject	1	2	3	Classical section 4	5	6	Practical section 4	5	6
Religion	1	1	1	2	2	2	1	1	1
Ancient Greek	6	6	6	7	7	7	4	5	4
Modern Greek	3	3	3	3	3	3	2	2	2
Latin	–	–	2	2	2	2	–	–	–
English	6	6	7	7	6	6	6	6	6
History	2	2	2	2	2	4	2	2	3
Philosophy	–	–	–	–	2	2	–	1	1
Mathematics	3	3	3	3	3	3	7	6	7
Cosmography	–	–	–	–	–	1	–	–	1
Science	2	–	–	–	3	3	5	6	7
Biology	–	–	–	2	–	–	2	–	–
Zoology	–	–	2	–	–	–	–	–	–
Botany	–	2	–	–	–	–	–	–	–
Geology	–	–	–	–	–	–	1	1	–
Hygiene	–	–	–	–	1	–	–	1	–
Gymnastics	2	2	3	3	3	3	2	2	2
Handwriting	2	1	1	1	1	–	2	2	2
Music	1	1	1	–	–	–	–	–	–
Domestic science (girls only)	2	2	2	2	2	2	–	–	–

management. The curriculum of one of the chief private commercial schools includes religion, Greek (ancient and modern), Latin, English, French, mathematics, commercial subjects, science, geography, history, typewriting, and physical education. Commercial subjects and typewriting are taken only in the last three years of the 6-class course.

Turkish schools. The first three years in all Turkish secondary schools in the Island are based on the curriculum of the Turkish *orta okul*, modified to include English and sometimes Greek. The second three years of the secondary course follows in some cases the Turkish *lycée* curriculum with its literature and science streams. Most of the Turkish secondary schools however make provision for courses specially adapted to Cyprus needs, which are called 'college' courses. These prepare pupils for the government examinations, or for the General Certificate of Education examinations of London University, or give a 3-year commercial education. In no cases are they specialized commercial schools; the aim is rather to give a broad general education starting on traditional Turkish academic lines, and later developing according to the needs of the pupils.

Selection to the Turkish secondary schools is by entrance examination. There is a wide range of subjects. The level to which they are taught in the *lycée* section is that of the Turkish *Olgunluk* examination, the entrance examination for Turkish universities. The aims of the 'college' courses are specified above.

Teaching methods vary widely in the Turkish schools; in the *orta okul* and *lycée* parts of the school the formal methods of the original *lycée* are in common use, but a variety of methods is to be seen on the college side. Direction and guidance is generally given in the Turkish secondary schools by senior masters in charge of subjects, who occupy posts of special responsibility.

A sample curriculum of one of the major 6-class Turkish secondary schools (*lycée* section) follows.

TIME-TABLE FOR TURKISH SECONDARY SCHOOL
(in periods per week)

Subject	Class 1	2	3	4	Class 5 Science	Class 5 Literature	Class 6 Science	Class 6 Literature
Lycée section								
Turkish	5	4	4	5	4	5	3	6
English	8	8	8	8	8	8	8	8
History	2	2	2	2	2	2	2	3
Geography	2	2	1	2	2	2	2	2
Civics	1	1	1	–	–	–	–	–
Mathematics	5	4	4	5	7	4	7	2
Biology	3	3	2	3	2	2	1	–
Physics	–	3	3	3	3	2	4	2
Chemistry	–	–	2	3	3	2	3	1
Agriculture	1	1	1	–	–	–	–	–
Commerce	1	1	1	–	–	–	–	–
Writing	1	–	–	–	–	–	–	–
Drawing	1	1	1	–	–	–	–	–
Handicraft	–	1	1	–	–	–	–	–
Physical training	1	1	1	1	1	1	1	1
Music	1	1	1	2	2	2	1	1
History of art	–	–	–	–	–	2	–	1
Psychology	–	–	–	–	2	2	–	–
Philosophy	–	–	–	–	–	–	–	2
Logic	–	–	–	–	–	–	1	2
Sociology	–	–	–	–	–	–	2	2
Astronomy	–	–	–	–	–	–	1	1

Schools run by religious foundations. It is difficult to give any general description of these schools as they have no common factor. Their aim is a general education of the type considered desirable by the religious foundation concerned, with varying degrees of adaptation to local conditions and requirements. English and French tend to be stressed, together with religion, and, in certain cases, some pre-vocational commercial education.

Government inter-communal schools. There are in Nicosia three schools which do not fall in any of the above categories. The junior school is a school which accepts children of all nationalities in order to prepare them for the Common Entrance examination for 'public schools' in the United Kingdom. The English School for Boys and the English School for Girls in Nicosia accept pupils of all communities for a secondary education on English grammar school lines up to the Advanced level of the London General Certificate of Education (GCE). The language of instruction in the first two classes is the vernacular (Greek or Turkish) and thereafter English. The curriculum approximates to that of an English grammar school, due allowance being made for the native languages of the pupils and Cyprus conditions.

Recruitment and selection of pupils is by entrance examination, on a competitive basis. Within the schools pupils are grouped in streams according to ability and aptitude and in certain subjects the system of 'sets' is in operation. In general, teaching methods are those at present in use in the United Kingdom.

Written examinations are held three times a year, once at the end of each term, and reports based on the work of that term and including the written examination, are sent to parents. In addition, there is a system of periodic written

tests on a subject basis. Promotions are made by the headmaster on the advice of the form master concerned, and after consultation with class teachers.

Teaching staff. In the Greek schools, the general aim is to have teachers who have qualified at Athens University to take gymnasium classes. Owing to the shortage of teachers, however, school committees employ a number of teachers with lower qualifications, and some private schools have teachers with little more than a secondary education.

In the Turkish secondary schools the qualifications of teachers are generally satisfactory; a considerable proportion of the teachers are Turkish nationals seconded by the Turkish Ministry of Education.

In the religious schools some of the teaching is done by members of the religious institutions concerned; lay teachers are also employed.

In the Government inter-communal schools all specialist teaching is by teachers who hold university degrees.

The prospects of a teaching career vary according to the type of school in which a teacher is employed. In government schools the teachers are government officials, and the posts are permanent and pensionable; in the majority of Turkish schools, the teachers are also appointed by the Government and hold pensionable posts. In Greek schools teachers are appointed by the school committee concerned, and if the school receives a grant-in-aid from the Government, they qualify for a gratuity at the end of their service; if they are teaching in a school recognized by the Greek Government, however, they may qualify for a pension from that Government.

Vocational and technical schools

Most of the secondary school work which might loosely be called pre-vocational takes place in schools already listed under 'General secondary schools' above. A number of these are pre-vocational in that they prepare pupils for the examinations leading to entry to the Civil Service, or for the qualifications for entry to universities in Greece, Turkey or the United Kingdom, or give elementary commercial training to the boy or girl going into office employment.

The only specialized vocational training is in a number of government institutions. It is limited by the number and size of the schools concerned and by the recent development (three years ago) of the system of technical education now in use. In addition, there is a strong tradition of academic and classical learning in Cyprus, and a decided preference on the part of parents and children for the academic type of education. The tendency of commercial schools to develop academic streams has already been noted.

Commercial schools. These have already been dealt with under the section 'General secondary schools' above, as they are not strictly vocational or pre-vocational. Most private commercial schools offer evening classes.

Government technical schools. These are now in their third year of development, and have not yet reached the stage of full courses; they accept pupils from all communities. The language of instruction in the first two years of the course is Greek or Turkish, and thereafter English. The general structure is as follows. The first two (primary) years form a preparatory technical school for boys aged 12 to 14—this gives a general education, with a bias towards mathematics, science and handicrafts. At the end of these two years, a proportion of the pupils may leave (14 being the minimum age for entry into industry), while others will continue their course. Of the latter, the abler will take a secondary technical school course, normally a 6-year course (7-year for General Certificate of Education 'A' level), with a bias towards science and engineering. The remainder will embark on a special course designed for craftsmen, which lasts for a further 3 years after their 2-year preparatory course, a total of 5 years in all. A fairly wide range of trades is available, including mechanical and electrical engineering and the building trades.

Recruitment to these schools is by entrance examination.

Attainment testing, reporting to parents and promotion are as for English secondary schools in Cyprus.

Apart from specialist language staff, most of the teachers in the government technical schools have been trained in the United Kingdom, and the majority of the workshop instructors have also been recruited there owing to the shortage of qualified Cypriots. An extensive scholarship scheme is in operation to make good this shortage.

Agricultural schools. There are two rural central schools in the Island, one Greek and one Turkish, both run by the Government and both residential. These aim at giving a 2-year course for youths intending to work on the land, the entry age being between 14 and 16. The course is intended to be half theoretical and half practical, and working farms are attached to the schools.

The present curriculum at the Greek Rural Central School comprises Greek, mathematics, science, geography, history, religion, music, physical education, arts and crafts, English, rural science.

The curriculum at the Turkish Rural Central School, markedly influenced by that of the *orta okul*, comprises Turkish, history, geography, civics, mathematics, general science, agriculture, woodwork/metalwork, English, art, music, physical education.

Forestry. There is a Forestry College, run by the Forestry Department of Cyprus, which organizes courses for Forestry Department staff, adapted to the needs of the Island. It also offers advanced courses for forestry personnel from all over the Middle East. All these are specially planned short courses designed to cover some specific aspect of forestry, and therefore no typical curriculum for the college is available.

Teacher training schools

The only teacher training institution in Cyprus is the Teacher Training College, which is post-secondary and trains teachers for Greek and Turkish elementary schools. It is administered by the Government, and accepts students who have completed a secondary school course. It therefore does not properly come within the scope of this report.

Other specialized schools

Three specialized schools should be treated under this heading: the School for the Blind, the School for the Deaf, and the Reform School. All three institutions are intercommunal and residential, and are run by the Government. These are not truly secondary schools, but as they are the only institutions of their type in the Island they have to cover a fairly wide age range, and an appreciable proportion of their pupils at any one time are of secondary school age. They provide vocational instruction as well as a general education, and give definite training to the older pupils with a view to fitting them for employment on leaving the schools, e.g. blind pupils are trained as telephone operators, and deaf pupils as draughtsmen.

Out-of-class activities

In the government secondary and technical schools pupils play a fairly large part in school government and social life; there is a prefect system and a students' committee system on the lines of schools in the United Kingdom. In community schools the tendency is to limit the participation of pupils in the school government, and in many cases they do not participate at all. The range of out-of-class activities in secondary schools again varies from school to school. With few exceptions they lack adequate playing fields, but this is no deterrent. Cypriot youngsters enjoy their games and take their training and matches very seriously. Apart from sport, most secondary schools have cultural clubs and activities. Drama and debate particularly provide an excellent outlet for the Cypriot temperament. All schools, elementary and secondary, organize excursions and the bus tour of the Island for those finishing school is a great occasion. There are frequent trips to monasteries and shrines, to antiquities, and to mountain and seaside resorts. There are philatelic societies, and science societies, and often a school magazine. Scouting is very popular in the Island, where the movement began in 1913.

Mention should also be made of the important role played by the evening institutes. These institutes are numerous and popular, and although they are conducted by elementary school teachers, usually in elementary school premises, they are aimed at those of the secondary school age group (12 to 18) who do not in fact go to a secondary school. Members of these evening institutes meet three evenings a week for classes and indoor recreation and on Saturday or Sunday for outdoor games. Once a year there is a play or concert. The Education Department gives grants to these institutes to cover rent, equipment, and the fees of lecturers.

TRENDS AND PROBLEMS

It is difficult to give any accurate picture of the present general trends in education in Cyprus, as the normal development of education in the Island was disrupted by the events of the recent emergency. The problems facing education in the Island are however quite clear.

Perhaps the major educational problem is that of breaking away from the present rigid and academic forms of secondary education, and supplying in addition those forms of secondary, vocational and technical education which are suited to the needs and aptitudes of the majority of Cypriot children.

Associated with the problem of a wider range of curricula in secondary schools is that of separate provision of secondary education for girls.

There are very few schools where girls are taught separately and with a curriculum adapted to their needs. The shortage of teachers is particularly acute with regard to women teachers. Although girls make up 35 per cent of the secondary school pupil population, only 22 per cent of the secondary school teachers holding degrees are women.

Secondary education in Cyprus has developed very rapidly since the war, and the supply of qualified teachers has completely failed to keep pace with this development. Even before the emergency, secondary schools were often dependent on Greece and Turkey for the supply of teachers with full degree qualifications. In recent years there has been an ambitious scholarship scheme in operation, but the results are not yet visible in the schools, and such has been the recent increase in the secondary school population that it is doubtful whether the supply will even keep pace with the rate of development.

During the emergency there was a considerable slowing down in the normal expansion of secondary school buildings. Classes are frequently too large. The basic problem, however, is shortage of teachers and not shortage of teaching space.

[*Text prepared by the Education Department, Nicosia, in June 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 549,000.
Area: 3,572 square miles; 9,251 square kilometres.
Population density: 154 per square mile; 59 per square kilometre.

Summary of school statistics, 1953–57. In the school year 1957/58 there were 799 primary and general secondary schools, 6 vocational schools, 2 public teacher training colleges and 3 special educational institutions. Total enrolment in these institutions was over 103,000 representing nearly 19 per cent of the total population. Enrolment in primary schools made up 78 per cent of the total, general secondary schools 21 per cent and all other institutions 1 per cent. In both primary and general secondary schools Greeks and Maronites were about 80 per cent of total enrolment and Turks between 18 and 19 per cent. The

increase in total enrolment in primary schools was 12 per cent between 1953/54 and 1957/58. The number of teachers in primary schools increased by 14 per cent between 1953/54 and 1957/58 and women teachers represent over one third of the total. The pupil-teacher ratio in primary schools was 38 in 1957/58 compared with 40 in 1953/54. Total enrolment in general secondary schools increased by 16 per cent between 1953/54 and 1957/58 and enrolment of girls by 43 per cent over the same period. The proportion of girls to total enrolment in general secondary schools was about 37 per cent for Greek children and 32 per cent for Turkish children. The pupil-teacher ratio in general secondary schools was 29 in 1957/58 compared with 25 in 1953/54. Enrolment of boys in vocational centres increased from 170 children in 1953/54 to 443 in 1957/58. In 1957/58 the two teacher training colleges enrolled 369 students of whom 27 per cent were women. (See Table 2.)

Educational finance, 1957/58. Total expenditure on education in the fiscal year beginning September 1957 was 3,138,939 pounds sterling, or about £5.8 per inhabitant. Some 73.5 per cent of receipts were derived from territorial revenue, 8 per cent from local authorities, 13 per cent from tuition fees, 3 per cent from the Public Loans Fund and the remaining 2.5 per cent from sale of property and donations. Capital expenditure (£577,961) was 18 per cent of the total spent. (See Table 1.)

Sources. Cyprus: Education Department, annual reports.

1. EDUCATIONAL FINANCE, 1957/58 (in pounds sterling)[1]

A. RECEIPTS BY SOURCE

	Amount
Total receipts	**3 138 939**
Territorial revenue	2 302 195
Local authorities	259 362
Tuition fees	410 576
Public Loans Fund	89 750
Sale of property and sundries	21 981
Donations	55 075

B. EXPENDITURE BY PURPOSE

	Amount
Total expenditure	**3 242 757**
Recurring expenditure	2 664 796
Capital expenditure	577 961

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure	**2 664 796**	**100.0**
Central administration	55 009	2.1
Primary education	1 660 550	62.3
Secondary education	710 781	26.7
Vocational education	113 496	4.3
Teacher training	124 960	4.7

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	727	2 005	711	79 133	37 833
	Primary schools, aided private	1957/58	9	71	47	1 064	589
	Primary schools, unaided private	1957/58	9	44	35	507	208
	Total	**1957/58**	**745**	**2 120**	**793**	**80 704**	**38 630**
	,,	1956/57	748	2 024	753	79 392	37 800
	,,	1955/56	741	1 904	675	79 245	37 932
	,,	1954/55	737	1 862	671	76 474	36 487
	,,	1953/54	739	1 782	576	72 136	34 348
Secondary *General*	Secondary schools, aided private	1957/58	21	330	97	8 462	2 641
	Secondary schools, unaided private	1957/58	33	404	129	12 894	4 995
	Total	**1957/58**	**54**	**734**	**226**	**21 356**	**7 636**
	,,	1956/57	55	650	186	17 667	6 039
	,,	1955/56	57	840	177	19 406	6 393
	,,	1954/55	57	756	199	18 992	5 977
	,,	1953/54	57	739	200	18 353	5 327

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Second. [cont.]							
Vocational	Agricultural schools, public	1957/58	2	[1]42	–	44	–
	Apprentice training centres, public	1957/58	4			395	–
	Total	**1957/58**	**6**	[1]**42**	–	**443**	–
	„	1956/57	6	[1]26	[1]3	359	–
	„	1955/56	3	[1]26	[1]3	156	–
	„	1954/55	3	[1]27	[1]3	178	–
	„	1953/54	3	[1]19	–	170	–
Higher							
Teacher training	Teacher training colleges, public						
	Total	**1957/58**	**2**	**20**	**4**	**369**	**103**
	„	1956/57	2	14	7	292	94
	„	1955/56	2	14	7	265	90
	„	1954/55	2	14	7	243	81
	„	1953/54	2	14	5	217	79
Special	Reform school, public	1957/58	1	[1]...	–	65	–
	School for the deaf, public	1957/58	1	...	...	62	26
	School for the blind, public	1957/58	1	...	...	24	9
	Total	**1957/58**	**3**	**...**	**...**	**151**	**35**
	„	1956/57	3	[1]11	...	150	...
	„	1955/56	3	...	...	...	...
	„	1954/55	3	...	...	...	...
	„	1953/54	3	[1]...	...	112	...

1. Teachers in reform school are included with those in vocational education.

GIBRALTAR

THE EDUCATIONAL SYSTEM

The educational system comprises pre-primary, primary and secondary schools. For young people and adults the Education Department runs evening classes, and the Calpe Institute, a branch of the British Council, arranges informal educational activities. There is also an apprenticeship scheme for boys entering the public service. There are no facilities for higher education or teacher training, and students wishing to take post-secondary courses go to universities and colleges in the United Kingdom.

The pre-primary institutions are all private, fee-paying nursery schools which cater for children from 3 to 5 years of age.

Except for three private primary schools, all primary and secondary institutions are maintained by the Government. The primary course is for children aged from 5 to 11+. Secondary courses starting at 11+ vary in duration according to the type of course, as will be set out below. Education is compulsory between the ages of 5 and 15; it is free in government schools, which are open to all pupils with the right of residence in the Colony, including children whose parents are members of the armed services. The language of teaching is English but some Spanish is of necessity used in the infant stages as most children in Gibraltar know practically no English at the age of 5.

A Director of Education, selected by the Secretary of State, heads an advisory Board of Education. As most of the schools are religious in character the board is made up of representatives of the Protestant, Catholic and Hebrew communities, as well as of the armed services. The function of the board, which meets at least four times yearly, is to advise the Governor of the Colony on matters relating to educational policy. The administration of education is regulated by the Education Ordinance of 1950. The Director of Education is responsible for the control and supervision of the school system and inspects both public and private institutions. The greater part of the funds expended on education comes from colonial revenue, with a small proportion coming from private endowments for scholarships. Buildings of government schools are provided and maintained by the Public Works Department. The

school medical service sees that standards of hygiene are maintained, inspects the children, and provides for dental and ophthalmic treatment.

TYPES OF SECONDARY EDUCATION

The pupil who has completed the 7-year primary school and reached the age of 11+ continues at one of the three types of secondary school: grammar, modern or technical. Selection is based upon results of Moray House standardized tests. The written tests in English and arithmetic and the intelligence test are followed, in borderline cases, by an oral test conducted by a selection panel of which the Director of Education is chairman. Since 1959 a further test has been introduced at 13+, mainly for the purpose of correcting any errors in posting arising from the 11+ examination. To facilitate transfers at this stage the three types of secondary school follow a common curriculum for the first two years.

The curricula in secondary schools are similar to those for the corresponding types of school in the United Kingdom. The two grammar schools (boys and girls separately) have courses which aim at the General Certificate of Education (GCE) at Ordinary, Advanced and Scholarship levels, taken after 5 and 6 or 7 years of secondary study respectively. The Government offers an annual scholarship to a university or institute of higher education and there is also a private fund providing a similar bursary. The scholarships are awarded primarily on academic achievement. In addition the Government sends eight secondary school graduates each year to the United Kingdom for teacher training.

The technical school, for boys only, provides secondary education with a technical bias but also prepares pupils for the GCE. Woodwork, metalwork and general science are included in the curriculum. On completion of the technical school course a fair proportion of the boys enter public service as apprentices. A joint apprenticeship indenture has been accepted by the chief employers in the Colony: the dockyard, the city council, the army engineers and the Colonial Government. Entry to the apprenticeship scheme is by competition.

The secondary modern schools (two for girls and one for boys) provide an education with a practical bias, not usually beyond the compulsory school age, for children with no special aptitude for academic or technical studies. The girls spend one half-day per week in the cookery centre and another half-day in the home needlework centre.

For girls of 15, whether attending grammar or modern school, there is now provision for preliminary experience in nursing. While following their normal curriculum at school they attend the hospital for one half-day per week for lectures and visits to the departments and wards. Girls of 15 may also transfer to the commercial school which provides a full-time 2-year course in commercial and basic subjects.

Religious instruction forms part of the curriculum in all secondary schools. The evening classes provide instruction in commercial subjects, languages and art.

Out-of-class activities include organized team games such as football, hockey, cricket, etc. All secondary schools hold annual athletic meetings and some also arrange aquatic competitions. The schools have little space of their own for games but are permitted to use the playing grounds of the naval and military authorities and various sports associations. The Education Department does not conduct any youth activities directly but encourages those in existence such as the Boy Scouts, sea cadets, St. John's Ambulance cadets. On the cultural side the Department is helping the secondary schools to build up libraries; in particular it supplies periodicals which are used as source material for discussion groups on current topics and school debates.

A few teachers, including members of the religious orders responsible for conducting secondary grammar education, are recruited in the United Kingdom. The rest are locally recruited and are nearly all Gibraltarians.

TRENDS AND PROBLEMS

The introduction of compulsory education in 1951 and the high birth rate in Gibraltar have in recent years caused problems in accommodation of the secondary school population. These have been met, partly by taking over barracks vacated by the army. The anxiety of parents for grammar school places for their children is as great as elsewhere, but with separate grammar schools for boys and girls the number of pupils of grammar school quality is too low to ensure reasonable numbers in the sixth forms—particularly for the second year. For the same reason, work at Advanced level is difficult and expensive to organize. Secondary technical education is not popular (although there are signs of an awakening to the possibilities), with the result that the technical school tends to be filled by boys who have failed to gain admission to the grammar school rather than by boys who desire to follow a technical career. The launching of a continued apprenticeship scheme for all employers of technicians in the near future should go far to strengthen the call of technical education, and the need for work at Advanced level in the grammar schools will probably be met by organizing combined groups from the secondary schools, each of which will cater for one type of advanced work.

[*Text revised by the Director of Education, Gibraltar, in July 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 26,000.
Area: 2 square miles; 6 square kilometres.
Population density: 13,000 per square mile; 4,333 per square kilometre.

Summary of school statistics, 1953–57. Enrolment in primary and secondary schools in 1957/58 was 4,347 pupils representing about 17 per cent of total population. About 65 per cent of pupils were in primary schools. Girls made up over 50 per cent of enrolment in both primary and general secondary schools. There were 109 boys studying in the Technical and Dockyard School. The total number of teachers in all schools was 174, of whom two thirds were women; the average pupil-teacher ratio was 29 in primary and 20 in general secondary schools. Compared with 1953/54 enrolment in primary schools had increased by 7 per cent and in general secondary schools by 21 per cent. (See Table 2.)

Educational finance, 1957. Total public expenditure on education in the fiscal year beginning January 1957 amounted to 138,445 pounds sterling, or about £5.5 per inhabitant. This money was derived entirely from territorial revenue. Capital expenditure (£33,338) represented about 24 per cent of the total spent. The distribution of recurring expenditure by level and type of education is given in Table 1.

Sources. Gibraltar: Department of Education, annual reports.

1. EDUCATIONAL FINANCE, 1957 (in pounds sterling)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure[2]	**105 107**	**100.0**
Central administration	4 692	4.5
Primary education	[3]45 310	43.1
Secondary education	[4]33 950	32.3
Vocational education	7 237	6.9
Teacher training	11 663	11.1
Other education	2 255	2.1

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.
2. Public expenditure only.
3. Includes expenditure of £1,342 by the Lands and Works Department for repairs and maintenance.
4. Includes expenditure of £1,006 by the Lands and Works Department for repairs and maintenance.

2. SUMMARY OF SCHOOL STATISTICS, 1953-57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957/58	16	86	65	2 372	1 136
	Primary schools, unaided private	1957/58	3	10	5	459	279
	Total	**1957/58**	**19**	**96**	**70**	**2 831**	**1 415**
	"	1956/57	20	[1]96	[1]82	2 436	1 213
	"	1955/56	19	[1]85	[1]72	2 938	1 491
	"	1954/55	19	106	92	2 949	1 486
	"	1953/54	18	100	87	2 641	1 354
Secondary *General*	Secondary schools, public						
	Total[2]	**1957/58**	**7**	**71**	**33**	**1 407**	**737**
	"[2]	1956/57	5	39	19	1 106	571
	"[2]	1955/56	4	43	22	982	518
	"[2]	1954/55	5	[3]54	25	1 094	588
	"[2]	1953/54	5	[3]54	25	1 160	593
Vocational	Technical and Dockyard School, public						
	Total	**1957/58**	**1**	**7**	–	**109**	–
	"	1956/57	1	9	–	113	–
	"	1955/56	1	9	–	107	–
	"	1954/55	1	...	...	94	–
	"	1953/54	1	...	...	101	–

1. Public schools only.
2. Including data on a commercial school for girls previously classified under 'vocational' education.
3. Including teachers of technical school.

THE EDUCATIONAL SYSTEM

Education is compulsory for all children between the ages of 6 and 14 years. A certain number of boys and girls remain at school voluntarily until 16 or 17 years and over to follow a course of secondary education—grammar, technical or vocational.

All government schools in Malta and Gozo, whether primary, secondary or vocational, come directly under the central authority of the Director of Education and form part of the Education Department. The Director administers the Department through his two assistants, his inspectors and his administrative staff. Thus, heads of schools look to the office of the Director for their material requirements (provision of accommodation, furniture, books, the payment of teachers' salaries, etc.), and also for a lead in educational matters (the choice of books, the compilation of the syllabus, etc.), the general direction being carried out at Head Office in consultation with the schools and referred back to the teaching staff through the inspectors.

A comparatively small number of schools function in Malta outside the government system. The great majority of these private schools are run by religious orders at their own expense and on the modest fees charged to the pupils, although some are in receipt of an annual government subsidy which in no case at present exceeds £500. These schools vary in their general set-up; a certain number cater for pupils between the age of 5 and 18 and are single-sex schools except in the first years, others are almost entirely intended for young children of 3 to 6 years.

THE DEVELOPMENT OF SECONDARY EDUCATION

Up to now, the pattern of secondary education has developed without any rigid imposition by the government authorities. In so far as it caters for boys and girls over 14 years of age, it is outside the Compulsory Education Statute and the setting up of secondary schools has mainly depended on the initiative of the Government and of different bodies, especially religious orders.

The earliest foundations in this branch, as in the other forms of education in Malta, were made by the Church. The most flourishing boys' government-run grammar school today, known as the Lyceum, traces back its origin to a foundation made at the instance of the Bishop during the time of Grand Master Pinto as early as 1595, at which time it was established as a preparatory school for the university and known as a College of Education. The change to the name which it bears to this day was made at the time of the French occupation in the early 1800s.

Other well-known secondary schools began within the last hundred years as independent schools run by religious orders and have remained so.

In addition to these foundations are the seminaries, one in Malta and one in Gozo. Although the purpose of these schools is mostly to prepare young men for the priesthood, they give an education at secondary level which has been availed of by many parents whose sons have followed other walks of life.

An exception to this rule of initiative by a particular religious order is the school known as St. Edward College, which is run on the lines of an English Catholic public school.

On the government side, the growth of the Lyceum and the establishing of a branch of this school in Gozo was accompanied by the establishing in Valletta of a secondary school for girls.

In the 1920s, the Director of Primary Schools (as he was then styled), seeing the need to expand the field of recruitment for the teaching staff, set up the central schools. These were to a certain extent vocational since they catered expressly for boys and girls who intended to become teachers.

Although at first the level of attainment in these schools was not high, a tradition of good, firm scholarship was built up within this framework. Gradually, the top classes were led to a higher standard and, in the case of girls, a further central school known as the Higher Central School was set up in 1927/28 to prepare pupils for the Oxford School Certificate.

In time, the other four central schools (three for girls, including one in Gozo, and one for boys) also began to prepare students for the School Certificate examination, and during the war years the distinction between 'secondary' schools and 'central' schools was eliminated, leaving the Lyceum (Malta and Gozo) and four girls' grammar schools (including one in Gozo) to provide a secondary grammar education for boys and girls up to the age of 17 or 18. With this unification, the vocational aspect of the work of these schools was suppressed.

Administration

As indicated above, in Malta and Gozo the management of all matters concerning education (including secondary education) radiates from the central authority. There is a Board of Education which functions as an advisory committee; its members include persons outside the Education Department.

The Director of Education exercises his authority and carries out responsibilities through the office (clerical) staff, as far as the material requirements of the school are concerned, and through his staff of inspectors, heads of schools and teachers as regards the educational care of the thousands of children entrusted to him.

All personnel in the government schools are civil servants except for the few teachers who are engaged on special short term contract from the United Kingdom.

Working with and for the schools, though not permanently attached to the Civil Service, are the teaching staffs of the two training colleges. These have entered into special agreement with the Government of Malta to train teachers for the Department.

The training college for men teachers is in the hands of the Brothers of the Christian Schools (English Province) and that for women teachers is in the hands of the Society of the Sacred Heart. They are assisted in their work by lay staff from the United Kingdom and by local personnel (mainly inspectors) who are loaned by the Education Department on a part-time basis to help in the work of preparation of teachers and to act as liaison officers between the colleges and the Department.

In principle, teachers and heads of schools are liable to be posted or transferred to any school (according to whether the person concerned is in the primary or secondary section) to suit the exigencies of the service, but in point of fact the personal wishes of the teachers concerned are met in this matter wherever possible.

The interests of the teaching staffs are also represented by teachers' unions, of which there are three: the Malta Union of Teachers, the Lyceum and Secondary School Teachers Association (including teachers in technical schools) and the Head Teachers Association. These unions are consulted before decisions are taken which affect the conditions of service of the teaching staff.

Supervision and inspection. Because of the small numbers originally involved, the Director of Education has always taken a personal interest and share in the supervision of secondary schools. Within the last 12 months, the post of Inspector of Grammar Schools has been suppressed with a view to the unification of the inspectorate.

Finance. The Education Department like other government services is financed from local revenue and grants from the United Kingdom.

Within the last 10 years, the financial provision has been increased from £551,105 in 1950/51 to £1,412,867 in 1959/60. A considerable number of fine new buildings for schools have been set up with the aid of monies from the Colonial Development and Welfare Fund. Among these new schools and in the secondary sphere are the new Lyceum, catering at present for 1,500 boys, the new Girls' Grammar School at Blata l-Bajda, still under construction but intended ultimately to house 42 classes, the Secondary Technical School for Boys and the parallel one for girls, each to cater for 1,000 pupils, and a boys' school in Gozo providing both secondary technical and secondary grammar courses.

The distribution of funds, including the payment of teachers, is carried out by the central authority according to a schedule presented to the Government and approved in the estimates. All expenditure is thus undertaken and controlled by the Education Department although the wishes of the heads of schools are consulted and suited as far as possible when it comes to equipment and teaching materials.

The government schools, both primary and secondary, are free.

School welfare services. These now cover the complete remission of fees, the provision of free books and also the improved care of the health of schoolchildren. All children attending government schools, both primary and secondary, are given a daily allocation of free milk.

TYPES OF SECONDARY EDUCATION

In Malta and Gozo, some 12 per cent of the boys and girls from the primary schools at present receive secondary education. It is planned that this percentage should be raised to 25 per cent, the provision being equally distributed between the secondary grammar and the secondary technical sections.

Since admission to the secondary schools is by an examination in English and arithmetic, designed also to test the intelligence of the candidates, any expansion largely depends on an increased number of children from the primary schools being able to reach the required standard. But there is no doubt that the improvements being implemented in the primary sphere of education are bearing fruit, and in the future there will be no lack of boys and girls who will go forward to secondary schooling.

There is no minimum age-limit for entry into the secondary schools, but no boy or girl who will be 14 or over by 1 October of the year in which he seeks admission can be considered.

The Lyceum (with its branch in Gozo) and the four girls' grammar schools (including one in Gozo) offer a course of studies normally lasting five years and leading to the General Certificate of Education examination.

The Secondary Technical School for Boys (also with a branch in Gozo) and the recently established parallel school for girls aim at the same ultimate goal with the difference that more emphasis is here laid on the practical subjects—woodwork and metalwork in the case of boys, and domestic science, art and crafts in the case of girls. The purpose of these practical subjects is however intended to be of an educational and not of a vocational nature.

In addition to these secondary schools, there are various technical centres in which vocational training is given to boys, usually between the ages of 14 and 17/18 years. These are the Technical Schools at Hamrun and Mriehel (numbers being 261 and 173 respectively) which prepare for careers in mechanical and electrical engineering as well as in woodwork, the Tailoring School with 92 pupils, and the Nautical School with 63 pupils.

Admission to these schools is also by examination held separately from that for admission into other types of secondary school.

Children who do not enter one or other type of secondary school complete their education in the all-age primary schools, where they remain until they turn 14. So far no alternative form of secondary education on the lines of the English secondary modern school is available for them though the education authorities are fully alive to the particular needs of these boys and girls and are actively considering how best to equip them for after-school life.

On leaving secondary grammar school, students normally proceed to the Royal University of Malta, to the training colleges, or enter employment.

The school year. Secondary schools open on 1 October and close on 15 July. There are three terms: the autumn term from 1 October to 23 December, the winter term from 7 January to the Wednesday in Holy Week, and the spring term from the Wednesday following Easter Sunday to 15 July.

Owing to the heat, classes are held in the morning only from 1 June to 15 July. Christmas holidays consist of 14 days, and the Easter holidays of 7 days. Summer holidays are from 16 July to 1 October.

The school week is from Monday to Friday inclusive with seven daily periods of 45 minutes each. There are four such periods in the morning and three in the afternoon.

General secondary schools

These include the secondary grammar and the secondary technical schools. Both have a 5-year course to prepare candidates for the General Certificate of Education though with a bias in each case on different aspects of the curriculum, the one on the academic and the other on the practical subjects and science. In Gozo, the one school contains both branches—the nearest approach to a bilateral school in these islands.

The aim of these schools is to give a good general education to pupils who will go on to higher studies at the university, the training colleges and, when it has been established, the Polytechnic. Many of these students will therefore later become priests, lawyers, doctors, teachers, industrialists and high ranking civil servants—men and women who will occupy key posts in the social structure of the future. Others will leave school to find employment in banks, in lower grades of the civil service, in industry and in other posts and will thus also exercise an influence on the affairs of the Maltese people.

Yet, underlying all material objectives in these schools is the resolute purpose of giving all pupils a good character formation in keeping with the religious traditions which have been the heritage of the Maltese people since early Christian times.

Recruitment of pupils, etc. Entrance examinations are held in June/July in the case of the secondary grammar and the secondary technical schools. The two types of secondary school have each a separate examination so that a great number of pupils sit for both and, should they be successful, choose then the type of school they wish to attend. There is nothing to prevent their doing this provided that they have not reached the age of 14 on 1 October of that particular year. There is no lower age limit and a pupil may sit for the examination several times over.

Curriculum. The compulsory subjects are religion, Maltese, English, two languages (out of Latin, Italian and French), arithmetic, algebra, geometry, history and physical education.

In addition, the pupils have to choose one of the following groups of subjects: (a) physics and chemistry (with biology instead of history added in form 4); (b) general science and geography; (c) geography and art; (d) needlework and housecraft (for girls).

Modern languages are taught as far as possible by the direct method and other subjects are taught through English.

Students are promoted from one form to a higher form through an annual examination held at the beginning of July, but those who fail may sit for a supplementary examination in September. The papers for these examinations are set and marked by two examiners under the direction of a moderator, these persons being responsible for a particular subject in one or more forms of any of the girls' grammar schools or the Lyceum.

Although the normal school leaving certificate to which the 5-year course of studies in the school is directed is the Oxford General Certificate of Education, a small number of students remain on at school in the sixth form after that examination in order to take one or more subjects at Advanced level.

The setting up of the sixth form from which these examinations are taken at the end of a 2-year course is a recent development. The purpose is to enable pupils to obtain direct entry to courses leading to first degree examinations in all English universities as well as to attain that standard of scholarship which sets a hallmark on a completed course of secondary school work.

The pattern of the sixth form is the same as that followed in the grammar schools in England. Students attending independent (private) schools may, if they have been successful in the GCE examination at Ordinary level, enter the sixth form in the government schools.

The teaching of practical subjects (woodwork, housecraft, needlework, metalwork) in general secondary schools is undertaken for its educational value and not as vocational training.

Teaching staff. Selection is made by an interviewing board specially constituted by the Government for the occasion.

Where possible, it is expected that the person appointed should be a university graduate. Many teachers, however, are men or women who have undertaken a 2-year training college course, have gained teaching experience in the primary schools and possess further suitable academic qualifications.

In order to help non-graduate members of staff to improve their qualifications, scholarships are provided for a small number of teachers to undergo graduate courses in United Kingdom universities.

A few specialist teachers, mainly for English, are recruited on a short-term agreement from the United Kingdom.

To make up for temporary vacancies, visiting masters and mistresses are engaged as required; they are paid by the hour and receive no appointment, the arrangement being liable to be terminated at short notice by either party.

Vocational and technical schools

Vocational and technical schools cater for an older entry (14 to 16) and are intended as a direct preparation for the craftsman's work. However, in these schools, too, some subjects are taught for their value from the point of view of right living and general education. These subjects are religion, English, mathematics and Maltese.

At present, technical and industrial training is carried on at the following centres.

Technical School, Hamrun. The school offers both a day and an evening course, the ages of the day students ranging between 14 and 17 years. Three-year full-time courses are given in the theory and practice of (a) electrical engineering, (b) mechanical/marine engineering and (c) technician qualifications (City and Guilds of London Institute). All courses lead to the City and Guilds Intermediate Certificate, to the General Certificate of Education examination, and to most public competitive examinations in the engineering field. The subjects taught are religion, Maltese, English, mathematics, applied heat and heat engines, electricity and mechanism, mechanics, engineering drawing, practical geometry, metalwork and engineering technology. Laboratory work is carried out in most of the engineering subjects. On completion of their 3-year course these students continue their practical training in the school workshops, government departments and at the Naval Dockyard.

Technical School, Mriehel. The aim of this school is to provide 3-year full-time courses for automobile engineering and cabinet-making, leading to the City and Guilds Institute examinations. The courses cater for boys between the ages of 14 and 17 and provide an alternative training for those who do not secure a place in any of the apprenticeship schemes available.

During the first six months all students follow a basic course in English, Maltese, religion, mathematics, science, drawing, and, in addition, needlework and woodwork.

Government Tailoring School, Valetta. The course is of 3 years' duration and the pupils are trained to reach a standard to enable them to sit for the Intermediate Grade of the City and Guilds Institute examinations.

Government Nautical and Wireless Telegraphy School. The scope of this school is to train Maltese boys for officer careers in navigation, wireless telegraphy and telecommunications and also for careers in other allied trades and professions. General subjects are included in the curriculum.

Boys of 14 years of age and over who possess the required standard of education are eligible to follow these courses.

Government Apprentices' School. All apprentices are released by their respective firms to attend classes at the school and to follow a course of studies. They receive full pay during the time spent in this way.

Students are trained in the new techniques which are being introduced in industry. As far as possible, courses are arranged to run parallel with the practical experience being gained by the student at his work. Any apprentice who works conscientiously is thus enabled to qualify for a better post in industry.

In addition to the technical side, students also attend regular classes in English and mathematics.

The trades catered for are mechanical and electrical engineering, woodwork, tailoring, boot and shoe manufacture, printing, counter-service and waiting, goldsmith's and silversmith's work, plumbing and agriculture.

Evening classes. In the technical centres described above, in primary schools in different parts of Malta and Gozo, at the Lyceum and at the secondary technical school, Paula, evening courses in both academic and technical subjects are held throughout the scholastic year. All can be admitted to these classes provided that there are vacancies and that they have attained a certain minimum age.

School of Art. At this school, which is run by the Education Department, evening classes in drawing, painting, decorative art, modelling, carving and history of art are held.

Commercial courses. The Education Department does not at present provide for a full commercial course in any of its schools.

However, during the midday break at the Lyceum, classes are provided on a voluntary basis for boys in form 5 who wish to take up shorthand, book-keeping and/or typewriting.

Evening classes in the subjects are also provided. Registration for these classes is usually very heavy, as they are popular with those who intend to seek employment as clerks in private firms or with the Government.

A number of commercial classes run by private individuals are also available on payment of fees.

In the newly established Secondary Technical School for Girls, it is intended to set up a complete commercial course as one of the alternatives to be chosen by girls after they have completed the basic course which will extend over the first three years.

Domestic science and careers for girls. The teaching of domestic science forms part of the curriculum of the upper classes in the all-age primary schools and the subject can also be taken in grammar schools.

However, the teaching of this subject in these schools is carried out with the aim of enhancing the general education of the young women and, in grammar schools, of securing a pass in the GCE examination.

It is only with the setting up of the Secondary Technical School for Girls already mentioned that it will be possible to provide a full vocational training in housecraft.

Teacher training schools

Reference has been made to the two teacher training colleges. The colleges offer a 2-year residential course, and examinations are conducted in collaboration with the London University Institute of Education. Every year this institute nominates two examiners who come out to Malta to help in assessing the marks of the students' practical teaching and to whom, later, sample papers from the students' final written examination are referred.

Out-of-school activities

The Lyceum, the Secondary Technical School for Boys and the technical centres show a keen interest in sports and especially in football. The Secondary Schools Sports Association organizes cross-country races and other sporting events. The Lyceum has a school orchestra and runs its own Boy Scout troop.

The girls' grammar schools are handicapped by lack of playgrounds and recreational facilities.

TRENDS AND PROBLEMS

Education in Malta is both old and new. In so far as it depends on traditions of the Catholic way of living and of family life, it is old; but the practice of schooling is comparatively new, at least as far as the community as a whole is concerned.

It is salutary perhaps to remember that compulsory education has been in force in Malta for only 16 years. The education authorities are faced with many problems including lack of facilities, which it is difficult for Malta's budget to provide, lack of trained personnel, and certain prejudices in the outlook of the general public.

Malta has also its language difficulties to meet, since its own native tongue is not sufficient to carry it into the outside world nor to take it far in cultural and scientific pursuits. In this, Malta, like other countries so placed, faces the difficulties of bilingualism, the two languages being English and Maltese.

Although the Maltese on the whole are naturally gifted in language learning, it is bound to add to the burden of study to have to carry on one's work in a second language, at least until such time as one is completely at home in both. Fortunately, this standard is reached in a surprisingly large number of cases.

The trends in secondary education are towards the provision of more facilities and to the raising of standards. Plans are in hand to take more pupils into the grammar and the secondary technical schools; ways of giving the best preparation to boys and girls who go out into the world on completion of the primary school course are constantly being reviewed. The raising of standards is the daily preoccupation of those responsible for education in these islands. The objectives may be simple, yet time and effort are required in order to reach them.

But education in Malta, both primary and secondary, has a great fund on which to draw: it has the backing of parents who want to see their children enjoying opportunities that never came their own way.

[*Text prepared by the Department of Education, Valletta, in March 1960.*]

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Further reading

CRICHTON-MILLER, D. *Report on education in Malta.* [Valletta, Department of Education], 1957. 36 p.

STATISTICS

Population (mid-year 1958 estimate): 322,000.
Area: 122 square miles; 316 square kilometres.
Population density: 2,639 per square mile; 1,019 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58 there were over 75,500 pupils enrolled in schools at all levels, representing about 24 per cent of the total population of the islands. There were, in addition, some 7,600 adults attending vocational evening classes. Over 85 per cent of total enrolment was in primary schools, where the proportion of girls was nearly 50 per cent. In general secondary schools girls formed 44 per cent of enrolment and in teacher training colleges 74 per cent. The teaching staff in primary and general secondary schools numbered nearly 3,000 in 1957/58, an increase of 38 per cent compared with 1953/54. Nearly two thirds of teachers are women. The pupil-teacher ratio in primary schools was about 23 in 1957/58. Compared with 1953/54 there was an increase of 16 per cent in primary enrolment, 33 per cent in general secondary enrolment and 33 per cent in teacher training colleges. (See Table 2.)

Educational finance, 1956/57. In the fiscal year beginning September 1956 total public expenditure on education amounted to 1,851,678 pounds sterling, or about £4.7 per inhabitant. This money was provided by the Central Government from territorial revenue and a grant from the Colonial Development and Welfare Fund. Capital expenditure (£792,094) amounted to 43 per cent of the total spent. The distribution of recurring expenditure by level and type of education is given in Table 1.

Sources. Malta: Central Office of Statistics, Education Statistics (1954–57).

1. EDUCATIONAL FINANCE, 1956/57 (in pounds sterling)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure[2]	**1 059 584**	**100.0**
Central administration	33 651	3.2
Primary education	733 157	69.2
Secondary education	74 628	7.0
Vocational education	58 495	5.5
Teacher training	30 064	2.8
Higher education	[3]30 660	[3]2.9
Other expenditure	98 929	9.3
Child Feeding Scheme	89 102	8.4
Orphan Asylum	9 827	0.9

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.
2. Includes £750,352 for teachers' salaries (all levels and categories).
3. Grant to Royal University of Malta.

2. SUMMARY OF SCHOOL STATISTICS, 1953/57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools or classes, private						
	Total	**1957/58**	[1]**3**	[1]**7**	[1]**7**	**3 213**	**1 594**
	,,	1956/57	[1]2	[1]6	[1]6	3 130	1 487
	,,	1955/56	[1]4	[1]6	[1]6	3 219	1 581
	,,	1954/55	[1]6	[1]9	[1]9	2 900	1 430
	,,	1953/54	[1]5	[1]13	[1]13	2 911	1 306
Primary	Infant and primary schools, public	1957/58	110	2 079	1 290	54 832	27 254
	Infant and primary schools, private	1957/58	[2]82	[2]740	[2]496	9 712	4 717
	Total	**1957/58**	[2]**192**	[2]**2 819**	[2]**1 786**	**64 544**	**31 971**
	,,	1956/57	[2]202	[2]2 957	[2]1 842	63 630	31 773
	,,	1955/56	[2]195	[2]2 685	[2]1 687	61 661	30 420
	,,	1954/55	[2]197	[2]2 411	[2]1 532	58 753	28 972
	,,	1953/54	[2]182	[2]2 023	[2]1 314	55 548	27 660
Secondary							
General	Secondary schools, public	1957/58	6	179	81	2 547	1 266
	Secondary schools, private	1957/58	[2] ...	[2] ...	[2] ...	3 127	1 250
	Total	**1957/58**	[2 3]**6**	[2 3]**179**	[2 3]**81**	**5 674**	**2 516**
	,,	1956/57	[2 3]6	[2 3]175	[2 3]70	4 908	2 163
	,,	1955/56	[2 3]6	[2 3]143	[2 3]58	4 321	1 950
	,,	1954/55	[2 3]6	[2 3]142	[2 3]57	4 299	1 742
	,,	1953/54	[2 3]6	[2 3]135	[2 3]55	4 274	1 856
Vocational	Technical schools, public	1957/58	5	70	–	875	–
	Industrial training centres, public	1957/58	2	23	–	306	–
	Dockyard class, private	1957/58	.	[2] ...	[2] ...	343	–
	Total	**1957/58**	[3]**7**	[3]**93**	–	**1 524**	–
	,,	1956/57	[3]6	[3]74	–	1 315	–
	,, [3]	1955/56	4	35	–	398	–
	,, [3]	1954/55	4	41	–	423	–
	,, [3]	1953/54	3	34	–	327	–
Higher							
Teacher training	Teacher training colleges						
	Total	**1957/58**	**2**	**...**	**...**	**229**	**169**
	,,	1956/57	2	...	...	214	154
	,,	1955/56	2	...	...	201	144
	,,	1954/55	2	...	...	202	140
	,,	1953/54	2	...	...	172	140
General and technical	University of Malta						
	Total	**1957/58**	**1**	**64**	**...**	**300**	**29**
	,,	1956/57	1	64	...	298	26
	,,	1955/56	1	62	...	339	46
	,,	1954/55	1	64	...	391	50
	,,	1953/54	1	64	...	284	30
Special	Classes for deaf and dumb children						
	Total	**1957/58**	**4**	**...**	**...**	**43**	**19**
	,,	1956/57	2	2	2	15	9
	,,	1955/56	2	...	...	14	9
	,,	1954/55	...	...	...	...	...
	,,	1953/54	...	...	...	...	...
Adult	Vocational evening classes						
	Total	**1957/58**	**...**	**264**	**107**	**7 624**	**4 663**
	,,	1956/57	...	282	116	7 903	4 762
	,,	1955/56	...	274	113	7 322	4 668
	,,	1954/55	14	252	104	6 546	3 512
	,,	1953/54	15	244	92	6 355	3 514

1. Not including data on nursery classes attached to other schools.
2. Data on secondary departments of private schools are included with those on primary education.
3. Public schools only.

BRITISH SOLOMON ISLANDS PROTECTORATE

The Solomon Islands form one of the territories which come under the jurisdiction of the British Western Pacific High Commission. They are administered directly by the High Commissioner, whose headquarters are at Honiara. For educational matters in the Solomons he is assisted by an advisory committee established under the Education Regulation enacted in 1954.

The provision of education is largely in the hands of five missionary societies although a number of schools have been opened in recent years by the Government and by native councils (local authorities). The Education Regulation provides for the registration of non-government schools and teachers, the inspection of schools and the payment of government subsidies to schools reaching a certain standard. General control and supervision of the whole system are the responsibility of the Chief Education Officer, who is head of the Education Department.

The complete primary course lasts 7 years and is divided into junior (standards 1–4) and senior (standards 5–7). Owing to the multiplicity of local languages, English is introduced into the curriculum at an early stage and quickly becomes the medium of instruction. The full course leads to the Senior Certificate examination.

The secondary course lasts 5 years. At present the only institution providing general education at this level is the King George VI school at Auki, a government boarding school for boys, which comprises a senior (i.e. upper primary) and a secondary department. The school was opened in 1950 as a senior school but is now being developed as a single-stream secondary school. The secondary classes are now in their third year, and, in due course, the pupils will sit for the School Certificate examination.

Extra-curricular activities include stamp clubs, first-aid training, personal gardens, handicrafts, sing-songs, sports and games.

Both the Government and the missions provide scholarships and facilities for general secondary education overseas and a few students have gone on to post-secondary teacher training or higher education.

The teacher training section at the newly-opened British Solomons Training College has an annual intake of 20 trainees. Entrants are required to have the Senior Certificate, i.e., to have completed senior school. Some missions provide limited teacher training locally or overseas and the Government also provides scholarships for attendance at colleges outside the Protectorate.

Vocational training at the British Solomons Training College began with a 2-year course in carpentry and joinery. Courses available at various mission schools include carpentry, boat-building and printing.

TRENDS AND PROBLEMS

Two mission schools already have secondary classes but it is unlikely that they will be able to develop beyond first- or second-year secondary teaching for some time to come. A third mission has planned to start developing its senior school into a secondary school within about three years. One mission regularly sends its senior school pupils to Rabaul, in the Territory of Papua and New Guinea, for secondary education and training as pastor/teachers. The opening of a government secondary school for girls is contemplated but this project will be subject to the recommendations of a Woman Education Officer joining the Department in November 1959. Short training courses are held at the Marine Base, Tulagi, but courses of 12 months are planned to provide instruction in seamanship and in the care and maintenance of diesel engines.

[*Text revised by the Senior Education Officer, Honiara, in September 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 105,000.
Area: 11,500 square miles; 29,785 square kilometres.
Population density: 9 per square mile: 4 per square kilometre.

Summary of school statistics, 1955–57. In 1957 total enrolment was about 14,350 pupils in 453 primary schools and 1 secondary school, representing approximately 14 per cent of the total estimated population. The proportion of girls to total primary enrolment was 37 per cent; there were no girls enrolled in the only public secondary school in the islands. There were 390 teachers of whom 103, or 26 per cent, were women; the pupil-teacher ratio was 36 in primary schools and 25 in the secondary school. (See Table 1.)

Educational finance, 1957. In 1957 total expenditure on education amounted to 116,393 Australian pounds or approximately £1.1s. per inhabitant. Of the total, 19 per cent was derived from territorial resources, 20 per cent from United Kingdom funds, 2.5 per cent was contributed by local authorities and the remaining 59 per cent came principally from missions. Capital expenditure amounted to 26 per cent of the total spent. (See Table 2.)

Sources. British Solomon Islands Protectorate: Department of Education, annual report.

1. SUMMARY OF SCHOOL STATISTICS, 1955–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Registered primary schools, public	1957	11	23	–	438	74
	Exempted primary schools, public	1957	4			87	33
	Registered primary schools, aided private	1957	21	118	48	2 185	915
	Registered primary schools, unaided private	1957	193	248	55	6 800	2 376
	Exempted primary schools, unaided private	1957	224			4 832	1 977
	Total	**1957**	**453**	**389**	**103**	**14 342**	**5 375**
	„ [1]	1956	109	...	...	5 316	...
	„ [1]	1955	157	252	...	7 575	...
Secondary *General*	Secondary school, public						
	Total	**1957**	**1**	**1**	–	**25**	–
	„	1956	1	1	–	25	–
	„	1955	–	–	–	–	–

1. Registered schools only.

2. EDUCATIONAL FINANCE, 1957 (in Australian pounds)[1]

A. RECEIPTS BY SOURCE

	Amount	
Total receipts		**116 393**
Central Government		45 207
Territorial revenue	21 761	
United Kingdom funds	23 446	
Local authorities		2 943
Other		68 243
Missions	67 031	
Chinese school	1 212	

B. EXPENDITURE BY PURPOSE

	Amount
Total expenditure	**116 393**
Recurring expenditure	85 664
Capital expenditure	30 729

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure	**85 664**	**100.0**
Central administration	7 564	8.8
Primary education	68 529	80.0
Secondary education	4 256	5.0
Vocational education	1 280	1.5
Teacher training	2 850	3.3
Other education	1 185	1.4

1. Official exchange rate: 1 Australian pound = 2.24 U.S. dollars.

THE EDUCATIONAL SYSTEM

The legal basis of Fiji's educational system is the Education Ordinance of 1929 by which the Education Department was constituted and the post of Director of Education established. Regulations governing the conduct of existing government schools were gazetted and provision was made for a system of grants-in-aid to primary schools and for the training, certification and classification of teachers. Regulations were issued governing the attendance of pupils at various types of schools and laying down syllabuses of instruction. This ordinance is now out of date, however, and has become increasingly difficult to implement. A new ordinance is in preparation and, it is hoped, will come into force in 1960.

In 1956, the control of education passed from the Board of Education to the Director of Education, acting on the advice of a multi-racial Advisory Council of 14 members.

The Education Department trains, appoints and transfers government teachers, inspects all schools, and is particularly concerned with the content and standard of primary, post-primary and technical education throughout the Colony.

Because of the multi-racial nature of the population (approximately 49.1 per cent Indian, 42.4 per cent Fijian, 4.5 per cent European, 1.2 per cent Chinese and 2.8 per cent 'others'), and because there is no lingua franca, separate schools are provided at the lower levels for each race, so that during their early years at school children can be taught in their mother tongue. There are, however, a number of primary schools for mixed races in urban areas where the pupils already enter school with some knowledge, albeit imperfect, of English and can thus profit from instruction in that tongue.

In non-European primary schools the medium of instruction for the first 4 years is the vernacular, English being taught as an additional language. For the second 4 years, English is the medium of instruction, vernaculars continuing to be taught as separate languages. Where the progress of the pupils and the ability of the staff warrant it, the changeover is put forward by one or more years.

At the secondary level, where the language problem does not arise, most of the schools are multi-racial.

Of the 521 primary and 38 secondary schools in the Colony, 34 are wholly maintained by the Government, 87 are managed by various missions, and the remaining 400 are run by various private bodies (mainly local committees).

The growth of educational facilities since the second world war is shown in the table opposite.

In Fiji the full primary course lasts 8 years. At the end of class 5 Fijian pupils may sit for the entrance examination to the intermediate schools (classes 6 to 8) which are for Fijians only. The Secondary Schools Entrance examination is taken at class 8. Secondary schools are open to all races.

EXPANSION OF EDUCATION BETWEEN 1946 AND 1959

Year	Total population (a)	No. of primary schools (b)	Total primary enrolment (c)	(c) as a percentage of (a) (d)	No. of post-primary schools (e)	Total post-primary enrolment (f)	(f) as a percentage of (a) (g)	Total school enrolment as a percentage of (a) (h)
1946	259,638	438	36,159	13.9	7	530	0.2	14.1
1959	374,284	521	72,475	19.4	39	4,517	1.2	20.6

THE DEVELOPMENT OF SECONDARY EDUCATION

Owing to the rapid increase in population, especially of Indians, most of the funds available for education have in the past been directed to the provision of primary education, leaving little to spare for secondary schools. Since 1946, however, there has been a growing demand for secondary education and the extent to which this demand has been met can be judged from the figures for secondary education in the above table.

The legal basis of secondary education is covered by the general provisions mentioned in the previous section of this report.

Administration. The control of secondary education is vested in the Director, who has full control over government secondary schools and is represented on the board of governors of aided non-government secondary schools (over which he can exercise considerable control by means of the grant-in-aid system). Unaided secondary schools are usually controlled by elected committees or by the heads of the missions concerned, and the Director's control over them is largely nominal.

The Inspector of Secondary Schools reports to the Director on the efficiency of all secondary schools (government-aided and non-aided) and assists and advises principals and staff on all matters pertaining to the efficient functioning of their schools.

New Zealand teachers in government secondary schools recruited on contract under the Scheme of Co-operation with New Zealand are inspected annually by a New Zealand inspector who visits Fiji for the purpose.

There has been a welcome growth in recent years of parent-teacher associations at almost all secondary schools.

Finance. The full cost of government secondary schools is borne in the first instance by the Central Government.

Tuition fees are levied at a rate calculated to cover 25 per cent of actual tuition costs, while boarding fees are fixed at such a rate as to recover the full cost of boarding.

Aided non-government secondary schools are eligible to receive from Central Government funds a capital grant of up to 50 per cent of the cost of approved building projects, and recurrent grants covering half the cost of the approved salary bill together with a substantial grant (mainly on a *per capita* basis) towards other approved recurrent expenses. The managements charge fees to cover remaining expenses.

Unaided secondary schools receive no direct financial aid from the Government but enjoy the benefit of many departmental services.

In government schools parents with inadequate means may be granted full or part remission of fees at the taxpayers' expense, and a limited number of scholarships, awarded on merit, are also available. Remission of fees in non-government schools is a matter for the managements concerned.

Buildings and equipment. There are two main categories of secondary schools: (a) recognized schools, which must fulfil the minimum requirements of the Medical Department in respect of space, lighting, ventilation and sanitation; (b) registered schools which not only fulfil the minimum requirements but which, in addition, have such necessary adjuncts as science laboratories and/or handicraft or homecraft facilities.

Only selected registered schools may receive recurrent grants-in-aid but in several instances capital grants have been awarded to schools to enable them to raise the standard of their buildings to a level where they are eligible for grant aid.

School welfare services. Schools are regularly visited by medical officers and by the Mobile Dental Clinic both of which are under the control of the Director of Medical Services, with whom close liaison is maintained in the matter of schoolchildren's health.

Auxiliary services. (a) *Visual aids:* selections of filmstrips and films are regularly received from the New Zealand National Film Library and are circulated to all secondary schools equipped with projectors. (b) *Book-room:* the Education Department maintains a book-room from which all schools may purchase their requirements of stationery, textbooks, etc.; in the case of country schools, the purchases are despatched by post. (c) *Schools broadcasts:* from 2.15 to 2.45 on three afternoons a week, broadcast lessons are given to secondary schools, using material supplied mainly by the British Broadcasting Corporation; in addition, particularly for lessons on literature, some use is made of local talent. (d) *Book-boxes:* many secondary schools still in the process of building up libraries, avail themselves of the service maintained by the British Council, which circulates boxes of selected books on loan.

TYPES OF SECONDARY EDUCATION

The secondary schools of Fiji are mainly of the academic type and lead either to the Cambridge Oversea or the New Zealand School Certificate. The Fiji Junior Certificate examination is taken at the end of the second year of the secondary school course (form 4), and the possession of this certificate in general is the minimum qualification for promotion to form 5 and for admission to the Training College and the government clerical service. Candidates must pass in English and arithmetic and in four to six other subjects out of a choice of over thirty. It is shortly intended to reduce both the choice of subjects and the number in which a candidate must pass. The School Certificate examination (New Zealand or Cambridge) is taken in form 5 and the New Zealand University Entrance examination in form 6.

The past three years have seen the introduction of 4-year post-primary courses in agriculture and building trades at the Ratu Kadavulevu School (a government boarding school for Fijians) and of a 4-year secondary modern course at the Labasa Secondary School (a government day-school with a predominantly Indian enrolment). In addition, new or increased facilities for homecraft and handicraft teaching have been provided at a number of other schools. With reference to the trades, it is hoped that 1960 will see the establishment of an Apprenticeship Council and the setting up of a proper system of indentured apprenticeship; as concerns agriculture, consideration is being given to the provision of some sort of student-farmer scheme which will, it is hoped, lead into a land settlement scheme.

A secondary school leaver may attend evening extension classes at one of three centres—Labasa, Suva or Lautoka—where he may either advance his academic subjects, or acquire some skills at woodwork, metalwork, shorthand and typing, etc.

Students who pass the New Zealand University Entrance examination may apply for admission to a New Zealand or Australian university, but if they want to do so on a government scholarship they must first spend a year in the upper sixth form.

The school year normally starts on the second Tuesday in February and is divided into three terms, each of approximately 13 weeks. The school year normally ends on the second Friday in December and is followed by the Christmas vacation of eight weeks. On five days a week, Monday to Friday, the school day starts at about 8.45 a.m. and finishes at 3.30 p.m., with recesses for 15 minutes in the morning and for one hour at lunch time. Each day's work is divided into seven periods of about 40–45 minutes each.

General secondary schools

With few exceptions the secondary schools of Fiji are not designed to prepare pupils directly for a particular career. A general education is given so that the boys and girls may become good, useful, cultured citizens possessing the basic knowledge to proceed into a variety of occupations, whether they be professional, artisan or commercial.

Recruitment and selection of pupils is through the Secondary Schools Entrance examination, candidates being required to list the schools of their choice, in order of preference, at the time of entering for the examination. For admission to a government school a child must be

under 15 years of age, while for a grant-aided school he must be under 16.

The subjects taught include English language, arithmetic, general science, chemistry, physics, biology, health science, English literature, history, geography, French, Latin, Fijian, Hindustani, mathematics, shorthand, typewriting, book-keeping, commercial practice, arts and craft, woodwork, metalwork, technical drawing, needlework, homecraft and cooking.

The following is a fairly typical time-table (number of periods per week shown in parentheses): English (5), arithmetic (4), history (4), geography (4), mathematics (4), Fijian or Hindi (3), science (4), literature (3), singing (1), physical education (1), arts and crafts (2); but where appropriate facilities are available, some of these subjects are replaced by needlework, homecraft, cooking, technical drawing, etc.

The lowest secondary class is called form 3. Promotion is almost automatic from the third to the fourth form. Promotion to the fifth form depends on a pass in the Fiji Junior Certificate examination. Promotion is again fairly automatic from the lower fifth to the upper fifth form, but no pupil is admitted to the lower sixth form unless he has either passed the New Zealand School Certificate examination or has obtained a good pass in the Cambridge Overseas School Certificate examination. Promotion to the upper sixth is limited to those who have passed the New Zealand University Entrance examination.

Many teachers in government secondary schools are recruited from abroad, mainly from New Zealand under the Scheme of Co-operation with that Dominion. In the Methodist and Catholic mission secondary schools teachers from abroad are recruited mainly from Australia and New Zealand. Indian Committee schools, both aided and unaided, recruit their staffs partly from India but mainly locally. An increasing number of posts in all secondary schools, however, is now being filled by local teachers who have received their secondary education in Fiji and have proceeded to New Zealand or Australia for their university degrees.

Vocational and technical schools

For the most part vocational and technical training is given informally in the course of normal employment. Schemes of apprenticeship (mainly unindentured) are operated by the Public Works Department and the Colonial Sugar Refining Company, but in these schemes also training is given mainly in the course of the normal production work. Full-time courses in agriculture, building and stenography are available for a limited number of students, and part-time classes in academic, vocational and technical subjects are available through the extension class programme of the Education Department.

Agriculture. There are four main institutions for the teaching of agriculture—the Koronivia Farm Institute, Navuso Agricultural School, the agriculture course at Ratu Kadavulevu School and Drasa Training Farm.

Of these, the highest level training is given at the Koronivia Farm Institute which is run by the Department of Agriculture to provide recruits for its own field staff, for other Government Departments and for the farming industry in general. Ten boys, preferably of School Certificate level, are selected annually to attend a 2-year course. The theory of crop and animal husbandry and related subjects is taught and practical work is carried out on the institute's farm.

The 4-year courses at Navuso Agricultural School and Ratu Kadavulevu School have similar aims but whereas the former recruits boys aged at least 15 from primary classes 6–8, the latter recruits 14-year-olds at class 8 level. Both schools have large farms (600 acres and 840 acres respectively) on which the practical work of the courses is carried out. The Navuso course is mainly practical, only one day a week being devoted to classroom subjects, whereas pupils at Ratu Kadavulevu School spend only a third of the normal school hours in the field. Student-farmer schemes are at present under consideration in which ex-pupils of these schools will gain experience, under guidance, of small farming on an economic basis.

The Drasa Training Farm managed by the Colonial Sugar Refining Company is spread over 350 acres; it specializes in the training of Fijians who own land in the sugar-cane growing area in all aspects of cane cultivation, including the management and care of farm animals and the production of food crops. A government teacher is seconded to the school for academic teaching. Twenty-seven boys are admitted annually for a 3-year course. Their ages range between 16 and 18 and their standard of attainment between class 5 and class 8. Lectures on all aspects of cane growing are given for four hours per week for the first four months of each year and approximately 30 hours per week are devoted to practical work.

Mechanical, civil and electrical engineering. The Public Works Department has training schemes for (a) professional civil engineers, (b) road construction supervisors, and (c) tradesmen; all of these are based upon 'on-the-job' training, the apprentice being given fixed periods of work in the various sections of the Department which relate to his studies. Apprentices under the professional civil engineers scheme are recruited at University Entrance level with credits in mathematics, physics and allied sciences under which they gain exemption from the Common Preliminary examination of the Joint Engineering Board. They undertake a 5-year course during which they study by correspondence for the examination for Associate Membership of the Institute of Civil Engineers. Up to the present none of these apprentices has completed this course. Apprentices under the road construction supervisors scheme are recruited at Fiji Junior Certificate level and are given a 3-year practical course. Trades apprentices serve a 5-year unindentured apprenticeship during which they receive guidance from the appropriate trade supervisor.

The Colonial Sugar Refining Company operates a training scheme in mechanical and electrical trades at each of its five sugar mills in the Colony. Boys are recruited at primary school leaving level, 15 to 20 being recruited annually for a 5-year course. They study the appropriate trades course of the Brisbane Technical Correspondence School on three afternoons per week, are assigned homework, and receive practical training on the job for approximately 40 hours per week.

No full-time courses are available through the Education Department, but part-time theory courses for garage mechanics are held in the larger centres. Recruitment for the electrical courses is mainly confined to mature students who, having had several years in the electrical installation trade, wish to qualify for the local Wireman's Certificate.

Building trades. Full-time courses are available at Ratu Kadavulevu School, Lelean Memorial School and Fulton Missionary College. The Ratu Kadavulevu School course (which is a parallel to the agricultural course described above) is the most comprehensive; recruitment is from class 8, the Fiji Junior Certificate in building subjects is taken in the second year and the course continues a further two years. Practical work at present is concentrated on a large scale school rebuilding project for which a sum of £12,000 per year is available for the purchase of materials. Since the self-building programme began in 1957, trades course pupils have constructed some 28,000 square feet of buildings at a cost of £42,000. Theory lessons and general subjects are taught throughout the course. Boys leaving this course enter industry as third year apprentices.

The Lelean Memorial School and Fulton Missionary College at present recruit pupils of a lower standard for a course lasting 3 years. Practical work is limited mainly to workshop projects and to the maintenance of buildings, although new work on staff housing and the building of dormitories is occasionally undertaken.

There are post-primary rural crafts courses, with an emphasis on building subjects, which are intended to assist the villager to lead a fuller life, and part-time classes in carpentry are available at 10 centres.

Commercial and distributive occupations. A full-time course lasting one year is held at the Government Stenographers School. Ten to 15 girls who have passed the School Certificate examination are recruited annually, the majority of whom find employment in government service. In addition to the vocational subjects, English is taught and speech training is given.

Part-time classes are held at a private school in Suva and at three extension class centres, whilst a number of secondary girls' schools provide courses emphasizing commercial subjects.

Teacher training schools

There is no teacher training at secondary level in Fiji. Potential secondary school teachers obtain appropriate degrees at overseas universities (either on scholarship or privately) and usually undertake a one-year post-graduate teacher training course before returning to Fiji.

Out-of-class activities

There is a flourishing Secondary Schools Sports Association which holds an annual sports and athletics competition in which nearly all secondary schools participate. The Boy Scout and Girl Guide movements are both rapidly gaining ground in the secondary school system.

TRENDS AND PROBLEMS

During the period 1956–60 the main emphasis has been on the development of secondary education in order to provide a better balanced educational system. This is being achieved not so much by the construction of new government secondary schools as by the award of substantial capital and recurrent grants to the managements of existing (and occasionally new) non-government secondary schools to enable them to provide better and more appropriate facilities.

As a result of this policy, by the beginning of 1960 there will be approximately 1,180 form 6 places available in government and aided secondary schools. The number of children completing the primary course in 1959 was approximately 4,895, of whom only 667 achieved 50 per cent or more of the total marks in the Secondary Schools Entrance examination. It is therefore evident that the number of form 3 places in such schools is likely to be more than adequate for several years to come, and the Education Advisory Council has accordingly recommended (and the Government has agreed): (a) that in future non-government secondary schools should be added to the grant-aided list only as and when the number of passes in the secondary schools entrance examination warrants such action; and (b) that when offering grant-in-aid to such additional schools, preference should be given to those which provide or are prepared to provide non-academic courses.

[*Text prepared by the Education Department, Suva, in December 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 368,000.
Area: 7,055 square miles; 18,272 square kilometres.
Population density: 52 per square mile; 20 per square kilometre.

Summary of school statistics, 1953–57. In 1957 total enrolment in primary and secondary schools was 69,300, representing about 20 per cent of total population. There were in addition over 500 people attending adult extension courses. Of the total enrolment about 95 per cent was in primary schools, 5 per cent in secondary schools (general and vocational) and 0.3 per cent in the teacher training

college. About 45 per cent of primary school pupils were enrolled in Fijian schools, 43 per cent in Indian schools, 4 per cent in European schools, 7 per cent in mixed schools and 0.3 per cent in Chinese schools. At the general secondary level, however, over 50 per cent of pupils enrolled were in Indian schools and only 14 per cent in Fijian schools, 26 per cent in mixed schools and the remaining 10 per cent in European schools. At the primary level, the proportion of girls enrolled in Fijian schools was 47 per cent and in secondary Fijian schools 36 per cent. In Indian primary schools 43 per cent of pupils were girls but in Indian secondary schools only 28 per cent. The average percentage of girls enrolled at all primary and secondary schools was about 44 per cent in 1957. The teacher training school caters for all races and girls formed 41 per cent of enrolment in 1957.

Enrolment in primary schools increased by 20 per cent between 1953 and 1957 and in general secondary schools by 29 per cent over the same period. The number of students in the teacher training college did not increase during the period under review. In 1957 the schools were staffed by over 2,050 teachers including about 35 per cent women. The average pupil-teacher ratio in primary schools was 35 and in general secondary schools 23. (See Table 3.)

Examination results in secondary education, 1953–57. Table 2 gives available details of candidates passing secondary school examinations. The Fiji Junior Certificate examination was passed by 427 pupils in 1957 compared with 311 in 1955, an increase of 37 per cent. The numbers sitting the Cambridge Oversea School Certificate reached a peak of 155 in 1956 and declined to 118 in 1957. No information is available on numbers of female candidates. The teacher training final examination is passed by between 80 and 90 students each year.

Educational finance, 1957. Total expenditure by the Education Department in the fiscal year beginning January 1957 amounted to 880,971 Fijian pounds, of which nearly all (£875,051) came from territorial revenue and the remainder from the Colonial Development and Welfare Fund. There was in addition considerable expenditure by the local authorities and voluntary agencies, including an estimated amount of £180,000 spent by missions. Capital expenditure represented about 12 per cent of the total spent by the Education Department. The distribution of recurring expenditure by level and type of education is given in Table 1.

Sources. Fiji: Department of Education, annual reports.

1. EDUCATIONAL FINANCE, 1957 (in Fijian pounds)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure[2]	**774 076**	**100.0**
Central administration	23 399	3.0
Primary education	547 406	70.7
Secondary education	153 263	19.8
Vocational education	12 846	1.7
Teacher training	28 635	3.7
Other education	8 527	1.1

1. Official exchange rate: 1 Fijian pound = 2.52 U.S. dollars.
2. Refers to the expenditure made by the Education Department only. The total government expenditure on education amounted to £982,632. In addition, local authorities contributed an amount for which data are not available and voluntary agencies contributed an estimated amount of £180,000.

2. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year				
	1953/54	1954/55	1955/56	1957/58	1957/58
New Zealand School Certificate	[1]7	22	41	31	39
Cambridge Oversea School Certificate	[2]13	...	122	155	118
Fiji Junior Certificate[3]	–	–	311	389	427
Royal Society of Arts	...	[4]29	47	...	...
Teacher Training Certificate	...	...	85	90	81

1. Results for two schools only.
2. Results for one school only.
3. The Education Department instituted this examination in 1955.
4. Including nine women.

3. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	26	184	83	6 349	2 474
	Primary schools, aided private	1957	448	1 628	572	57 949	26 078
	Primary schools, unaided private	1957	34	65	17	1 347	639
	Total	**1957**	**508**	**1 877**	**672**	**65 645**	**29 191**
	,,	1956	495	1 728	584	62 451	28 035
	,,	1955	479	...	...	60 223	26 737
	,,	1954	467	1 395	403	58 835	25 986
	,,	1953	453	1 389	427	54 658	23 879
Secondary							
General	Secondary schools, public	1957	9	52	16	750	280
	Secondary schools, aided private	1957	9	41	17	960	452
	Secondary schools, unaided private	1957	8	46	6	1 427	287
	Total	**1957**	**26**	**139**	**39**	**3 137**	**1 019**
	,,	1956	23	114	40	2 713	786
	,,	1955	23	104	28	2 462	634
	,,	1954	23	92	36	1 932	481
	,,	1953	21	109	33	2 433	693
Vocational[1]	Vocational schools, public	1957	2	14	4	127	16
	Vocational schools, aided private	1957	3	10	4	216	19
	Total	**1957**	**5**	**24**	**8**	**343**	**35**
	,,	1956	5	19	10	216	44
	,,	1955	5	30	17	244	31
	,,	1954	1	...	...	47	–
	,,	1953	...	...	...	...	...
Teacher training	Teacher training college, public						
	Total	**1957**	**1**	**15**	**5**	**180**	**74**
	,,	1956	1	10	4	174	66
	,,	1955	1	9	3	181	74
	,,	1954	1	10	2	175	87
	,,	1953	1	7	1	194	93
Special	Approved school, public						
	Total	**1957**	**1**	**2**	...	**58**	...
	,,	1956	1	2	–	50	–
	,,	1955	1	...	...	42	...
	,,	1954	...	...	...	...	...
	,,	1953	1	...	...	29	–
Adult	Extension classes						
	Total	**1957**	**11**	**62**	...	**1 503**	...
	,,	1956	...	...	...	...	...
	,,	1955	...	...	...	363	
	,,	1954	...	...	...	...	...
	,,	1953	...	...	...	209	...

1. In addition, there are handicraft and domestic science centres attended by primary and secondary pupils.

GILBERT AND ELLICE ISLANDS

The Gilbert and Ellice Islands Colony, which includes Ocean, Christmas, Fanning and Washington Islands besides the Gilbert, Ellice and Phoenix groups, is administered by a Resident Commissioner responsible to the High Commissioner, Western Pacific, whose headquarters are at Honiara, British Solomon Islands Protectorate.

THE EDUCATIONAL SYSTEM

Education is largely in the hands of the Christian missions but all schools and teachers must be registered with the Education Department, which controls the curriculum and general standards. Besides maintaining an increasing number of schools of its own, the Government makes available grants-in-aid to mission schools which meet certain conditions.

The educational system is regulated by the Education Ordinance of 1955 and is administered by a Chief Education Officer, five education officers and clerical staff. In addition, the ordinance established an advisory committee comprising the Chief Education Officer, two other government officers and up to eight persons nominated by the controlling authorities of the mission schools, whose function it is to advise the Resident Commissioner on educational matters in the Colony.

Education is compulsory between the ages of 6 and 16 and is for the most part provided in all-age village schools without differentiation into primary and post-primary levels. The full graded primary course lasts 8 years and comprises a 2-year infant school (primers 1 to 4) and standards 1 to 6. Education is initially in the vernacular but by standard 4 English has become the medium of instruction, the vernacular continuing as second language. The two top primary classes (standards 5 and 6) form an intermediate stage and are roughly equivalent to the first two years of secondary education (forms 1 and 2). The full secondary course lasts 5 years (forms 1 to 5).

Other types of education provided include teacher training and various vocational courses. Beyond this level a few students are sent overseas, principally to the Central Medical School, Fiji, and Ardmore Teachers' College, New Zealand. An increasing number will be sent overseas for higher, including university, education in the future.

TYPES OF SECONDARY EDUCATION

Each of the principal missions conducts schools which are aspiring towards secondary standard and one of them has reached the fifth form of secondary school work. Entry to these schools is by selection rather than examination.

The only institution providing a full 5-year course is the King George V School, a government boarding school for boys, with an enrolment of 120. A similar boarding school for girls, with accommodation for 60 pupils, was opened in 1959. Both these schools are at Tarawa.

The secondary course prepares pupils for the General Certificate of Education examination of London University. It will shortly be modified to prepare them for the Cambridge Oversea School Certificate and Cambridge General Certificate of Education examination.

The curriculum includes English language and literature, history of the British Commonwealth, geography, mathematics, health science, art and local crafts, woodwork, physical education and singing. General science is taught in the lower forms and will be continued until the fifth form when staffing permits. Stress is laid on practical work and adaptation to local conditions.

Vocational and technical education. The government departments train their own fitters, mechanics, wireless operators, nurses, clerks, etc. The British Phosphate Commission Apprenticeship Scheme offers courses for electricians, plumbers, welders, fitters, carpenters, painters, boilermakers and other skilled occupations.

Teacher training. A new teachers' college at Tarawa has 16 students in training per year. The Missions also have arrangements for pastor/teacher training in their own institutions.

Out-of-class activities. Sports and team games are taught at government schools. At King George V School and the larger mission schools club activities are well established and include stamps, chess, dramatics, etc. At government boarding schools traditional native singing and dancing are kept alive.

TRENDS AND PROBLEMS

Until recently secondary education has been handicapped by the low standard of education generally and the shortage of teachers capable of undertaking the work. Owing to the improved supply of teaching materials and books in government schools and to the fact that more and more teachers who have spent a year in New Zealand are now teaching on outer islands, many good candidates for the government secondary schools are coming forward. It has been possible to lower the age of entry to 12 or 13 and the problem of wastage is being overcome. This trend will gather momentum as more students complete the course at the new teachers' college.

One of the objects of the government secondary schools is to provide staff for the various Colony services. From 1961 on there will be a regular output of boys with an overseas school certificate or certificate of education available for training for higher posts in the Colony and for study overseas. Girls' education still remains behind that of boys,

but the opening of the new girls' secondary school has marked a great step forward.

[*Text revised by the Chief Education Officer, Tarawa, in May 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 44,000.
Area: 349 square miles; 905 square kilometres.
Population density: 126 per square mile; 49 per square kilometre.

Summary of school statistics, 1953–57. In 1957 there were 8,453 pupils enrolled in primary and secondary schools representing over 21 per cent of total population. The proportion of girls enrolled was about 42 per cent in primary schools and 22 per cent in secondary schools. The teaching staff numbered 314 and the average pupil-teacher ratio was 27. (See Table 2.)

Examination results in secondary education, 1953–57. In the school year 1956/57, 120 candidates passed the local secondary school leaving certificate and one passed the New Zealand School Certificate examination. No information is available on the number of girl candidates.

Educational finance, 1956. Total public expenditure on education in the fiscal year beginning January 1956 amounted to 23,512 pounds sterling, or approximately £0.6 per inhabitant. Of this sum, £1,000 was contributed by the United Kingdom, £750 by local authorities and the remainder (£22,062) from territorial revenue. Capital expenditure amounted to £300 or just over 1 per cent of total. Distribution of recurring expenditure by level and type of education is shown in Table 1.

Sources. Gilbert and Ellice Islands: Education Department, annual reports. United Kingdom: Information transmitted to the United Nations on Non-Self-Governing Territories.

1. EDUCATIONAL FINANCE, 1956 (in pounds sterling)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure[2]	**23 512**	**100.0**
Central administration	6 956	29.6
Primary education	8 010	34.1
Secondary education	6 642	28.2
Vocational education	600	2.6
Teacher training	1 000	4.3
Other education	304	1.3

1. Official exchange rate: 1 pound sterling = 2.80 U.S. dollars.
2. Public expenditure only.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	16	29	3	1 023	343
	Primary schools, aided private	1957	231	240	16	6 418	2 815
	Primary schools, unaided private	1957	8	5	—	193	70
	Intermediate schools, aided and unaided private	1957	7	23	12	580	209
	Total	**1957**	**262**	**297**	**31**	**8 214**	**3 437**
	"	1956	253	295	30	7 725	3 230
	"	1955	274	330	26	8 995	4 183
	"	1954	262	318	23	8 893	4 133
	"	1953	253	305	20	8 650	4 098
Secondary *General*	Secondary school, public	1957	1	8	—	110	—
	Secondary schools, aided private	1957	7	7	4	150	57
	Total	**1957**	**8**	**15**	**4**	**260**	**57**
	"	1956	7	18	4	196	30
	"	1955	1	1	—	54	—
	"	1954	1	1	—	40	—
	"	1953	—	—	—	—	—
Teacher training	Teacher training centre, public						
	Total	**1957**	[1]1	[1]1	—	[1]12	[1]2
	"	1956	[1]1	[1]2	—	[1]6	[1]1
	"	1955	[1]—	[1]—	—	[1]—	[1]—
	"	1954	[1]—	[1]—	—	[1]—	[1]—
	"	1953	[1]—	[1]—	—	[1]—	[1]—

1. In addition there were mission pastor/teacher training courses.

PITCAIRN ISLAND

Education was formerly in the hands of missionaries but is now a government responsibility. It is entirely financed from the island resources, obtained largely by the sale of stamps. The inhabitants make no direct contribution.

There is one education officer and one assistant. A new school and community centre equipped with modern teaching aids was completed in 1949. All education from kindergarten to the secondary stage is conducted in this school, which is inspected by the Western Pacific High Commission at intervals.

The education officer adjusts the curriculum to suit the current needs of the children. General subjects, handicrafts, hygiene and physical education, music and art are taught. Gardening, particularly the growing of fruit trees, is an important part of the curriculum.

Secondary education was begun in 1957, when courses from the New Zealand Correspondence School were introduced. Pupils desiring further education go to New Zealand or Australia.

Adult education, based on individual needs, is also the responsibility of the education officer. There is a close link between the school and the community.

The children are regularly inspected by a qualified nurse resident on the island.

[*Text revised by the Colonial Office, London, in March 1960.*]

STATISTICS

Population (mid-year 1956 estimate): 143.
Area: 2 square miles; 5 square kilometres.

Population density: 72 per square mile; 29 per square kilometre.

TONGA

The Tongan or Friendly Islands, situated in the Southern Pacific some 450 miles east-south-east of Fiji, form a self-governing State under the protection of the United Kingdom.

Schools are provided by the Government of Tonga and by a number of church organizations, the chief of which are the Wesleyan and Roman Catholic missions. General responsibility for education is vested in a Minister of Education who is assisted by an advisory board. The administrative staff at the Education Office consists of the director, a senior inspector of schools, three organizing inspectors and an attendance officer. The church schools receive no state aid of any kind. Fees are payable in all schools except government primary schools and the teacher training college.

The Education Act of 1927 requires compulsory attendance at government primary schools of all children, aged not less than 6 and not more than 14 years, who are not in attendance at some other primary school. Exemption is granted on the grounds of distance from a government school, sickness, etc., and to pupils within these age limits who have completed the 6-year primary course. The compulsory period does not include any part of the secondary stage. All primary schools except one or two mission schools are co-educational, but all except 5 of the 21 post-primary schools are single-sex institutions. Tongan is the language of instruction in all but the top class of the primary school. At the post-primary level the language of instruction is English but Tongan remains a compulsory subject for examinations.

Secondary education is provided at three government institutions, Tonga High School, Tonga College and Teachers' College and at the colleges run by the missions. Although the normal primary school course lasts 6 years, pupils who have completed class 5 may sit the entrance tests to the various secondary schools. These tests are usually set by the headmaster of each college, although the government test may be used by other schools. Until 1957 the government entrance tests consisted of papers in mechanical arithmetic and formal English, but in that year these were replaced by a battery of four tests: a 'best reason', a 'problem arithmetic' and vocabulary test in

Tongan and a vocabulary test in English, all standardized for Tongan schools.

There is at present a differentiation in course between Tonga High School and the other secondary schools. Tonga High School admits selected pupils at the age of 11 years who will follow the New Zealand syllabus leading in six or seven years to the New Zealand School Certificate examination. Pupils entering Tonga College and the mission colleges take a 7-year course based on the Government of Tonga's post-primary curriculum, which leads to the local Higher Leaving Certificate and Public Service Entrance. The Higher Certificate is at a somewhat lower standard than that of the New Zealand Certificate, particularly in English. In the Leaving Certificate examination English, Tongan, elementary mathematics, hygiene and first aid are compulsory, and two optional subjects must be chosen from among the following which are usually regarded as part of the curriculum at all colleges: Tongan handicraft, history, geography, drawing, general science, needlework, agriculture, music, woodwork, domestic science, elementary mechanics, animal husbandry.

The course at Tonga College has a vocational bias. This college is a boarding establishment for boys selected from village schools. It has a farm of approximately 200 acres and is practically self-supporting.

The minimum academic requirement for entry to the government teacher training college is the Lower Leaving Certificate, which is taken at the end of the fifth year in the syllabus followed by secondary schools other than Tonga High School. However, since students also enter with the Higher Certificate taken at the end of the seventh year, training is carried out at two levels.

Under the Scheme of Co-operation between the Governments of Tonga and New Zealand, several of the senior posts at Tonga High School and Tonga College are filled by teachers recruited in New Zealand.

The secondary education facilities in Tonga are supplemented by government bursaries enabling suitable pupils to attend secondary schools in New Zealand. There is no post-secondary education in Tonga but the Government provides scholarships for university, teacher training and technical training courses abroad, particularly in New Zealand and Fiji.

TRENDS AND PROBLEMS

The development of government post-primary education and the introduction of vocational and industrial training courses are contingent on the enlargement of Tonga High School. Work is going ahead and when the new building is completed it is proposed to double the intake and to introduce a broader curriculum, while continuing to provide facilities for the highly academic few who will go on to further education overseas. At the same time Tonga College, relieved of its more academic functions, will become a vocational training school providing courses in woodwork, metalwork, elementary mechanics and various aspects of farming and agriculture. It will then become possible to integrate the local Leaving Certificate syllabus and the New Zealand syllabus.

Mission schools still account for over 80 per cent of the secondary school population. One school has organized its lower secondary classes as a separate intermediate school.

The recent overhaul of the whole school syllabus in Tonga and the introduction of new methods in place of formalism and rote learning is being reflected in a general improvement in standards up to and including the Higher Leaving Certificate level.

[*Text revised by the Director of Education, Nuku'alofa, in January 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 58,000.
Area: 269 square miles; 697 square kilometres.
Population density: 216 per square mile; 83 per square kilometre.

Summary of school statistics, 1953–57. In 1957 there were 15,873 pupils enrolled in 157 primary and secondary schools and 1 teacher training college, representing nearly 28 per cent of the total estimated population. Enrolment increased by 14 per cent in the primary schools and 37 per cent in the secondary schools between 1953 and 1957 and the number of teachers by 59 per cent over the same period. The average pupil-teacher ratio in primary and secondary schools was 25 in 1957 compared with 33 in 1953. (See table.)

Educational finance, 1957. Total expenditure on education in 1957/58 was 213,017 Tongan pounds, or about £3.7 per inhabitant. Of this total 40 per cent (£84,492) was public expenditure and 60 per cent (£128,525) was spent by missions. Official exchange rate: 1 Tongan pound = 2.24 U.S. dollars.

Sources. Tonga: Department of Education, annual reports.

SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary schools, public	1957	[1]78	[1]351	...	7 963	3 723
	Primary schools, private	1957	[1]79	[1]291	...	4 890	2 402
	Total	**1957**	**[1]157**	**[1]642**	**...**	**12 853**	**6 125**
	"	1956	[1]155	[1]575	...	12 910	6 152
	"	1955	[1]149	[1]494	...	12 606	5 962
	"	1954	134	[1]417	...	12 830	...
	"	1953	133	[1]405	...	11 311	...
Secondary *General*	Secondary schools, public	1957	(3)	[2]...	...	331	45
	Secondary schools, private	1957	(18)	[2]...	...	2 632	1 463
	Total	**1957**	**(21)**	**[2]...**	**...**	**2 963**	**1 508**
	"	1956	[2]...	[2]...	...	2 865	1 447
	"	1955	[2]...	[2]...	...	2 789	1 335
	"	1954	17	[2]...	...	2 591	1 261
	"	1953	11	[2]...	...	1 887	842
Teacher training	Teacher training college, public						
	Total	**1957**	**1**	**...**	**...**	**57**	**...**
	"	1956	1	...	...	54	...
	"	1955	1	...	...	62	...
	"	1954	1	...	...	57	...
	"	1953	1	...	...	55	...

1. All schools.

2. Included with primary education.

UNITED STATES OF AMERICA

THE EDUCATIONAL SYSTEM

In the United States of America the present trend in public education is for local communities to provide tax-supported and publicly-directed schooling for all from the age of 5 to the age of 20, that is, from kindergarten through two years of college. Nine years of this 15-year sequence, from age 7 to 16, are now compulsory in two-thirds of the states. Other states require school attendance to ages 17 or 18. Six states set the minimum compulsory attendance age at 6, six others set it at 8.

While the number of publicly-supported kindergartens for children under 6 is increasing each year, there are as yet few publicly-supported nursery schools. The number of privately-financed nursery schools, however, is growing steadily.

Elementary schools, embracing the first 6 or 8 grades of the elementary-secondary 12-year sequence, enrol virtually the entire elementary school-age population, boys and girls alike, in both urban and rural areas. Secondary education in the United States aims at including all youth of secondary-school age, thus offering 12 years of schooling to every boy and girl throughout the country. At present, 80 per cent of the young people of secondary-school age are enrolled, and 62 per cent of them graduate. Each year both percentages increase, bringing nearer the establishment of universal secondary education.

To comply with compulsory attendance laws, parents may send their children either to the public schools or to private or church-supported institutions. However, public funds have not been used to support either private or church-connected schools and the parent has had to meet the full cost of such education, in addition to paying his share of the tax for support of public schools.

Above the secondary level are the colleges and the universities with their graduate and professional schools. There are also junior colleges, the number of which is growing rapidly. These junior colleges provide two types of curricula: (a) the first 2 years of the traditional 4-year college course; (b) a 2-year terminal course of technical training.

The area of college, university, and professional education is shared by privately and publicly-supported institutions. State universities and municipal colleges rely upon public funds rather than upon income from endowment, current gifts, or student fees; in most of these

institutions fees are low. With few exceptions, institutions of higher learning are selective in their admission policies and each one insists that students meet its scholastic standards in order to continue their studies.

The way in which the various levels of the educational system are interrelated is shown in the diagram on p. 1365.

The provision of education (statutory base). The United States operates within the framework of a federal system in which power is shared between the Central or Federal Government and the 50 separate states which make up the Union. Education is not mentioned in the Federal Constitution, but this document clearly states that all powers not delegated to the Federal Government or denied to the states are reserved to the states and to the people. Under this provision each of the 50 states exercises sovereign control over schools and education in that state.

The Federal Government may provide essential educational programmes in those instances where states are not jurisdictionally responsible, i.e., for persons living on federal reservations located within states; for Indians and other indigenous peoples covered by treaty or international agreement; for persons living in the District of Columbia and the territories and outlying possessions of the United States; and for dependent children accompanying military or civilian personnel of the Federal Government at overseas stations.

The Federal Government may engage in other educational activities under the constitutional authority to levy and collect taxes for the common defence and the general welfare of the United States.

In respect of the territories belonging to the United States, it has been the policy of Congress to create territorial governments and delegate to them powers similar to those of states wherever possible. Thus, most schools operated in the territories are under the direct management and control of territorial governments.

There is in the United States a strong tradition that a large measure of control over education and the schools should rest with the local community. State statutes and directives define minimum standards for schools, the taxing power of the local community for education and other questions of this character, and leave to the locally selected school board the responsibility for providing education in conformity with state regulations. In general, teachers are licensed by the state education authority, but are appointed to teaching posts by local authorities. Local financial support varies with the resources of the local communities and their interest in education. Many states provide equalization funds from state sources to upgrade the schools in poorer communities. In general, such subsidies from state funds do not diminish local control.

Factors affecting the provision of education. One ethnic factor has influenced the development of schools in the United States, namely the practice of segregation of Negro pupils in the schools in some Southern states. In 1897, the Supreme Court of the United States upheld the legality of this practice on the part of the states provided that the quality of education in schools for each race be equal. In its rulings of 1954 and 1955 the Court reversed the earlier decision and declared compulsory segregation to be inherently unequal. Since 1955 desegregation has proceeded rapidly in five states and the District of Columbia. In other states no changes have taken place and in a third group changes have been few.

A religious factor influencing the system of schools in the United States is the provision in the Federal Constitution for the separation of Church and State. This provision, which prohibits the teaching of sectarian religion in the public schools, resulted in the growth of schools sponsored and supported by religious denominations, of which by far the largest proportion is supported by the Roman Catholic Church. There are some Lutheran schools and a few run by other denominations, although in general the Protestant groups do not operate schools.

Public schools in the United States are not organized on the basis of linguistic, social, or cultural factors. In spite of the large immigration into this country, the English language is the language of instruction. In a small number of schools attended by Indian children, a tribal language is sometimes used initially to a limited extent. However, the transition to exclusive use of English is made as quickly as possible. The Indians themselves favour this policy.

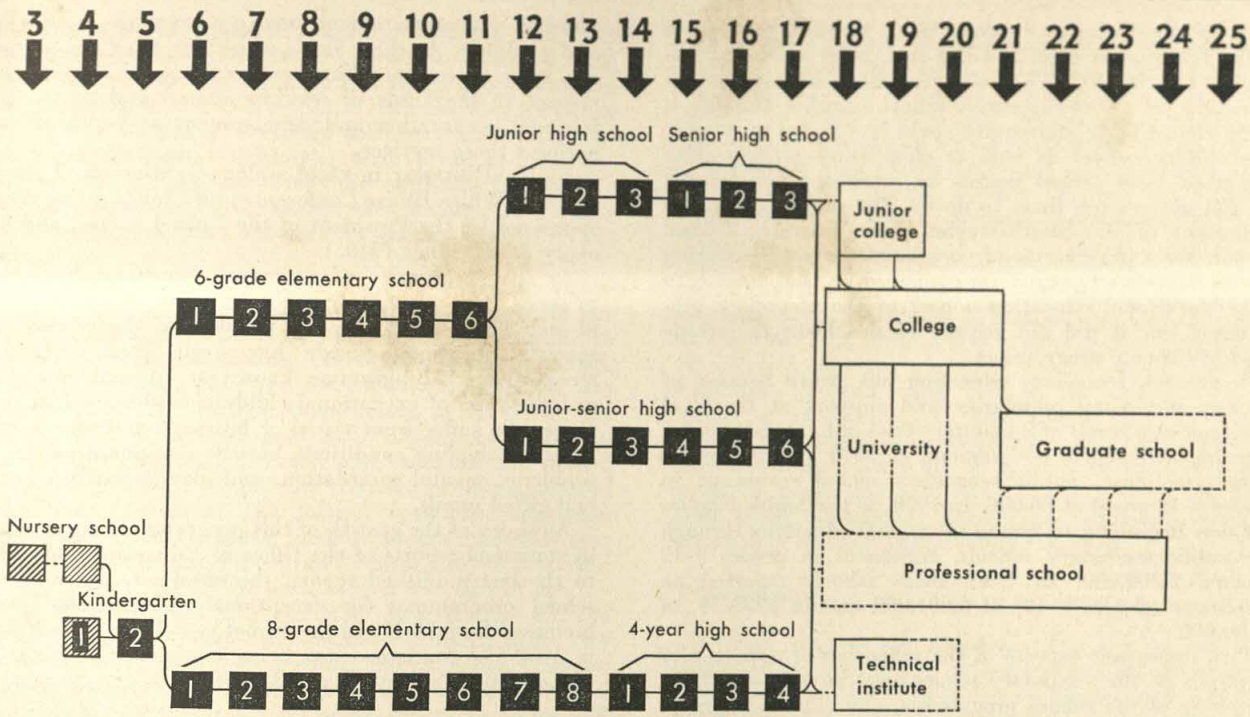
Role of public authorities. The role of public authorities at the federal and state levels is clearly defined. The U.S. Office of Education (which corresponds to the national ministry of education in many countries) has a mandate to collect statistics on the state of education in the nation and to make information about education available to schools and school authorities. It performs a research and clearing-house function, rather than an administrative one, with respect to school systems. It administers the subsidies for education appropriated by the Congress of the United States—for the most part these funds are used for vocational education, science and mathematics, modern languages, guidance, and research in the field of education.

The division of powers between state and local authorities in the 50 states is more marked and more varied. Each state has a department of education which is responsible for the enforcement of state statutes on education. Local autonomy within the framework of the state statutes is, in general, the system adopted in each state, but the division of power between state and local authorities varies from one state to another.

Role of private agencies. Non-public schools in the United States are primarily of two types: church-sponsored and operated, and independently supported and operated. The local agency operating church-sponsored schools is the parish which, in the case of Catholic schools, is responsible to the diocesan superintendent. As the term implies, independent elementary and secondary schools are unaffiliated with any religious group but are owned and operated by an individual or corporation. All of these schools must conform with state requirements for non-public schools.

THE DEVELOPMENT OF SECONDARY EDUCATION

Two landmarks stand out in the history of secondary education during the last 85 years: a decision handed



GLOSSARY

elementary school: primary school; organized to include 6, 7 or 8 grades of school, and the kindergarten and nursery school in school systems which maintain them.

high school: secondary school. The secondary level of education includes academic, general, vocational and business programmes.

kindergarten: pre-primary school or classes.

nursery school: pre-primary school preceding *kindergarten;* schools of this type are included in only a relatively small number of public school systems.

HIGHER EDUCATION

college: (a) an institution of higher education usually offering a curriculum in the liberal arts and sciences, and frequently one or more professional curricula in addition, empowered to confer bachelors' degrees for 4-year programmes and/or associate degrees for 2-year or 3-year programmes; (b) that undergraduate division of a university which corresponds in programme and function to (a).

graduate school: a major division of a university administering programmes of study requiring for admission a bachelor's or a first professional degree and leading to a master's and/or doctor's (Ph.D. or equivalent) degree.

junior college: a post-secondary school usually offering a 2-year programme either as preparation for transfer to the third year of a 4-year college or as preparation for a technical or semi-professional occupation. Adult education classes are sometimes provided.

professional school: an institution organized as a major division of a college or university, or independently organized, which provides education and training that qualifies for the practice of a profession such as architecture, dentistry, education, engineering, law, or medicine. Schools for some professions admit students who have been graduated from secondary schools; schools for other professions admit only students who have completed a pre-professional curriculum in a college of arts and sciences.

technical institute: the technical institute provides post-high school programmes of 1, 2 or 3 years' duration frequently leading to the associate degree. Although many of the courses in such institutions are not accepted for transfer credit by 4-year colleges and universities, most of the programmes are definitely of college grade. Some technical institutes are separate institutions offering only specialized technician training. The majority are divisions of universities or of junior colleges.

university: a complex institution of higher education usually comprising a college of liberal arts and sciences, two or more professional schools, and a graduate school, and sometimes a junior college. The word 'university' is also used in the titles of some institutions of higher education which are in reality only colleges.

down by the Michigan Supreme Court in 1874, referred to as the Kalamazoo case, and the enactment of the Smith-Hughes Law in 1917. The first event made mass secondary education in a tax-supported school possible through a ruling that a local community could levy taxes to support a secondary school as well as elementary schools. This permitted local school boards to establish high schools but did not require them to do so. The second event, the enactment of the Smith-Hughes Law, provided federal support for a programme of vocational courses by offering federal subsidies to states for communities that wanted to make vocational education a part of the secondary programme, but it did not require local schools to include these vocational programmes.

In general, secondary education has grown because of steadily increasing popularity and support at the local level, not as a result of mandatory laws or financial support from higher levels of government. In 1870, just before the Kalamazoo case, public secondary school enrolment in grades 9–12 stood at 80,000. In 1920, as the Smith-Hughes Act was beginning to spread vocational education through the public secondary schools, enrolment in grades 9–12 reached 2,200,000. In 1940, these schools reported an enrolment (grades 9–12) of 6,601,000 and in 1958–59, of 7,790,000.

Two important aspects of the extension of opportunity to pupils at the secondary school level have been (a) the enriching of the school programme, and (b) the improvement of the quality of teaching. The secondary school programme has changed as the ideas of Pestalozzi, Froebel, Herbart, Parker, and Dewey have influenced educational thinking. Teachers trained in educational methods based on pedagogical research have improved the quality of education for all pupils.

The American high school at the turn of the century concentrated chiefly on teaching the academic subjects—English, classical and modern languages, mathematics, sciences, history and civics. The twentieth century has witnessed the emergence and development of the high school as an institution which provides for the needs of all boys and girls of secondary school age.

Some schools offer a work experience programme—usually as part of the vocational programme, but sometimes as part of general education—in which pupils attend school part of the day and work part of the day under supervision of the school. They receive school credit for their work and frequently are paid for it as well.

A programme representing the technological aspects of American culture and included in the general education course is the industrial arts programme. Although non-vocational in nature, industrial arts deals with industrial processes—tools, machines, raw materials, products, and occupations representative of American industry. The narrow concept of manual training which had been introduced into the schools prior to 1900 was discarded in favour of a broad representation of modern industry.

Other developments in secondary education since 1900 came about as the result of critical times in the national life. World War I, the economic depression of the 1930s, and World War II emphasized certain student needs and resulted in the establishment or extension of various welfare services, e.g., health supervision and instruction, physical education, school lunch programmes, counselling and guidance. As these fields of service have grown there has been a corresponding increase in specialization with respect to the kinds of services offered and to the professional preparation and development of personnel who perform these services.

National interest in child welfare is illustrated by the series of White House Conferences on Children and Youth sponsored by the President of the United States, and held every decade since 1910.

As the programme of secondary education broadened to serve more adequately the needs of more young people of secondary school age, the problem of those who have special educational needs has been given increasing recognition. A programme known as 'special education' or 'education of exceptional children' is designed to serve those who suffer from visual or hearing handicaps, speech defects, crippling conditions, serious emotional and social problems, mental retardation, and also specially talented and gifted pupils.

An index of the growth of this programme may be found in statistical reports of the Office of Education. According to the last published report, the enrolment in secondary school programmes for exceptional children and youth increased from 18,150 in the school year 1937/38 to 108,058 in 1952/53.[1] Statistics now being compiled by the Office of Education indicate that this increase is continuing.

Legal basis

The state systems of free public schools are established by state legislatures, usually under constitutional mandate. The Constitution of Kentucky, for example, directs that the General Assembly 'shall, by appropriate legislation, provide for an efficient system of common schools throughout the state'. The Kentucky General Assembly has defined the term 'common school' as 'an elementary or secondary school of the state, supported in whole or in part by public taxation'.

All states have explicit legislation authorizing the establishment, maintenance, and support of public high schools and all now require that local school districts provide secondary education opportunities. In some states, if a local school district does not choose to operate a secondary school it may meet the requirement 'to provide secondary education opportunities' by sending pupils of high school age to public high schools maintained by neighbouring districts, or sometimes to approved non-public schools. Many states which promoted the initial establishment of public high schools by grants-in-aid still employ this means to encourage specific improvements in secondary education.

As educational institutions non-public high schools are subject to regulation under state laws dealing with their establishment and approval. Moreover, in the normal operation of their activities, non-public schools must accept responsibilities prescribed by law for the conduct and care of the children and young people they enrol. They

1. Mabel C. Rice and Arthur S. Hill, 'Statistics of Special Education for Exceptional Children, 1952–53,' *Biennial Survey of Education in the United States*, Chapter 5. Washington, D.C., U.S. Government Printing Office, 1954, p. 78.

may be expressly required to keep records and make any reports to state officials that are needed to establish valid legal evidence that the children and young people enrolled are attending school in compliance with the law; they may be expressly required to remain in session for a term that compares favourably with the term prescribed for the public schools; and they may be expressly required to provide educational programmes that compare favourably with the programmes required in public schools of like nature.

Vocational education. Public vocational education at the secondary level was a relatively late development in the United States. Wisconsin, in 1907, was the first state to enact legislation authorizing the establishment of public industrial schools. The need for vocational education was recognized by the Federal Government in 1917 with the passage of the Smith-Hughes Act. Subsequent legislation enacted by Congress increased and extended the federal assistance provided to states by that act for programmes of vocational education. The federal vocational education acts limit the use of federal funds to programmes that are: (a) under public supervision and control; (b) of less than college grade; and (c) for persons over 14 years of age.

The federal-state programme of co-operation for the development of vocational education is based upon two fundamental ideas: (a) that vocational education is in the national interest and is essential to the national welfare, and (b) that federal funds are necessary to encourage and assist the states to make adequate provision for such training.

The law requires that each state appoint a board responsible for the promotion, development, improvement, and supervision of vocational education within the state. In 45 states, the state board of education for the state system of free public schools also serves as the vocational education board. Vocational schools may be operated within local school districts under the operational management of district boards of education or they may be operated regionally by the state board for vocational education.

Apprenticeship programmes are supervised and regulated under federal and state law. Related educational requirements for apprenticeship programmes are usually provided for under federally aided state programmes of vocational education.

Compulsory education. In 47 of the 50 states at least nine years' schooling is required by statute. With the maximum school age-limit for compulsory attendance ranging from 16 to 18 years, normal grade promotion in each of these states assures pupils of at least some education at the secondary level. Free public education opportunities below the college level are available to all children and young people in the United States under 21 years of age.

Child labour laws of both the State and Federal Governments help to enforce compulsory education legislation. Such laws govern the employment of young people of school age. Work permits may be issued to children of school age under conditions prescribed by state or local authorities. These permits usually stipulate that work must not conflict with hours of school attendance, or that the young person must attend a continuation school at night. Requirements vary so widely from state to state in this respect that it is difficult to generalize.

The enforcement of attendance laws in the United States is rapidly becoming a matter of discovering what causes the absence of pupils and helping to remove these causes. In many local school districts, responsibility for this work is now placed with a skilled school social worker. A number of states have state-wide associations of attendance officers or 'visiting teachers' as they are sometimes called. There is also a National Association of Visiting Teachers.

Compulsory attendance legislation may provide exemption for: (a) children who are seriously handicapped, mentally or physically; (b) children of certain ages and educational attainments who have obtained official state permits; and (c) children who are unable to attend school because of conditions beyond their control, for example, serious illness or remoteness of their homes from the nearest school. Technological developments, i.e., radio, television and telephone, now make it possible to bring the classroom to many children who previously were exempted from school attendance. Many school districts now employ teachers to instruct 'homebound' children.

Administration

The final decision of questions of policy in secondary education is made by one or both of two groups of authorities: (a) the chief state school official and the state board of education; and (b) the local superintendent and local board of education. In most cases where major questions of policy are involved the authority making the decision usually consults the other, even though it may have the power to act alone.

Many of the states prepare courses of study for the secondary schools. The course of study is regarded as suggestive rather than prescriptive; considerable latitude is thus permitted the school and the teacher. When a new course of study is to be prepared, a state committee is set up composed of secondary teachers, professors of education, and professors in the subject area. In many cases a very large committee discusses the general outline and a smaller working committee writes the course, which cover both subject content and methods of teaching. Very frequently the course of study is printed, tried out in selected schools, and revised on the basis of the trial experience.

Very often, especially in large urban and suburban school districts, the local school system itself prepares courses of study or curriculum guides, as they are frequently called. As at the state level, their preparation is carried out not only by supervisors and consultants; many teachers who will be using them as guides in teaching their classes are also members of the working committees.

In most states, a state textbook committee draws up a list of textbooks for each subject from which local schools make their choice. In a few states, however, a single textbook is adopted for each subject, while in many others each school or school district selects all textbooks without the intervention of the state education officials.

The Federal Office of Education does not make recommendations on curriculum, methodology, or textbooks. It may call general attention to programmes which show promise of helping to solve persistent educational problems.

Control. The system of free public schools in each state is headed by a department of the State Government, commonly called the state department of education. The administration and direction of this department is entrusted to a state board of education or a chief state school officer or both. The chief state school officer is responsible for the technical administration of the department.

State departments of education have various responsibilities including the exercise of such regulatory powers as are delegated to them by state legislatures. No two departments are organized and administered alike, although there is a marked similarity in departmental functions from state to state.

The duties and responsibilities of state departments may be grouped under three broad headings: (a) Leadership—advising and consulting, planning, co-ordinating, public relations work and research for the state educational system; (b) Regulations—insuring system-wide conformity to state laws and administrative rules establishing minimum performance standards; (c) Operation—direct management and control of state-wide programmes that cannot be effectively or efficiently administered locally.

With few exceptions, the public schools below the higher education level are local schools, in that they are operated for, and primarily supported by, the people residing in political subdivisions of the state, commonly called local school districts. There are approximately 40,000 of these districts in the United States, ranging in size from small rural districts employing one teacher, to large city districts operating more schools than some of the smaller states. Approximately 14,600 of the local districts operate high schools. The affairs of districts are generally managed by lay boards whose members are residents of the district in which they serve. Board members are usually elected by the qualified voters of the district.

Since the Federal Government makes appropriations for the promotion and further development of vocational education, the U.S. Office of Education is responsible for the administration of the federal vocational education acts. The office therefore maintains a staff of specialists in vocational education working at the national and interstate levels, with public and private agencies and groups, on activities relating to the programme. In addition, the office co-operates with the states in identifying the instructional needs of individuals and communities on the basis of occupational opportunities and trends. Co-operation is given to the states also in planning, organizing, supervising, and administering programmes as well as in the development of instructional materials and suitable standards for vocational education facilities.

The state board for vocational education prepares an outline of the vocational education programme for which the state will use federal funds and it specifies how the programme will be operated and the teachers trained. The Federal Government reviews state programme operations to determine whether they conform to the state plans. Programmes in local school districts are thus to be found operating in conformity with the plans prepared by the state and approved by the Federal Government.

Supervision and inspection. Except in the area of vocational education, the U.S. Office of Education has no responsibility for the supervision of schools, but it provides consultative or advisory services to the various states and territories upon request. Each state and territory has on the staff of the department of education one or more persons responsible for the supervision of secondary schools. The persons who serve in this capacity act chiefly as advisers or consultants to local school districts. They are referred to as supervisors, directors, consultants, or assistant superintendents. The supervisors, as they will be called in this report, may be general or special supervisors. General supervisors concern themselves with the general overall supervision of the schools, while special supervisors are responsible for certain subject-matter areas or specific aspects of education, such as vocational education or the education of exceptional children.

In some states, the state department of education carries heavy responsibility for approving high schools to receive state funds and for formally approving or accrediting schools or for recommending schools for accreditation. Formal approval or accreditation involves periodic evaluation of a school in terms of the minimum standards established by the state department. Either alone or as a member of a team the supervisor participates in the periodic visits, in reviewing the required annual reports of the school, and in making the official rating.

Inspection as such is tending to disappear as a function of state department personnel and a growing emphasis is placed upon improving instruction through providing professional help for teachers and administrators. The duties of the supervisor include the conduct of or help in conducting school surveys, participation in self-evaluative studies by local schools, and assisting in curriculum development and in-service education.

In the city, county, or other local school system, supervision takes the form of advisory or consultative services and is the responsibility of general or special supervisors, heads of departments, assistant superintendents, co-ordinators, or directors of instruction or curriculum. In the smaller school systems the principal may be responsible for supervision. At whatever level supervision is exercised, it is concerned with the improvement of the educational programme, the in-service education of teachers, and with the strengthening of school-community co-operation through leadership. Observation is only one of the techniques used. Very little school visiting is done according to a regular schedule. Instead, supervisory visits are made when schools or teachers request them or when supervisors believe that such visits are needed.

In the local school districts, a supervisor is usually a person who has had several years of teaching experience, holds at least a master's degree with an emphasis on professional education, and possesses an ability to work with professional and non-professional personnel. Most state departments of education require similar qualifications for their supervisory personnel.

Supervision of programmes of vocational education is carried out at the state and local levels by persons whose qualifications and duties are set forth in the state plan for vocational education. Supervision is looked upon as a means of improving instruction through assisting teachers to continue to develop and enlarge their grasp of the technical aspects of the subjects they teach.

Important in the field of secondary education are the five non-governmental regional accrediting associations. These associations, each of which has assumed responsibility for accrediting schools in states in a given area of the United States, are composed of representatives of colleges and secondary schools in that area. Their evaluations of high schools, using similar standards and criteria, have a marked effect in bringing about uniformity in educational practice in the 50 states. Membership in an association, evaluation by it, and compliance with its suggestions are voluntary and outside the regular channels of state or federal control. However, to be regionally accredited does give status to a high school and accreditation is very generally sought by schools which are able to meet the regional association's standards. Regional accreditation is in addition to and apart from accreditation by the state accrediting agency.

Finance. All levels of government in the United States—local, state, and national—provide funds for free public education. Under traditional patterns of financing free public education, the schools operated by local school districts are supported largely by funds derived from local taxes. Funds derived from state taxes are usually provided in order to equalize educational opportunities throughout the state and to stimulate and encourage the introduction or expansion of particular programmes and services in local school districts. Funds derived from federal taxation are provided for specific purposes which the Congress deems essential for the common defence and the general welfare of the United States. Federal funds are now being provided to states for a variety of purposes including the promotion of vocational education, the operation and construction of schools in areas under federal jurisdiction, and the strengthening of science, mathematics, and modern language instruction and of guidance and counselling programmes.

For the school year 1955/56, the proportions of funds for free public elementary and secondary education from governmental sources were approximately: local 55.9 per cent; state 39.5 per cent; and federal 4.6 per cent. These percentages have remained essentially the same. Since information on free public education in the United States is reported for elementary and secondary education taken together, separate figures cannot be provided for the financing of each level.

Public school buildings and the initial outlay for equipment are usually paid for by local school districts with funds derived from the sale of bonds. Local school districts pay off the debt incurred by the bond sale over a period of years. Many states provide some aid for the building of schools in cases where local school districts lack the resources to raise sufficient funds by conventional bond sales. Teacher salaries, administrative costs, operation and maintenance costs, and other expenses incurred during the school year are paid from funds raised by taxation for that year.

No tuition fees are charged in public secondary schools. Most school districts provide students with the textbooks and equipment used during the school year and many provide school lunches. These latter are usually paid for in part by parents, although such programmes are substantially aided by state and federal funds and federal donations of surplus commodities.[1]

A majority of the secondary schools charge or permit the charging of admission fees to athletic contests, dances, dramatic presentations, concerts, and other school-sponsored activities. Many also assess various fees such as those for rental, use or breakage of school property, fees for items such as caps and gowns used in graduation ceremonies, cameras used on field trips, and musical instruments for individual or group instruction which are too expensive for most parents to provide. The miscellaneous fees are waived or paid by other means in cases where they would constitute a hardship for parents.

In an effort to keep students in school throughout the secondary course, provision is made to meet basic family needs through private and public welfare agencies in cases where the student's attendance at school constitutes a hardship to his parents.

The federal vocational education acts require that each dollar of federal funds shall be matched by a dollar of state or local funds or both. Federal funds for vocational education are allotted to the states on a population basis and are largely used for the reimbursement of a portion of the salaries of teachers, supervisors, and administrators. Some funds are available for school supplies and equipment but none for financing the cost of buildings. Fees are required of vocational education students in some instances, usually to cover the cost of supplies or certain special services. In general, however, vocational education in the United States is free.

Buildings and equipment. The local school districts which operate public high schools are responsible for providing school facilities. State laws and administrative regulations prescribe obligatory building and equipment standards to protect the safety and health of students, employed personnel, and others who will use the facilities, and to insure the functional adaptability of the facilities to the approved state educational programme. State departments of education usually supervise the school building activities of local districts in matters pertaining to the educational programme and also provide consultative and advisory services for the planning or execution of such programmes. They inform the districts of pertinent state standards and make available professional services designed to encourage districts to provide facilities that best meet their needs. The state departments of education in many states are empowered to enforce certain minimum building standards having direct educational implications, particularly in those instances where state building funds are being provided.

School welfare services. Among the services in which schools share responsibility with other community agencies are

1. In order to be eligible for either funds or surplus foods for a school lunch programme, certain requirements must be met. The programme must be operated on a non-profit basis; lunches must be served either free or at a reduced cost to children who cannot afford the full cost; and the meal must meet minimum nutritional standards established through research. Each day's lunch is supposed to supply approximately one-third of the pupil's daily requirement for calories, vitamins and minerals.

those pertaining to health and welfare. These services contribute to child growth and development, help the child take advantage of his educational opportunities, facilitate adjustment and protection, and supplement or extend the school programme. The welfare services of the schools are largely preventive, but the schools also work in co-ordination in many ways with welfare, health, and other agencies in developing adjustment or corrective procedures.

Among the responsibilities of the schools relating to the welfare of school children are instruction in basic health concepts and needs; the provision of facilities meeting at least the minimum state and local requirements as to lighting, heating, sanitation and drinking water; insuring the safety of children on the playground and when crossing streets near the school; transporting children to and from school and on school-sponsored field trips and other school-related activities; and the provision of school lunches.

In these programmes there are several patterns of administration, although in general a large measure of authority is exercised at the local level. Three constituent agencies of the U.S. Department of Health, Education, and Welfare—the Office of Education, the Children's Bureau, and the Public Health Service—carry on programmes at the federal level for the health and welfare of children. The major role of the Federal Government in this field lies in the areas of research and technical consultative services. Both the Public Health Service and the Children's Bureau, however, also make grants to states to assist in the provision of needed health and social services.

TYPES OF SECONDARY EDUCATION

Secondary education in the United States may be either a 6-year or a 4-year programme. When it is six years in length, grades 7 and 8, which are otherwise part of elementary education, are included in a junior high school or a junior-senior high school. When grades 7 and 8 are a part of the secondary school the programme is normally somewhat broader than it is when these grades form part of the elementary school. The pupils usually receive instruction in a departmentalized situation, i.e., they are taught by a different teacher for most of their seven or eight subjects, rather than in a self-contained classroom. There are few if any elective subjects in these lower secondary grades.

The programmes of seventh and eighth grade pupils in the secondary school consist of the following subjects in one or both years: English, history, geography, arithmetic, general science, industrial arts or homemaking, health and physical education, art, and music. In general, one or more elective subjects are introduced in grade 9.

Most high schools in the United States are comprehensive high schools, that is, they are not selective in the subjects offered or the pupils enrolled. Americans in general believe that a high school should be a universal common school providing opportunities for all boys and girls in the area it serves to receive the kind of instruction that will best develop their individual potentialities. Specialized high schools are usually found only in the largest cities. A recent study showed that of 18 cities of above 500,000 population 16 have from two to seven different types of high schools. The most common types of specialized schools are the vocational, vocational-technical, technical, commercial, and academic.[1]

In the past, specialized schools in larger cities were numerous and many cities maintained both an academic and a vocational high school. In a few, there were separate high schools for boys and girls. Now, however, in most school districts there is only one type of secondary school available to the pupil who wants to attend a free public school—the comprehensive high school in the district where he lives. In this school the pupil may elect to follow one of three or four or more different courses. Usually these are the academic or college preparatory, vocational and business courses, and a course of general studies which does not prepare for college or a specific vocation.

Small comprehensive high schools usually offer a single curriculum, that is, required subjects plus electives. Approximately 50 per cent of the high schools in the United States enrol fewer than 200 pupils. These schools can, of course, provide only a limited number of courses; they do not succeed in offering everything for all types of pupils. Their purpose, however, is the same as that of the larger comprehensive high school with multiple curricula.

Guidance. To help pupils and their parents in choosing suitable programmes and courses, secondary schools provide a guidance service, which assists the individual pupil in educational and vocational planning and in making personal and social adjustments.

In planning the pupil's studies consideration is given to his elementary school record, his ability as indicated by his past achievement and test scores, his interests, and his vocational aspirations. A cumulative record concerning these and related matters is usually kept during elementary and secondary school years. The planning interviews are held at intervals throughout the student's schooling, so as to help him to develop a programme of studies appropriate to his own purposes. Within the limits of available elective subjects, and the basic curriculum he has chosen, he is free to make his own choices subject to approval by his parents, provided his record of past achievement seems to warrant his undertaking the courses selected. Normally such assistance in planning is the responsibility of specifically designated counsellors, although teachers often assist. In smaller schools the guidance service may be run entirely by teachers and the principal.

Considerable impetus was given to the development of guidance and personnel services at the secondary level by the National Defense Education Act of 1958. Provision is made in the Act for financial assistance to states for carrying out testing programmes designed to identify pupils of high ability, providing guidance services to assist students with educational planning, and encouraging students of outstanding ability to prepare for and enter institutions of higher education.

Types of further education open to secondary school leavers. Many educational opportunities are still open to secondary

1. 'High School Curriculum Organization Patterns and Graduation Requirements in Fifty Large Cities,' Washington, D.C., U.S. Office of Education, 1959. (Circular No. 587.)

school students who fail to complete the requirements for a high school diploma.

In some states continuation education opportunities are provided for those who have not completed high school and have not passed the compulsory age for attendance. Such continuation programmes, which are usually maintained only by the larger school districts, are provided in the morning, afternoon, or evening, according to the convenience of the student, who works on the job during hours when he is not attending classes.

In many states a high school diploma or a certificate of equivalency may be awarded to adults who pass the General Education Development Tests which were standardized during World War II. Other states require either attendance in specific classes or satisfactory completion of course tests before a diploma is granted.

Of the 17,000 local school districts providing education for 150 or more elementary and secondary students, more than 6,000 offer a programme of education for the adults of their respective communities. Usually these programmes include specific provisions whereby adult citizens may acquire high school diplomas. The requirements may be the same as those established by the school district for the granting of the high school diploma to secondary school students. Some communities now offer educational programmes leading to the high school diploma which are especially adapted to individual educational needs.

A number of state universities, directly, or in co-operation with the state universities of other states, provide correspondence courses at the high school level. Completion of such correspondence courses may at times be certified to the parent local school district and the diploma may be issued by the local high school.

The school year. During the school year of nine months, September to June (the exact dates varying from state to state and even from city to city), most state departments of education and regional accrediting associations prescribe a minimum of 175 teaching days, that is, days when classes are actually in session. There is a week's vacation at Christmas and another week in the spring, frequently at Easter. Certain other legal holidays are observed, often as many as four or five during the school year.

The school year may be a single term with promotion coming only at the close of school in June, or it may be divided into two semesters with promotions both at the end of January and in June. The trend is towards the end-of-year promotion only. Some systems maintain a summer school, attendance at which is voluntary.

Classes meet on five days of the week, Monday to Friday. Except for schools which because of overcrowded conditions must maintain double shifts, the length of the school day ranges from 5½ to 7¼ hours, including a lunch period of 25 to 45 minutes. Schools may schedule classes on either the short-period (40–45 minutes) or long-period (50–55 minutes) basis. If the short period is adopted, the school day will probably consist of seven class periods; with the long period, there are usually only six. A brief homeroom period may be included when pupils gather once each day for roll call and other routines, or an activity period of approximately 30 minutes when hobby clubs meet, assemblies are held, and group guidance is provided.

General secondary schools

General secondary schools in the United States, commonly referred to as comprehensive high schools, are schools of the multi-lateral type offering several different curricula, usually college preparatory, vocational, business education, and general; they may, however, offer a single curriculum of required subjects with as many electives as possible according to the size of the school.

For the most part, pupils who take the general course in a comprehensive high school lack the interest, the ability, or the aptitude to follow one of the programmes leading to college or to vocational preparation. There is no selection of pupils for the general course since both boys and girls are required by law to attend school until the age of 16, which normally means the midpoint in the 4-year secondary sequence. Those who have reached the legal school-leaving age of 16 are encouraged to stay in school at least until they can secure full-time employment. Young people who are not in school and are not employed represent an economic waste which the schools try to keep to a minimum.

Pupils choose their course—college preparatory, vocational, general or business education— with the advice and consent of their parents and their high school advisers or counsellors.

Regardless of the curriculum followed every high school boy and girl is required to take certain specified subjects. While there is some variation among states and among school districts within states, a typical pattern of subjects required of all is as follows: four years or 'units'[1] of English, two or three of social studies (including American history and government), one of mathematics, one of a science, and two to four years of health and physical education, out of a total of sixteen or more units required for high-school graduation.

In addition to these subjects required of all pupils, each curriculum except the general specifies other compulsory subjects. The college preparatory, for example, normally requires an additional year of mathematics and frequently a second year of science plus two years of a foreign language. The business education curriculum has a specialized programme including such courses as shorthand, typewriting, and general office practice. The vocational curriculum in the comprehensive high school is similar to that in the specialized vocational school and is discussed in the relevant section of this report.

To complete the total number of units required for graduation pupils elect subjects from among those offered by the school. In some instances, they are required to choose subjects bearing a relation to the curriculum they have chosen; frequently, however, they may elect freely from all the subjects available. The number and variety of subjects available in any comprehensive high school is dependent primarily upon the size of the school. The largest comprehensive high schools may offer as many as 200 different courses; the smaller schools can offer very few.

These smaller schools try in various ways, however, to

1. A unit is given for successful completion of a course meeting for at least 40 minutes a day, 5 days a week for a year of 180 days.

provide additional opportunities for their pupils. Frequently, they alternate subjects, that is, chemistry may be taught one year and physics the next. An itinerant specialized teacher may teach a course in agriculture or homemaking in two or more schools. When no teacher is available for a desired subject, the school may obtain a correspondence course from the state university which it then offers the pupil under teacher supervision.

In schools having multiple curricula a certain grouping of students by ability and aptitude is inherent in the selection of the curriculum followed. In a few large cities secondary school pupils are assigned to streams or 'tracks' on the basis of ability or aptitude. One of these cities has, for example, these four tracks: honours for the brightest pupils; regular college preparatory; general for non-college-bound pupils; and basic for pupils of below-average ability.

Some aspects of curricula and methods. Within the framework of a curriculum guide, teaching in the secondary school very generally follows a prescribed textbook, the pupils preparing each evening an assigned lesson supplemented on occasion with information from other sources. Occasionally school trips are made to examine or observe at first hand objects or activities under study. In some classes there is unit teaching, in which the work is organized under broad topics, or the problem-solving method is used; each requires some teacher-pupil planning of the activities in which the class will engage in working on the unit or problem.

It is common practice at the secondary-school level, especially in the junior high school but to a certain extent in the senior high school as well, to employ a group-guidance approach in the classroom for certain units, on subjects such as healthful living, understanding adolescent growth and development, home and family living, occupations, etc.

Frequently, units of this type are taught in a core programme the purpose of which is to assist pupils in meeting the needs most common to them and to society without regard to any subject-matter classification. Instruction centres on problem areas of needs in a two or three-period block class, utilizing the time otherwise devoted to two or more subjects required of all pupils, such as English and social studies. In developing understanding of a problem of common concern, the class carries on research and engages in other activities agreed upon through teacher-pupil planning. It sets up goals for itself, such as growth in the communication skills of reading, writing, listening, and speaking; learning to get along with others; developing cultural appreciations; extending interests; and understanding the responsibilities of democratic citizenship. On completing each four- to six-week unit of work it evaluates itself in terms of these goals.

Science and mathematics. Under the impetus of a current nation-wide interest and concern, programmes in secondary school science and mathematics are being strengthened on several fronts. Summer and academic-year institutes for teachers in service emphasize the importance of up-to-date training. The National Science Foundation makes available to colleges and universities approximately $50 million annually to pay stipends and living allowances to selected teachers. Over the past five years, approximately 20 per cent of the science teachers of the United States have benefited from these institutes.

The curriculum in secondary school science and mathematics is being revised and brought up to date by committees and commissions working at several centres throughout the country. Among the projects being carried out are the revision of the course in high school physics by the Physical Science Study Committee, the modernization of the curriculum in biology at all school levels by the Biological Sciences Curriculum Study Committee, and the preparation of a course of study in mathematics, grades 7–12, by the School Mathematics Study Group.

The National Defense Education Act, passed by the Eighty-fifth Congress, provides funds to local schools for remodelling obsolete science facilities. Funds are also available for equipment and teaching aids designed to improve and strengthen the teaching of science and mathematics, both in elementary and secondary schools.

Languages. Because of the increasing enrolments in modern languages courses and the interest in having pupils acquire greater proficiency in skills leading to real mastery of the language studied, teaching methods in this field are changing to an aural-oral approach. The use of audio-visual equipment and materials, including tapes and discs, is increasing. The National Defense Education Act of 1958 provides state grants to strengthen foreign language instruction, the funds to be used for the acquisition and installation of materials and laboratory equipment and for technical assistance. Provision is made for scholarships in institutes especially set up for training or retraining elementary and secondary school teachers in new techniques of teaching French, German, Spanish, Italian and Russian, stipends being granted to the students selected. Research grants for studies and surveys, development of specialized materials, and research and experimentation in effective use of such media as television, radio, and motion pictures are also provided for in the Act.

Work experience. This is the term most commonly used to describe work during school hours as a part of the regular school programme. Work experience education programmes are common to both general and vocational courses but, for the sake of convenience, are dealt with here together. The student may gain experience through participation in the production of goods or services, in business, in the community or in school, under the direction of the school. His work may be remunerative or non-remunerative.

The in-school non-remunerative work experience programme is most commonly scheduled for one period a day throughout the week and the school year. The out-of-school non-remunerative programme requires at least two periods per day of on-the-job work experience. The remunerative types of programmes conform generally to the half-time in school, half-time at work plan, although many business education co-operative work experience programmes operate on a basis of less than half-time at work and often are scheduled for only a portion of the spring semester of each school year. School credit toward graduation is given for work experience.

Special needs. Special methods are used at the secondary as well as at the elementary school level with the so-called exceptional children. These are the blind and partially sighted, the deaf and hard of hearing, those whose speech is

impaired, those who are crippled or who have special health problems such as epilepsy or heart conditions, the socially and emotionally maladjusted, the mentally retarded and the mentally gifted; the education provided for them is designated 'special education'.

Specially trained teachers serve the students in various ways. There is perhaps a trend in the direction of substituting more part-time special teaching for the individual student as soon as he is ready for it. Thus a handicapped student who has had full-time special teaching as an elementary school pupil, may be able to adjust quite well to regular school classes at the secondary school if he has some additional special teaching help. A hard-of-hearing student may need to continue special help in lip reading, a blind student may need special help to perfect his braille, and so on. Many schools offer special programmes of instruction for the mentally retarded adolescent.

Not a few cities now provide teachers in the detention homes where delinquent children are held pending further action. Academic teachers are also often included on the staff of a diagnostic centre or similar institution so that instruction may continue during the period when pupils are undergoing study and treatment. Similarly teachers are assigned to hospitals and convalescent homes to work with physically handicapped pupils who are hospitalized or otherwise under treatment. In cases of this sort, the teacher may become an important member of the treatment team.

Other school staff who are of great value in dealing with the complex adjustment problems of exceptional youth are the school social workers, school psychologists, and guidance counsellors.

In the preparation of exceptional young people for employment, members of the school personnel co-operate with workers from other agencies, such as vocational rehabilitation centres and employment services. Preparation for employment begins early in the child's school career with development of good attitudes and habits in relation to work, and progresses through study of vocations to schoolwork programmes both in school and out of school. The entire school curriculum contains some proportion of vocationally oriented experiences as one of its major objectives.

There has been renewed emphasis upon the improvement of educational programmes for the gifted during the last few years. Educators in secondary schools are experimenting and developing new and improved programmes to challenge these students, and in many localities superior learners are being taught at an accelerated pace. Special progress classes are arranged and gifted juniors and seniors are offered certain elective college-level courses. In some cases, colleges offer credit for these courses or other advantages (advanced college placement).

Numerous schools provide honours or special classes in various areas of the school programme for the gifted students and a lesser number set up honour schools as separate organizations within the schools themselves. Other schools rely solely upon enrichment of programmes in the regular secondary classes. Gifted students are retained in classes with others of varying ability but many materials and techniques are used in order to give greater breadth and depth to their work. Differentiated assignments, independent research and projects, and creative and experimental work are examples of enrichment procedures used.

Testing, evaluation, promotion. Achievement testing and promotion are responsibilities of the local school. There is no uniform programme of testing for the entire country. The two basic types of achievement tests are those which are prepared by teachers for use with their own students, and standardized tests prepared by co-operating groups of educators and commercial firms for use with more extensive student populations. Standardized tests are normally used as instruments for making surveys of student progress in city systems or in states, but in either case their use is voluntary. Standardized test results are also taken into account in assessing achievement for guidance purposes, but they are not used as the sole basis for assignment of grades.

Promotion is based on the earning of a required number of units of credit, and not upon a comprehensive examination at the close of the secondary school year. Current developments indicate that an increasing number of universities plan to grant advanced standing at university level to students with superior records in secondary school. In such cases the universities set the examinations by which the students' achievements are evaluated.

Reports to parents usually give the mark earned in each of the various subjects in which the student is enrolled. A number of schools have experimented with other or supplementary methods of reporting such as holding conferences with parents, sending written descriptive reports of progress, and assessment by various types of rating scales. Reports are usually made every six weeks, although practice varies considerably in this regard.

Teaching staff in general secondary schools

Training. General secondary school teachers receive their training in general colleges, teachers' colleges, and universities. Teacher preparation programmes consist of four years of higher education (beyond the usual twelve years of elementary and secondary education) leading to a bachelor's degree.

All states now require at least the bachelor's degree (4-year course) for secondary school teaching, while two states and the District of Columbia require five years of higher education. It is estimated that today, 44 per cent of the secondary school teachers in the United States of America hold master's degrees (equivalent to five years of higher education beyond graduation from a secondary school).

In college and university four-year programmes of preparation for secondary school teaching, usually half the time is devoted to liberal or general education; one-third of the remaining half is devoted to the student's field of specialization, the subject or subjects he plans to teach; one-third to professional education courses (pedagogy), including practice teaching; and one-third to elective courses.

The current interest in adding a fifth year of higher education, as a requirement for the standard or permanent secondary school teacher's certificate is owing, in large part, to a desire to ensure that secondary school teachers have a

thorough liberal or general education in addition to the necessary professional training.

Many public school systems organize and administer their own in-service teacher education programmes with or without the assistance of nearby institutions of higher education. In-service teacher education courses are also provided by institutions of teacher education in the form of evening, summer, and extension courses or through special institutes, conferences, or workshops.

Recruitment. The recruitment and placement of teachers in the United States is essentially a local operation. Each state grants certificates to teach in the secondary schools of that state. Each local school superintendent, as the executive officer of the local board of education, has full authority in the selection and appointment of teachers in the school system he administers.

Placement or employment offices for teachers are operated by institutions of higher learning which provide teacher-education programmes. They may also be operated by state teachers' associations, state departments of education, state employment services (affiliated with the United States Employment Service), and by commercial employment agencies.

Career. During the past decade in the United States there has been a great deal of public interest in encouraging highly qualified young people to take up the profession of education.

It is estimated that the average salary of all instructional staff (teachers, principals, and supervisors) in public schools increased approximately 70 per cent during the last decade. Although the cost of living also increased considerably during this period, the real wages of instructional staff probably increased by more than 40 per cent. The average salary for secondary school classroom teachers for the school year 1958/59 is estimated at $5,110. Salaries are determined on the bases of education and experience. As either or both of these factors change during a teacher's career, the computation of the amount of his base pay also changes. Most school systems in the United States have clearly stated salary schedules which are relatively simple to administer.

After a probationary period, usually of three years, a new teacher in a public school system is given tenure. Thereafter, he is dismissed only for serious unethical conduct or obvious failure to fulfil the requirements of his job. Teachers who give satisfactory service may generally look forward to yearly salary increments for 12–15 years until a stipulated maximum salary is reached.

Teachers usually teach and are paid for 10 months, September–June, each year.

Sick leave with pay is provided in practically all school systems, as a protection to children as well as an assistance to the teachers.

Retirement systems for teachers vary with state and locality. They usually indicate the age at which a teacher *may* retire and the age at which he *must* retire. The teacher contributes a percentage of his salary each month which is matched by the governmental unit administering the retirement system.

Almost every American teacher belongs to some kind of professional organization for teachers: local, state, or national. These organizations are taking a very active interest in raising the professional standards of the teaching profession as a whole; they have organized a national movement to foster this aim.

Today, approximately 55 per cent of American secondary school teachers are women.

The decision to make a career of secondary school teaching is often made by boys and girls while they are still in secondary school. The Future Teachers of America is a national organization at the secondary school level whose purpose is to encourage such vocational interest. At the college level, there is a growing Student National Education Association to help acquaint college students with the opportunities for a career in teaching.

Secondary school teaching as a career is undoubtedly gaining status and is attracting an increasing number of well-qualified young people in the United States. However, the acute demand for college teachers raises the major problem that many good secondary school teachers may be drawn away from the secondary schools to become college and university professors.

Vocational and technical schools

The vocational education programme does not replace but rather supplements general secondary education for students who want training for a chosen occupation. Vocational education is not a single subject; it is an important part of a well-balanced school programme aimed at developing mature workers, competent to play a part in economic and civic affairs.

Pupils are selected for admission to vocational programmes at the beginning of grade 10 on the basis of personal desire and aptitude for acquiring the skills and knowledge essential to successful performance in the chosen occupation. Most programmes terminate at the end of grade 12; some, however, are conducted as post-secondary terminal courses in grades 13 and 14.

Vocational education in agriculture is designed to meet the needs of persons over 14 years of age who are preparing for work on the farm. Training may be given in day classes in the secondary school, in young farmer classes for out-of-school youth, or in adult farmer classes. Secondary schools must provide for at least six months of directed or supervised practice in agriculture each year on a farm for all persons enrolled. The instruction deals with practical farm problems and is sufficiently flexible to adjust to the types of farming found in the community served by the programme. Instruction takes place in classrooms, laboratories, shops, and in the field. Secondary school courses last for not less than 2 years and programmes for young and adult farmers consist of not less than 10 meetings totalling at least 20 hours of group instruction per year.

Vocational education in distributive occupations is for persons over 16 years of age who are employed in such occupations, i.e., proprietors, managers or employees engaged primarily in marketing or merchandizing goods or services. Such occupations are to be found in business establishments—both retail and wholesale, and in manufacturing, storage, transport, financial and risk-bearing enterprises. The students attend classes in conjunction with their part-time employment under a co-operative school-work arrangement or during their non-working hours.

Vocational education in home economics is designed for persons over 14 years of age. The curriculum for both young people and adults is concerned with the fundamental values and problems of home life and homemaking and is designed to develop the necessary skills, understanding, attitudes, and appreciation. The time devoted to home economics classes in the secondary school varies from one-half of the total school time per week to class time equivalent to a full unit of credit for other school subjects, for not less than two years, as the local school authorities decide. The courses for young people who have left school and for adults are also given in the school under the supervision of a teacher.

Vocational education in trades and industries is designed for persons over 14 years of age who are preparing to enter a trade or take an industrial job. The programmes are intended for journeymen, technicians, and industrial workers; apprentices; and for young people whether in school or out-of-school. Instruction may also be provided for industrial supervisory personnel. In addition, courses are offered for nurses, laboratory assistants, draftsmen and technicians. In general, students who attend the secondary school are required to spend at least half the time allotted for instruction in work of a useful or productive nature. Subjects related to the occupation taught are offered and, in addition, general education subjects round out the curriculum. Classes are held in the evening and at other non-working hours for employed workers 16 years of age and over. These classes are strictly limited to giving supplementary instruction relevant to the daily employment of those enrolled. Part-time schools or classes are also conducted for employed workers and apprentices. Co-operative programmes are operated for student learners who spend an average of not less than 15 hours per week during the school year as employed workers during the normal day school hours, and an average of 15 hours per week during the year in attendance at classes.

Vocational programmes are conducted at the secondary level in schools of various types. Classes in agricultural education, home economics, and distributive education are usually given in the comprehensive high school where the curriculum in vocational education is but one of several curricula leading to the secondary school diploma. Trade and industrial courses may also be provided in the comprehensive high school. In some of the states, however, special premises are provided for these programmes in a trade, vocational or technical school, as the state and local school authorities see fit. In the larger metropolitan centres, trade and industrial courses are more likely to have their own school plant since the facilities and equipment required are generally best housed in a school plant designed specifically for this purpose.

All teachers of vocational subjects are required to complete specialized training. For example, teachers of agricultural subjects attend teacher training courses in agricultural education at the land-grant colleges and universities, and all must either be farm-bred or have had considerable farm experience as one of the qualifications for teaching this subject at the secondary level. Teachers in trade and industrial education are required to have had first-hand experience in the trade to be taught, the amount of experience required varying in the different states. One, for example, demands the satisfactory completion of an apprenticeship plus six years experience in the trade for entry to the teacher training programme. These teachers are trained either at designated higher institutions or in specialized programmes conducted by the state board of vocational education. Teachers of home economics subjects receive training at any one of numerous higher institutions designated by the states to prepare teachers of these subjects in a special curriculum developed for this purpose.

Teacher training schools

Virtually all teachers are trained in institutions of higher education. Students enrolled in 'normal training courses' attached to secondary schools were less than 1 per cent of the total number of students in training in 1958/59.

Specialized schools

The term refers to certain institutions above the junior high school level; there are not many of these schools, and they are found only in the largest cities. Some are designed for students who show exceptional ability in science, most of whom will enter institutions of higher learning to study medicine, chemistry, bacteriology, etc. Others are for those who demonstrate a marked ability in engineering and technical fields. Others again are for students who will eventually, perhaps after further training in institutions of higher learning, embark on business careers. Still other schools are for young people gifted in literature, art, or music. In certain cities there are institutions specializing in agriculture, horticulture, and such areas as landscape gardening and homemaking. Established for specific purposes, specialized high schools have the authority and also the obligation to refuse admission to any student who does not fall within the group the school is designed to serve.

There is no conflict between the educational philosophy of the specialized high school and that of the comprehensive high school. The former is a natural outcome of the varied curricula offered in secondary education and has been in existence for decades. Because of its large secondary school population, New York City has been a pioneer in the development of the specialized high school.

Out-of-class activities

An extremely important part of the educational programme in secondary schools is devoted to what are termed 'extra-curricular', or 'co-curricular', or 'student' activities. These are not necessarily 'out-of-class' activities; indeed, in a small but steadily increasing number of schools little distinction is made between class and certain extra-class activities. For example, work for the newspaper or the school annual may be done in a regular journalism class, or French club meetings may be held during the regular French class. Extra-curricular activities are developed and carried out in terms of well-formulated and worth-while educational goals and are integrated with other aspects of the school's instructional programme.

The most common of these activities are athletics, publication of the school paper and the annual yearbook,

production of school and class plays, membership in the orchestra, the band, the glee club, and in class and social organizations, cultural and special interest clubs, and student government. Among athletic activities football, basketball, baseball, and track sports are the most popular. Hockey, tennis, swimming, and golf are also played and intramural and interscholastic sports competitions are held. Students in many schools also take part in producing their own radio and television programmes. In short, there are usually activities for all interests, abilities and tastes. Students are encouraged to participate in at least one activity but are also advised not to undertake too many. Although a faculty adviser is always in charge, the students themselves assume considerable responsibility for the control, administration, and planning of their activities.

In many secondary schools, usually through the school council or a similar group, students also undertake a good deal of responsibility for certain aspects of the government of the school, such as the administration of elections of pupil office-bearers, provision of safety patrols on streets adjoining the school, regulation of student traffic in the school, supervision of playgrounds, control of conduct in the cafeteria, making policies for extra-class activities, and study hall supervision. Pupils may also participate in the administration of finances for extra-class activities; for example, pupils in the book-keeping class or other business courses share in the accounting work in connexion with the activities funds, usually under the supervision of a faculty member. Sometimes a school bank is operated by pupils taking business education courses who serve as tellers, cashiers, book-keepers and officers. Purchases made by pupils in school are paid at the school bank, i.e., dues for clubs and classes, cafeteria tickets, activity tickets, and similar items. In a few schools, pupils help to prepare the budget and make other decisions concerning the raising, management, and disbursement of activities funds. The common practice is to have each pupil organization prepare a budget which it submits to the student council for approval, after which the council prepares a composite budget for all activities and supervises the revenue raising and the expenditure of funds. Such responsibility provides excellent preparation for democratic living in the school as well as in life outside the school.

Pupils are encouraged to evaluate their own activities; sometimes this is done by pupils of an activity group, sometimes by the student council, and sometimes by the entire student body. Frequently the evaluation is made by special committees who may survey the student body by means of a questionnaire. Evaluation usually includes suggestions for improvement.

TRENDS AND PROBLEMS

In the decades before the 1950s the major problem in secondary education was the absorption of increasing numbers of pupils aged 14 to 18. During the 1950s, and increasingly during the last two years, the emphasis has shifted from this quantitative consideration to a concern for quality—popularly called 'the pursuit of excellence'—in the secondary schools. Parents and other citizens are becoming interested as never before in this question and partly as a result of increased public interest, partly because of the changing world scene, the American high school is undergoing re-examination.

Emphasis is being placed upon more fully articulating the sequence of levels of instruction, from elementary school to college. Workshops and conferences have been held for this purpose, visits have been exchanged among schools, and closer co-operation has been developed among teachers of the various age groups.

The subjects in the secondary school curriculum are being carefully examined. There is much concern over the state of science and mathematics teaching, the general opinion seeming to be that not enough pupils take these subjects in the third and fourth years, and that all science and mathematics courses need revision. Constant attention is being given to the improvement of English language instruction; the trend is to require that English be studied during all four years of the secondary school sequence. The pupils' knowledge and understanding of other peoples and cultures is being extended through the study of literature, world geography and world history, and modern languages. It is felt that more pupils should take foreign languages and that emphasis should be shifted from the acquisition of reading knowledge to ability in the spoken tongue. Aural-oral methods are tending to replace reading methods.

School systems are tending to increase the number of units of work required for graduation from high school above the prevailing 16, and also the number of courses required of all pupils in the various subject fields, especially in mathematics and science.

There has been a growing concern over the alleged neglect of gifted pupils. The definition of 'gifted' varies. In general, the term would not include more than the first quartile of all pupils tested by intelligence tests, and more frequently it is used only for the top 15 per cent. Ability grouping on the basis of IQs, reading test scores, and other measures of scholastic aptitude and competence has been more widely practiced, a form of this being the 'track' systems or 'streaming' arrangements for dividing pupils which have been adopted in a few large city systems. School-college agreements have been made and experiments carried out to enable secondary school graduates who have completed the course work in accelerated groups in the secondary schools to obtain advanced standing when they enter college. Responsibility for identifying talented pupils, advising them on the elective courses they should take in secondary schools, and encouraging them to continue with higher studies has been placed on guidance and counselling services.

During the last three years there has been a great deal of experimentation and discussion concerning the use of television in secondary school classrooms, although as yet the results are inconclusive. It seems certain that television can play an important part in instruction, but just what that part will be remains to be determined.

The problem of motivation remains one of the central problems of the whole of secondary education. It is part of the problem of the gifted, but it is also regarded as the key to a greater measure of success with the slow learners; the aim is to have all pupils learn more than they have learned in the past. The American secondary school will remain a mass education school. Improvement is being

sought along the three lines of better motivation, better methods, and an improved school curriculum.

One of the principal trends in vocational education is towards catering for older pupils than those for whom vocational courses are at present designed. This implies the extension of instruction in some institutions up to grades 13 and 14, that is, beyond the secondary school as it is usually organized. In addition, more and more employed workers are tending to avail themselves of instructional opportunities in part-time classes.

Among the many factors affecting the development of vocational education are the expansion of the population, the tendency for people in rural areas to move to metropolitan centres and seek employment in industry, the application of mechanical methods to more and more operations formerly done by hand, the development of new and improved machines with greater power and speed, the design of appliances and controls to make machines much more automatic in operation, newer methods of farming developed as a result of scientific research, and the increasing proportion of the population engaged in providing services rather than producing goods; vocational programmes will be adjusted so as to meet new and changing needs.

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STATISTICS

Population (mid-year 1958 estimate): 174,064,000.
Area: 3,022,389 square miles; 7,827,976 square kilometres.
Population density: 58 per square mile; 22 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, approximately 42.6 million children and young people were enrolled in schools at all levels (not including an estimated 8 million persons enrolled in adult education courses). This represents 25 per cent of the total population. Of the total enrolment, 5 per cent were receiving pre-primary education, 67 per cent primary, 21 per cent secondary and 7 per cent higher education. The proportion of girls was between 48 and 49 per cent in primary schools, 50 per cent in secondary schools, 52 per cent in teacher training colleges and 33 per cent in universities and colleges. Women teachers were 88 per cent of the teaching staff in primary schools, including kindergarten grades, 52 per cent in secondary schools, 40 per cent in teacher training colleges and 21 per cent in universities and colleges.

Between 1953 and 1957, enrolment increased in primary schools by 17 per cent, by 26 per cent in secondary schools, by 50 per cent in teacher training colleges, and by 33 per cent in general and technical higher education. The pupil-teacher ratio in primary schools in 1957 was 33 as compared with 35 in 1953. (See Table 1.)

Enrolment trends in secondary education, 1930–57. Table 2 gives total enrolment figures for alternate years between 1931 and 1957. There was a steady increase up to 1939, a sharp decline between 1939 and 1943, followed by another period of continued expansion up to 1957. The average total enrolment for the 1955–57 period was 43 per cent higher than the average for the 1931–33 period. Owing to fluctuations in the estimated population 15–19 years old, the secondary enrolment ratio has ranged from 50 for the 1931–33 period to 73 for the 1955–57 period.

Examination results in secondary education, 1953–57. The annual number of high school diplomas awarded from 1953 to 1957 was as follows: 1,276,100 (F.663,600) in 1953/54, 1,345,100 (F.698,900) in 1954/56, 1,414,800 (F.735,300) in 1955/56, 1,458,000 (F.757,000) in 1956/57, and 1,522,000 (F.791,000) in 1957/58. There was an increase of 19 per cent in the number of diplomas granted in 1957 as compared with 1953. The proportion of high school diplomas received by girls has remained constant at 52 per cent.

Educational finance, 1955/56. For the school year beginning in September 1955, total receipts for public education amounted to 14,544 million U.S. dollars (including debt service of approximately 216 million dollars), of which 5 per cent came from the Federal Government, 34 per cent from state governments, 54 per cent from local authorities, and the rest from tuition fees, gifts and other sources. In addition, total receipts for private primary and secondary schools were estimated at 3,753 million dollars. Total

expenditure for public schools amounted to 13,352 million dollars, and for private schools to an estimated 3,459 million dollars. The total of these amounts represented an average expenditure of 102 dollars per inhabitant. (This does not include any expenditure for higher education, public and private.) Concerning public schools only, recurring expenditure was 77 per cent of total expenditure, capital expenditure accounted for 21 per cent, and debt service (excluding higher education) about 2 per cent. (See Table 3.)

Source. United States of America: Office of Education, Department of Health, Education and Welfare, Washington, D.C., replies to Unesco questionnaires.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary[1]	Kindergartens, public	1957/58	...	...	...	*1 733 000	*852 500
	Kindergartens, private	1957/58	...	...	...	*353 000	*170 000
	Total	**1957/58**	**...**	**...**	**...**	***2 086 000**	***1 022 500**
	"	1956/57	...	...	...	*[2]1 684 400	*[2]828 700
	"	1955/56	...	...	...	*1 838 250	*893 550
	"	1954/55	...	...	...	...	...
	"	1953/54	...	...	...	*1 800 100	*886 600
Primary[1]	Elementary schools (grades 1–8), public	1957/58	95 200	*807 300	*704 500	*24 086 500	*11 586 800
	Elementary schools (grades 1–8), private	1957/58	...	*118 200	*112 900	*4 485 600	*2 224 900
	Total	**1957/58**	***[2]95 200**	***925 500**	***817 400**	***28 572 100**	***13 811 700**
	"	1956/57	[2]110 478	*771 400	*673 200	*[2]23 417 900	*[2]11 382 300
	"	1955/56	116 799	*821 400	*724 000	*26 434 700	*12 876 300
	"	1954/55	...	*[2]691 000	*[2]602 000	*26 100 000	*12 697 000
	"	1953/54	122 614	*746 900	*660 100	*24 421 300	*11 881 900
Secondary *General and vocational*	Secondary schools, public	1957/58	26 500	*459 200	*233 100	*7 932 500	*3 926 500
	Secondary schools, private	1957/58	...	*67 400	*40 100	*1 015 500	*553 300
	Total	**1957/58**	***[2]26 500**	***526 600**	***273 200**	***8 948 000**	***4 479 800**
	"	1956/57	[2]26 162	*[2]438 700	*[2]222 700	*[2]7 348 100	*[2]3 644 800
	"	1955/56	29 933	*465 830	*239 730	*7 753 500	*3 940 800
	"	1954/55	...	*[2]389 000	*[2]213 000	*7 385 000	*3 791 000
	"	1953/54	29 550	427 918	233 951	*7 096 100	*3 519 500
Higher *Teacher training*[3]	Teacher training colleges, public	1957/58	170	19 807	7 624	284 012	145 434
	Teacher training colleges, private	1957/58	29	1 210	711	10 676	8 054
	Total	**1957/58**	**199**	**21 017**	**8 335**	**294 688**	**153 488**
	"	1956/57	198	...	...	278 025	145 180
	"	1955/56	192	17 134	7 311	243 652	129 117
	"	1954/55	193	...	...	216 032	120 023
	"	1953/54	200	15 896	6 807	196 220	112 344
General and Technical	Universities, public	1957/58	78	117 074	21 546	813 603	231 175
	Higher schools and colleges, public	1957/58	397	47 312	12 282	627 443	231 042
	Universities, private	1957/58	59	70 950	10 044	511 406	138 177
	Higher schools and colleges, private	1957/58	990	80 649	23 637	722 765	278 555
	Total	**1957/58**	**1 524**	**315 985**	**67 509**	**2 675 217**	**878 949**
	"	1956/57	1 505	...	...	2 604 997	855 205
	"	1955/56	1 534	278 554	60 662	2 420 723	790 073
	"	1954/55	1 545	...	...	2 233 055	761 635
	"	1953/54	1 548	247 395	53 767	2 007 257	690 333
Adult	Adult courses						
	Total	**1957/58**	**...**	**...**	**...**	***8 271 000**	***4 365 000**

1. Data for schools and teachers of kindergartens are included with elementary schools, as kindergartens are part of these schools.
2. Public schools only.
3. Teachers are also trained in universities and liberal arts colleges. Here only those institutions are included which have as their principal object the training of teachers.

2. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education		Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General and vocational				
	Total	Per cent female			
1930	...	...			
1931	5 592 900	51			
1932	...	...	5 845	11 719	*50*
1933	6 096 500	51			
1934	...	...			
1935	6 435 700	51			
1936	...	...			
1937	6 747 700	52	6 769	12 123	*56*
1938	...	...			
1939	7 123 000	51			
1940	...	...			
1941	6 933 300	52			
1942	...	...	6 482	12 097	*54*
1943	6 030 600	54			
1944	...	...			
1945	6 237 100	53			
1946	...	...			
1947	6 305 200	51	6 323	11 202	*56*
1948	...	...			
1949	6 427 000	51			
1950	...	...			
1951	6 596 400	51			
1952	...	...	6 846	10 659	*64*
1953	7 096 100	51			
1954	...	...			
1955	7 753 500	51			
1956	...	...	8 351	11 487	*73*
1957	8 948 000	50			

3. EDUCATIONAL FINANCE, 1955/56 (in thousand dollars)

A. RECEIPTS BY SOURCE

	Amount
Total receipts[1]	**14 544 223**
Federal Government	761 367
State governments	4 898 253
Local authorities	7 870 591
Tuition fees and other receipts from parents	218 274
Private gifts and grants	82 452
Other sources, not specified	713 286

B. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[1]		**13 352 409**
Recurring expenditure		[2]10 327 139
For central administration	524 332	
For instruction		
Salaries to teachers, etc.[3]	5 126 982	
Other instructional expenditure[3]	400 668	
Higher education[4]	666 325	
Other recurring expenditure	3 608 833	
Capital expenditure		2 809 571
Debt service, payment of interest[3]		215 699

1. Data refer to public schools only. Available data in 1955/56 for primary and secondary private schools is as follows: total receipts were estimated at $3,753,413,000, of which $232,931,000 came from the Federal Government; $29,335,000 from state governments; $2,916,000 from local authorities; $3,488,231,000 from tuition fees, other receipts from parents, private gifts and grants, and miscellaneous. Total expenditure was estimated at $3,459,241,000, including $2,796,897,000 for recurring expenditure.
2. Owing to rounding of figures details do not add to the total.
3. Not including data for higher education.
4. Includes expenditure for instruction and research in institutions of higher education.

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent
Total recurring expenditure[1]		[2]**10 327 139**	**100.0**
Central administration		524 332	5.1
Instruction		6 193 975	60.0
Primary and secondary education	5 527 650		53.5
Higher education	666 325		6.5
Other recurring expenditure, not specified		3 608 833	34.9

For notes 1 and 2 see previous page.

ALASKA

THE EDUCATIONAL SYSTEM

Because of its great size, its long history as a territory,[1] and its minority native population, Alaska developed a complex school system.

The largest group of pupils attends schools operated by 28 incorporated school districts, each with its own school board and financed by local and state funds. For these schools, in 1957, the number of pupils enrolled in elementary schools was 19,264, of whom about 20 per cent were native Alaskans[2] and in secondary schools 4,667, of whom about 18 per cent were natives.

Next in size of enrolment come the territorial non-incorporated schools. There are 72 of these rural schools, with an enrolment in 1957 of 3,147 primary and secondary pupils. The percentages of native pupils were 48 per cent and 35 per cent respectively.

The Johnson-O'Malley schools constitute another category under territorial jurisdiction. There are 21 of these formerly federal schools, now operated by the territory in a manner similar to that for the 72 rural schools, save for the fact that the Federal Government pays the cost under the Johnson-O'Malley Act and holds the titles to the schools. The elementary school enrolment was 644 in 1957, and was practically all native. None of these schools provides secondary education.

The last group of schools under territorial jurisdiction is composed of eight schools on military bases. Though financed by the Federal Government under Section 3 of Public Law 874, these schools are operated in much the same manner as are the non-district schools. Elementary enrolment was 6,701 in 1957 and secondary, 170.

The entire territorial school system is growing at a very rapid rate; for example, the average daily attendance for 1946/47 was 7,100, and for 1955/56 it was 26,400. Annual per pupil costs rose from $233 to $439 in the same period, while the total territorial budget for education increased from $1.7 million to $11.6 million.

There are also 20–25 private and denominational schools in Alaska with an enrolment in 1957 of nearly 1,600. Most of these are elementary schools, and the enrolment is fairly evenly divided between white and native children.

A further system of schools is run in Alaska by the Bureau of Indian Affairs (BIA). This consists of 84 federal schools which enrolled 4,802 pupils in 1957. Most of these are one- or two-room, one- or two-teacher schools. In 1956/57 the smallest of these had 13 pupils, the largest 308. In 75 per cent of these schools enrolments vary from between 15 to 55. Two BIA schools call for special notice. The Wrangell Institute is an elementary boarding school with an enrolment of 255 pupils drawn from all over Alaska, some from as far as 2,000 miles away. The secondary counterpart to Wrangell is the Mount Edgecumbe High School, the only all-native high school in Alaska, which in 1957 had an enrolment of some 739 pupils. In addition to providing a thorough college preparatory programme, Mount Edgecumbe offers vocational commercial and industrial courses.

The BIA day schools are most heavily concentrated in the northern and western parts of Alaska. Along the Yukon River and the shores of the Bering and Arctic Seas schools are established in the communities which have demonstrated their permanence.

Role of public authorities. The United States Constitution provides that all powers not delegated to the Federal Government or denied to the states are reserved to the states and the people. Education falls in the latter category. Although then a territory Alaska gained authority over

1. Alaska became a state of the United States of America on 3 January 1959, but at the time this report was prepared there had been no material change in the educational system apart from the modification of the administrative apparatus mentioned below under 'Trends and problems'.
2. Native status is recognized for all persons of at least one-quarter Alaskan Indian, Aleutian, or Eskimo extraction. None of Alaska's schools is in any way segregated, though owing to geographical factors in some schools all or nearly all pupils are 'native Alaskans'.

education similar to that of a state through the Nelson Act of 1905.

The authority controlling education is the territory acting through its legislature. The Department of Education, created by the legislature to act as its agent, enjoys only such powers as are delegated to it by that body. The legislature is responsible for determining the local school organization, and local school districts exercise only specific delegated powers. In addition, the Federal Government assumes responsibility for certain aspects of education in Alaska, providing instruction to groups and in areas where federal control has proved necessary.

Non-official agencies. There are numerous non-official agencies interested in maintaining a sound educational system. Such groups as the Superintendent's Advisory Commission, the Alaska Educational Association, the Association of Alaska School Boards, and local teachers' associations are able to proffer professional advice and ideas. Other groups, such as parent-teacher associations, mothers' clubs, women's clubs, and fraternal and civic groups help develop understanding and co-operation between the school and the parents, and the school and the public.

THE DEVELOPMENT OF SECONDARY EDUCATION

Although some funds were provided by Congress after 1881, public education in fact began in 1885 with the creation of a small number of schools by the U.S. Bureau of Education of the Department of the Interior.

A Congressional Act of 27 January 1905 provided that the Governor assume the position of *ex officio* Superintendent of Public Instruction. School boards of both rural areas and incorporated towns were made directly responsible to him. This responsibility for maintaining rural schools for white children, and children of mixed extraction who had abandoned their ancestral way of life, was transferred to the territory, while the U.S. Bureau of Education retained responsibility for the education of natives and those of mixed extraction living outside incorporated towns in an aboriginal manner. The 'Alaska Fund', composed of moneys collected from various licence fees, financed the school operation.

The Organic Act of 1912 had little effect on territorial schools. The 1913 Compulsory Education Law passed by the territorial legislature proved ineffective until 1917, when funds were finally appropriated to implement the law. The Alaska Fund was supplemented by a Congressional Act of 1914 providing funds from leases of coal lands. In 1915 a further act initiated the Permanent School Fund.

The Alaska Legislature was empowered by Congress in March 1917 to organize and support the present territorial system of public education. A Uniform School Act was immediately passed which provided for a Territorial Board of Education authorized to appoint a Commissioner of Education. Provision was made for incorporation of school districts which were empowered to levy property tax for the support of schools. A system of refund from territorial funds to incorporated districts of 75 per cent to 85 per cent of certain school expenditures was established, and with certain minor changes the territorial school system emerged.

The provisions of the Alaskan Constitution clarify the territory's responsibility. 'The Legislature shall by general law establish and maintain a system of public schools open to all children of the state, and may provide for other additional institutions. Schools and institutions so established shall be free from sectarian control. No money shall be paid from public funds for the benefit of any religious or other private educational institution.'

The George-Barden Act of 1946 made available federal allocations for vocational education.

Attendance is compulsory for all children between the ages of 7 and 16 who live within one and a half miles of a school or a school transportation route.

Administration

The Alaska school system is by law administered by a Territorial Board of Education, a Territorial Commissioner of Education, and local school boards. The Territorial Board lays down policy, the Commissioner administers the public school system, and local school boards are empowered to perform all duties necessary to the maintenance and operation of schools, subject to relevant territorial laws and to Territorial Board of Education regulations.

A Textbook Commission selects and adopts a uniform set of books, which must be non-partisan and non-sectarian, for use in all branches. This commission is composed of the Commissioner of Education and six persons appointed by him with the advice and consent of the President of the Territorial Board of Education. Textbook selection is based solely on the merit of the books.

The Commissioner of Education is responsible for territorial school budgets, certification of teachers, general administration of territorial school law, contracts for school transport of pupils to centres of population, and the direct administration of rural schools. The Office of the Commissioner directly operates 72 rural schools and by contract operates schools on 8 military bases and 22 Johnson-O'Malley schools. The Department provides administrative assistance to schools operated by the Fish and Wildlife Service.

Administrative and financial responsibility for schools for native children, Indians, Eskimos, and Aleuts in some 84 localities is assumed by the Juneau Area Office, Bureau of Indian Affairs of the United States Government.

Supervision and inspection. Supervision and inspection are undertaken by the Commissioner and supervisory staff members appointed by the Territorial Board of Education. As the rural schools are directly controlled by the Commissioner of Education, they receive special attention. Supervisors also give extensive teaching help to many teachers by correspondence and by sending them books.

The Bureau of Indian Affairs supervisors inspect the schools operated by that agency.

Finance. Funds for the support of Alaskan schools are derived from the following sources: 25 per cent of the receipts of the Forest Reserves; receipts from royalties and rentals of mineral lands; 50 per cent of the receipts of the Alaska Game Commission; income from investment of the

Permanent School Fund, and the school tax. These sources provide approximately 10 per cent of the total. The other 90 per cent comes from general fund appropriations, for which the chief source of revenue is the territorial income tax. The tobacco tax, in its entirety, is earmarked for school construction.

In 1929 the basic school support law, establishing a refund system, was set up. From the funds appropriated, the Office of the Commissioner gives financial support for city schools and incorporated district schools to the extent of 75 per cent to 85 per cent of the refundable items of the budget, the percentage depending on the size of the school. On the average, the territory supports school districts to the extent of 60 per cent of their total current school expenditures.

The territory pays all costs of operation, maintenance, capital outlay, tuition, and administration for rural school systems. Transport costs for all schools, district and non-district, are borne entirely by territorial appropriations.

The Federal Government finances the schools for native children, administered by the Bureau of Indian Affairs, and the schools on military bases, operated by the Territorial Department of Education. Special schools operated by the Office of the Commissioner are supported entirely by direct territorial appropriations. Some federal funds, under Public Law 874, are made available to schools for children whose parents live or work on federal property. Also, the 1953/54 contracts covering 22 Johnson-O'Malley schools required that support on the basis of classroom units be paid by the United States Government into the territorial treasury.

The minimum salaries in both district and non-district schools are fixed by a territorial minimum salary law, which provides for periodic salary increases. The ranges of salary vary according to region ('judicial division') and the individual teacher's qualifications. In the first judicial division the salary for a beginner teacher without experience in Alaskan schools but with a minimum 3 years' training is $4,500, while a teacher with a master's degree and 12 years' experience is paid $6,900. In the second and fourth judicial divisions the minimum is $5,200 and the maximum $7,600. The third judicial division has a range of $5,900 to $8,000.

TYPES OF SECONDARY EDUCATION

The only free public institution of secondary education available to the Alaskan student is the general high school. Admission is based on the successful completion of the eighth grade in elementary school. An annual eighth grade examination is held and the diploma awarded to those who pass admits them to any high school in the territory. There are no separate educational institutions which are solely vocational or academic. Owing to demographic and geographic factors, each Alaskan high school must cater for a large area. The pupil usually attends that school which is most accessible to him.

The secondary course lasts 4 years. Each high school, to be accredited and fully approved, must offer at least 16 units in academic subjects (a 'unit' being 1 year's work in 1 subject), 6 units in practical arts, and not less than 2 units in the fine arts. The programmes offered vary with the individual high school. In general, the smaller high schools offer only one basic programme, a college preparatory programme with emphasis on academic subjects but including units in practical arts. Some of the larger high schools, under the impetus of the 1946 George-Barden Act and in recognition of the need to broaden the education programme to meet Alaska's particular problems, are offering limited programmes in vocational education. In general, full-time attendance is required.

Provision is made for 'citizenship night schools' to be established by the Commissioner of Education in any community where there is sufficient demand and when funds are provided by the legislature.

The school year begins in September on the day following Labour Day and is 180 days in length. Schools are required to operate a minimum of 172 actual school days during the school year. Normally, there are seven legal holidays: Labour Day, Thanksgiving Day (usually the last Thursday in November) and the day after, Christmas, New Year's Day, Memorial Day (30 May), and the Fourth of July. Classes meet from Monday to Friday and, according to law, each school day must not be less than 5 hours in length, exclusive of intermission.

High school courses. The Alaskan high school offers mainly college preparatory courses but limited general, pre-vocational, and vocational courses are also available in certain of the schools.

Subjects required for graduation from secondary school are English (3 units), social studies (2½), mathematics (1), science (2), physical education (½). As 16 units are needed, the student elects 7 additional units from among such subjects as typewriting, music, art, or home-making.

For subjects which require laboratory, shop, or practice sessions, such as industrial arts, home economics, office practice, biology, chemistry, physics and typing, 275 minutes per week are required, to be taught in 5 or 6 periods of 50 to 60 minutes each. For all other subjects, such as English, mathematics, general science, etc., between 225 and 275 minutes per week must be taught, in 4 or 5 class periods of 45 to 60 minutes each.

Vocational education. This is not a separate division in Alaska's schools but is integrated into the regular programme. Alaska participates in the co-operative programme of vocational education sponsored under the George-Barden Act of 1946 and receives federal matching funds for programmes in vocational agriculture, home economics, distributive education, trade and industrial education, and the fishing trades. Beginning with the adoption of an approved plan in 1946, the programme has been expanded to include in-school instruction in each of these basic areas except the fishing trade.

Vocational programmes are the responsibility of the local school board. The administrative relationship of the territory and the Federal Government to such programmes is chiefly that of ensuring that the funds appropriated are administered according to the law and that policies and procedures are being followed. The vocational programmes are developed to fit local needs. Territorial-federal funds may be used to promote and supervise guidance and counselling.

Achievement testing. Permanent records for each child are kept for official purposes and for use in diagnosis and remedial procedures. The testing programme is in the early stage of development, but eventually it will consist of an intelligence test record and at least one achievement test each year for every child. Promotion is made from class to class on the basis of teacher evaluation and sometimes through conferences with the superintendent, principal and parents.

Teaching staff. The Commissioner of Education is authorized to select qualified teachers for all territorial schools. Preference is given to bona fide Alaska residents who possess the necessary qualifications. The same selection policy is recommended to all school boards in incorporated school districts, all of which have authority to appoint the teachers for the district schools.

Secondary teacher's certificates are granted to those with a bachelor's degree or higher degree from an accredited college or university; they must also have completed at least 16 semester hours of education, including 4 semester hours in practice teaching and methods of teaching and have maintained a minimum 'C' grade average. All teachers must be United States citizens and must obtain an Alaska teacher's certificate unless they are on the exchange programme. The minimum age for teachers is 18.

TRENDS AND PROBLEMS

The education of native Alaskan children constitutes the greatest problem confronting Alaskan educators today. The last 10 years have seen a profound change in the federal policy toward Alaskan natives, as well as toward American Indians in the United States. Previous programmes of assistance were premised on the idea that the native population would remain in their own villages. Latterly, the policy of the Department of the Interior has been 'pointed toward discharging the nation's obligation to the natives to assure that as individuals and groups they maintain national standards of health, education and economic well-being. The rehabilitation of Alaska's natives and their complete assimilation into the culture and economy of Alaska is the goal of this policy and its related programmes' (Governor's Report, 1951, pp. 3–4). Recently, the Federal Government has emphasized a type of education programme which will prepare the Alaskan native to live anywhere in the territory, rather than merely in his own village.

As this policy of integrating the native population into Alaskan society has developed, the courses of study in the schools run by the territory and those of the BIA have become more alike and there has been a tendency on the part of the territory to make the programmes of study in all schools identical. While it seems desirable to preserve the native culture, it is recognized that educational opportunities should be made equal for all sections of the population.

Another problem which confronts the Alaskan educators today arises from the absence of mandatory incorporation laws. Thus several areas deemed large enough and capable both of incorporation and partial self-support have not been incorporated; rather, the areas have elected to remain under territorial jurisdiction, which means they receive full territorial support.

There is also a pressing need for more vocational and prevocational programmes. Given Alaska's economic and geographic situation, more programmes of this type are needed to give Alaskan youth the necessary training to enable them to provide for themselves and serve their community.

There is a growing teacher shortage because there are too few Alaskans in training to teach in the territory, and the supply from the United States is diminishing as salaries there increase.

The climate and terrain, the short building season, and the shipping problem all tend to complicate school construction and to make building costs excessive.

Finally, Alaska faces a tremendous growth in her school population with a resulting increase in budgetary requirements and a need for more teachers and schools.

Over the years Alaska has developed basically good schools. A continued programme of growth and expansion, and efforts to provide more and more effectively for the educational needs of the entire population, give promise that Alaskan schools will achieve a very high standard.

Alaskan education since statehood

The Constitution for the State of Alaska adopted by the people of Alaska in 1956, and approved by Congress in the Statehood Act of 30 June 1958, specifically provided that all existing laws would remain in force until amended or repealed by Alaska Legislatures. The actual implementation of several constitutional mandates, particularly those related to the development of a borough system of government, may ultimately have considerable effect on state and local organization. The 1959 session of the Alaska Legislature took no action which materially changed actual school operation, but it did modify the organization of the Department of Education.

Under the omnibus Alaska Governmental Reorganization Act all previous acts relating to the Territorial Department of Education were repealed. The new Act provides for a 6-member Board of Education appointed by the Governor for overlapping 3-year terms, subject to legislative confirmation. This board nominates a list of candidates for the position of Commissioner of Education. The Governor appoints a Commissioner from the list (or may reject a list and call for a new one) and the appointment made is then subject to legislative confirmation. (Under the territorial system the board had authority to appoint a Commissioner for a 4-year term.) The appointment is nominally for a 5-year term, although the Act provides that, notwithstanding any other provision of the Act, all department heads serve at the pleasure of the Governor. Under statehood the Commissioner, rather than the board, is the actual head of the Department and has regulatory power which is subject to board confirmation but which could be exercised independently with approval of the Governor if the board did not concur.

[*Text prepared by the U.S. Office of Education, Department of Health, Education and Welfare, Washington, D.C., in September 1959.*]

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STATISTICS

Population (mid-year 1957 estimate): 211,000.
Area: 586,401 square miles; 1,518,775 square kilometres.
Population density: 0.4 per square mile; 0.1 per square kilometre.

Summary of school statistics, 1953–57. During the school year 1957/58 there were about 45,600 pupils enrolled at schools at all levels, representing some 20 per cent of the total population. Total enrolment was distributed as follows: pre-primary and primary education, 81 per cent; secondary education, 13 per cent; higher education, 6 per cent. Women students were 37 per cent of the total enrolment in higher education. Between 1953 and 1957 total enrolment increased by 30 per cent, enrolment in pre-primary and primary schools by 24 per cent, in secondary schools by 26 per cent. At the Liberal Arts College the 1957 enrolment was nine times that of 1953. (See Table 1.)

Enrolment trends in secondary education, 1930–57. Average enrolment in public secondary schools for 1955–57 was almost five times that for 1930–34. (See Table 2.)

Examination results in secondary education, 1953–56. Seven hundred and fifteen certificates were granted to pupils of public schools in 1956/57, an increase of 24 per cent since 1953/54. The proportion of girls was 46 per cent in 1953/54 and 47 per cent in 1956/57.

Educational finance, 1955/56. The total receipts of public schools in the fiscal year beginning September 1955 amounted to nearly 18 million U.S. dollars. Almost half this sum came from the territorial revenue, 25 per cent from local authorities, 21 per cent from the Federal Government and the remainder from tuition fees, private gifts and grants, etc. Total expenditure was distributed as follows: recurring expenditure, 82 per cent; capital expenditure, 16 per cent; debt service, between 1 and 2 per cent. (See Table 3.)

Sources. United States of America: Office of Education, Department of Health, Education and Welfare, Washington, D.C., replies to Unesco questionnaires.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary[1]	Kindergartens, public	1957/58	[1] ...	[1] ...	[1] ...	2 600	...
	Total	**1957/58**	[1] ...	[1] ...	[1] ...	[2] **2 600**	...
	,,	1956/57	[1] ...	[1] ...	[1] ...	[2] 2 500	...
	,,	1955/56	[1] ...	[1] ...	[1] ...	[2] 2 600	...
	,,	1954/55	[1] ...	[1] ...	[1] ...	...	...
	,,	1953/54	[1] ...	[1] ...	[1] ...	[2] 2 600	...
Primary[1]	Elementary schools (grades 1–8), public	1957/58	209	1 259	982	32 700	...
	Elementary schools (grades 1–8), private	1957/58	18	64	...	1 400	700
	Total	**1957/58**	**227**	**1 323**	[2]**982**	**34 100**	...
	,,	1956/57	229	[2]1 057	[2]825	34 100	...
	,,	1955/56	230	1 191	[2]904	30 200	...
	,,	1954/55	...	...	...	...	...
	,,	1953/54	231	[2]999	[2]819	27 000	...

1. Data on pre-primary education are included with elementary (primary) schools except those relating to the number of pupils enrolled at public kindergartens.

2. Public schools only.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Secondary							
General	Secondary schools, public	1957/58	37	357	182	5 800	...
	Secondary schools, private	1957/58	7	34	...	290	150
	Total	**1957/58**	**44**	**391**	**[2]182**	**6 090**	**...**
	„	1956/57	[2]37	[2]298	[2]150	[2]5 700	...
	„	1955/56	45	254	[2]128	5 020	...
	„	1954/55	...	...	...	...	...
	„	1953/54	39	[2]207	[2]96	[2]4 600	...
Higher							
General	Liberal Arts College						
	Total	**1957/58**	**1**	**276**	**48**	**2 770**	**1 070**
	„	1956/57	1	...	...	2 578	1 075
	„	1955/56	1	237	51	1 122	468
	„	1954/55	1	...	...	409	126
	„	1953/54	1	147	25	304	68

2. Public schools only.

2. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled by type of education		Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General and vocational[1]				
	Total	Per cent female			
1930	...	...			
1931	937	51			
1932	...	...	1.0	5	*20*
1933	1 139	50			
1934	...	...			
1935	1 292	50			
1936	...	...			
1937	1 361	50	1.4	6	*23*
1938	...	...			
1939	1 524	47			
1940	...	...			
1941	1 648	47			
1942	...	...	1.5	12	*13*
1943	1 299	53			
1944	...	...			
1945	1 560	49			
1946	...	...			
1947	2 000	50	2.0	10	*20*
1948	...	...			
1949	2 300	52			
1950	...	...			
1951	2 800	50			
1952	...	...	3.3	15	*22*
1953	3 800	50			
1954	...	...			
1955	4 000	...			
1956	5 000	...	4.7	18	*26*
1957	5 000	...			

1. Grades 9–12 in public full-time day schools only.

3. EDUCATIONAL FINANCE, 1955/56 (in thousand dollars)

A. RECEIPTS BY SOURCE

	Amount
Total receipts[1]	**17 930**
Federal Government	3 765
Territorial revenue	8 792
Local authorities	4 422
Tuition fees and other receipts from parents	104
Private gifts and grants	628
Other sources, not specified	219

B. EXPENDITURE BY PURPOSE

		Amount
Total expenditure[1]		**17 136**
Recurring expenditure		14 105
For central administration	1 022	
For instruction		
Salaries to teachers, etc.[2]	6 680	
Other instructional expenditure[2]	558	
Higher education	639	
Other recurring expenditure	5 206	
Capital expenditure		2 790
Debt service		
Payment of interest[2]		241

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent
Total recurring expenditure[1]		**14 105**	**100.0**
Central administration		1 022	7.3
Instruction		7 877	55.8
Primary and secondary education	7 238		51.3
Higher education	639		4.5
Other recurring expenditure, not specified		5 206	36.9

1. Public schools only.

2. Not including data for higher education.

HAWAII

THE EDUCATIONAL SYSTEM

The Department of Public Instruction for the State of Hawaii conducts modern American public schools in seven of the eight islands of Hawaii. In the school year 1958/59 there were 208 schools with an enrolment of 135,088 students in regular, institutional and technical schools; and an additional 13,930 in adult community schools held during the evenings. Regular schools include kindergartens, elementary schools (grades 1 to 6) and secondary schools (grades 7 to 12). The head office of the Department is in Honolulu (Oahu), with district offices in four of the chief islands (Hawaii, Kauai, Maui and Oahu).

Article IX of the Constitution of the State of Hawaii provides for the establishment of a state-wide system of public schools free from sectarian control, a state university, public libraries and such other educational institutions as may be deemed desirable. There must be no segregation in public educational institutions because of race, religion or ancestry; nor may public funds be appropriated for the support or benefit of any sectarian or private education institution.

Article IX further provides for a Board of Education and lays down its powers. The board appoints as its chief executive officer the Superintendent of Public Instruction.

The Revised Laws of Hawaii 1955 contain further provisions, a few of which are given below.

Section 37, among other matters, establishes the Department of Public Instruction, and authorizes it to adopt rules and regulations which, when approved by the Governor and published, have the force and effect of law.

Section 40(2) places responsibility on the Department for the control and conduct of all affairs pertaining to public instruction. The Department may establish and maintain

schools for secular instruction at such places and for such terms as in its discretion it may deem advisable and the funds at its disposal may permit. Such schools may include high schools, kindergarten schools, schools for technical instruction, boarding schools, evening as well as day schools. The Department may also maintain classes for technical and other instruction in any school where there may not be enough pupils to justify the establishment of separate schools for such purposes. The Department regulates the courses of study to be pursued in all grades of public schools and classifies them by such methods as it shall deem proper.

Section 40(3) establishes the English language as the medium of instruction in all public and private schools—provided that the Hawaiian language is taught in addition to English in all high schools.

Section 40(6) sets forth the conditions for the establishment of private schools and requires that they shall meet certain standards and comply with the provisions of the law.

Section 40(9) declares attendance at a public or private school compulsory for all children who have reached the age of at least 6 years and have not reached the age of 16 years on or before 31 December of any school year. Exemption may be granted in certain cases.

Section 40(15) requires the Department to provide for the release of any pupil in any public school from attendance at the public school for a period not to exceed 60 minutes each week during the school year, on such days and during such school hours as the Department shall designate, for the purpose of receiving religious instruction from the religious organization of his choice.

THE DEVELOPMENT OF SECONDARY EDUCATION

The first secondary schools in Hawaii were founded by missionaries. Public secondary schooling began with the establishment of Honolulu High School in 1895. A federal survey carried out in 1920 showed that only three pupils out of every 100 were enrolled in public high schools, and the Federal Commission therefore recommended increasing high school accommodation, especially in remote areas. In order to avoid the high drop out (40 per cent of the pupils failing to complete the course), the commission suggested five different curricula: arts preparatory, science preparatory, commercial, industrial and home economics. It also recommended the establishment of junior high schools (since 1932 known as intermediate schools).

At that time vocational education was practically non-existent, but in 1925 the Hawaiian legislature accepted the provisions of the federal Smith-Hughes Act,[1] and in 1927 a special board for vocational education was set up and a director of vocational education appointed.

In 1920 Hawaii's secondary curricula, following the mainland pattern, were college preparatory, commercial and general. In 1940 a broader type of programme was introduced which included art, music and dramatics. By that year two trade schools and four secondary schools with courses in trades and industries were receiving federal aid. Home economics was being offered in 59 schools, the majority of them rural secondary schools. Hawaii being primarily an agricultural community, agriculture received special prominence in the vocational education programme. In 1941 the Territorial Apprenticeship Act was passed, providing appropriate instruction for indentured apprentices in the trade and industrial education programme of the public school system.

Act 83, Session Laws of 1941, passed the Single Salary Schedule Act, under which all teachers, whether kindergarten, elementary or secondary, were paid according to the same salary scale.

In the decade following World War II there was considerable expansion in the number and variety of vocational courses, and the secondary programme of studies was revised in 1958. In the same year the Superintendent's Curriculum Council was organized so as to work out, together with representatives of the administrative and teaching staffs from all the school districts, over-all curricula for Hawaii's schools. Long range plans for several years were mapped out.

On 12 March 1959 Congress granted Hawaii statehood and with this momentous change in government Hawaii will henceforward benefit on an equal footing with other states from federal aid in health, welfare and education.

Legal basis

Some of the principal laws governing the school system as a whole, and therefore covering secondary education, have been referred to in a previous section. Further provisions specifically related to secondary education (general and vocational) include the following sections of the Revised Laws of Hawaii 1955:

Section 42(1). 'The Department . . . may include agricultural and industrial pursuits among the branches of instruction taught by the public schools.'

Section 42(2). '. . . There shall be prescribed courses in agriculture, manual training, domestic arts and domestic science in all grades above the sixth grade in all public schools where proper facilities are available, which courses shall be compulsory . . .'

Section 42(21). 'The Commissioners of Public Instruction are designated as a territorial Board for Vocational Education. The chairman of the Board of Commissioners is designated as chairman of the Board for Vocational Education; and the Superintendent of Public Instruction its administrative officer . . .'

Administration

Secondary education is offered to students in seven of the chief islands. The state programme is planned by the Instruction, Vocational and Special Services Divisions in the central office of the Department of Public Instruction. Secondary education is uniform throughout the islands and taught under a single school system. The secondary programme is planned in relation to the elementary school curriculum; certain facets of the programme are reviewed by the Superintendent. Upon approval by the Superintendent and the Commissioners of Public Instruction,

1. See chapter on United States of America, p. 1366.

policies and plans are implemented through the four district offices.

There is supervision of the Secondary Education Programme from the state office by the Superintendent, carried out through the secondary curriculum staff. At the district school offices, the superintendents of the district provide supervision through their staffs and school principals.

Financial support for the public schools of Hawai is derived from the following sources:

State of Hawaii. Biennial appropriations by the Legislature based on a budget prepared by the Department and submitted through the Governor with his recommendations for approval or modification. Approximately 88 per cent of the total cost of education comes from this state aid.

County. The local county political sub-divisions (Hawaii, Kauai, Maui and Oahu) are responsible for the acquisition of school sites, for school plant construction, maintenance and operation and, where they are provided, for school transport services. About 10 per cent of the total cost of education is a charge against county funds.

Federal. Hawaii shares on the same basis as the other states in various federal grants-in-aid for the support of education, and these cover about 2 per cent of the total cost. The main sources of federal grants are: grants in support of areas related to defence activities; the National Defense Education Act; various public laws in support of vocational education; reimbursement of expenditures for veteran training in agriculture.

At the secondary level certain course fees are charged but the Department hopes to abolish these as soon as possible.

In general, funds are distributed on the basis of pupil enrolment. Teachers' salaries are an obligation of the State Government and are provided through biennial appropriations as described above.

As regards buildings and equipment, technical school buildings are financed from the sale of state General Improvement bonds. Other public schools are a responsibility of the county authorities and are usually financed by the sale of improvement bonds, although recent legislation will modify this practice by the use of current revenues for at least a portion of replacement construction. Equipment is financed from current revenues—basic building equipment by the county authorities, educational equipment by state legislative appropriations.

The Department of Public Instruction recently adopted a school building guide entitled *Educational Specifications for the Public School Buildings in Hawaii.* Volume II of this guide deals with secondary school buildings, including furniture and equipment. State and county laws and regulations govern the planning of all new school plants in matters pertaining to construction, fire and safety, lighting and sanitation.

School welfare services. During the legislative session of 1943 the Division of Pupil Guidance was created and the responsibility for enforcement of the school attendance law was transferred from the Juvenile Court to the Department of Public Instruction.

Pupil guidance workers co-operate with the Juvenile Court, the Crime Prevention Division of the Police Department, the Division of Mental Health and other government services, as well as with private social agencies set up to help children and families in trouble. There is a well organized school lunch service.

TYPES OF SECONDARY EDUCATION

All public secondary education in Hawaii is of the comprehensive type and is available to all pupils who have completed the elementary school, from kindergarten to grades 1 to 6.

The guidance programme developed in each of the secondary schools assists pupil and parents in selecting the type or category of training desired. Secondary education is expected to provide for five categories: college preparatory, scientific; college preparatory, general; technical; business occupations; and terminal.

The types of further education open to secondary school leavers are university, or technical education for the thirteenth and fourteenth years of schooling.

The secondary school year runs from 1 September to mid-June and is organized in two semesters: September to January and February to June. The school day is of 6½ hours and the school week 5 days (Monday to Friday).

General secondary schools

The Required Programme indicates those subjects required of all secondary students regardless of their long-range educational and vocational goals. They include the language arts, social studies, mathematics, physical education, science and the practical and fine arts.

The Minimum Elective Programme indicates courses offered in every high school, regardless of size and designed to meet any one of a number of long-range educational goals, whether college preparatory, technical or terminal.

The Additional Elective Programme provides additional courses to meet the varying interests of students.

It is essential that a student be helped early in his school career to decide what kind of course he will need to take in high school to prepare him for a vocation. Since many students do not know what they wish to become, it is not always possible for them to prepare for any one vocation. However, they should be able, with guidance, to determine to some extent fields of preparation, such as scientific, mechanical, business, etc.

During the 8th grade, students are made familiar with the five categories referred to above and informed of opportunities for further education. In grade 9, each student is placed tentatively in one of the five categories, but throughout the rest of his school career (grades 9 to 12) he can be shifted if necessary into a category which more nearly meets his needs.

Grouping within the school is decided according to the individual needs of students. This means, for instance, that a class of 35 pupils in English might possibly have pupils from several categories.

The Department recommends that pupils should be provided with broad as well as specialized experiences. For example, students taking the science programme should be persuaded to take elective courses other than science—such as art, music, news-writing and others. Wherever

possible, parents are consulted in this long-range educational vocational planning.

The required programme taken by all secondary students is as follows:

Grade 7. English, social studies, mathematics, physical education (one semester), art (one semester).

Grade 8. English, social studies, mathematics, physical education, electives.

Grade 9. English, social studies, mathematics (algebra or general mathematics or high school arithmetic), physical education, health (if not taken in grade 7 or 8), practical arts (agricultural arts or general shop for boys, general homemaking for girls; students who met this requirement in the 8th grade are excused), elective.

Grade 10. English, social studies, physical education, health (may be taken in grades 10, 11 or 12), electives.

Grade 11. English, social studies, electives (maximum 4).

Grade 12. Same as grade 11.

The minimum programme from which electives may be chosen is as follows:

Applied arts. Exploratory drawing, painting and crafts.

Business education. Book-keeping 1 and 2, business arithmetic, general business, typing 1 and 2, shorthand 1 and 2.

Foreign language. Any of the language courses included in the approved list of course offerings (2 years).

Mathematics. High school arithmetic, algebra, plane geometry, solid geometry (1 semester), trigonometry (1 semester).

Music. General music, a vocal music course, an instrumental music course.

Practical arts. Industrial arts, homemaking, agriculture.

Physical education.

Science. Advanced general science, biology, chemistry, physics.

Social studies.

To achieve promotion, students in the intermediate school grades must earn four or more credits each year, a credit being obtained on the successful completion of a full year's work in a subject. At least two of these credits must be in the required subjects, and one of these must be either English or social studies. A 9th grade student in a three-year intermediate school who does not meet the above requirements may be accepted into the 10th grade by the high school on a trial basis if the principals of the intermediate and high schools concerned agree that he will benefit from high school experience. This same procedure would apply for the 9th grade in the school organized on the 8–4 basis. Students in grades 10–12 are promoted on the basis of earned credits, as set out in the Department of Public Instruction's publication, *Program of Studies for the Secondary Schools of Hawaii.*

A written report for each student is made to parents at least four times a year, at the end of each quarter, indicating the student's personal development as well as his academic progress.

Adult education. This includes general elementary and secondary education, and civic, cultural, social and recreational non-academic subjects. In the secondary field, evening classes at regular high schools are available; they have the same credit requirements as day schools, viz., English, social studies, mathematics, science. Elective are vocational and commercial subjects, foreign languages, music, art. Many non-academic courses are also available, such as parent education, leadership training, investment courses, home improvement, driver education, cooking, sewing, etc.

Teachers. The Professional Teacher's Certificate of the Department of Public Instruction is based on a five-year programme of preparation. Requirements can be met in any one of the three following ways.

1. Completion of all requirements for the Five-Year Diploma granted by the College of Education, University of Hawaii.
2. Completion of the following requirements: (a) a minimum of 30 semester credits of collegiate work subsequent to the bachelor's degree; (b) a minimum of 24 semester hours in education during the 5 years of college training —those specializing in secondary education must take adolescent psychology, principles of secondary education, and the teaching of a particular subject field (methods and materials); (c) practice teaching in addition to the 24 semester hours in education courses called for above and at the teaching level for which the teacher is to be certificated (five full years of successful classroom teaching experience certified by proper school officials may be accepted in lieu of practice teaching).
3. Completion of a total of 160 semester credits, provided all requirements in 2(b) and 2(c) above are met. In addition, for secondary certification a teacher must meet the teaching requirements for at least one subject field, including a teaching course in that field.

Teachers are recruited from the University of Hawaii's College of Education and from mainland universities at the rate of 200 secondary teachers a year, the majority from local sources. Teachers are on probation for two years and then receive permanent tenure. Retirement is optional after 25 years' service, mandatory at age 65.

Vocational and technical schools

Vocational and technical education is administered and supervised by a staff of specialists under a Division of Vocational Education, headed by a deputy superintendent who has overall responsibility for programmes in agricultural, business, homemaking and industrial arts education, for trade and industrial education, occupational information and guidance, and the school lunch service.

Agricultural education. The various courses are as follows:

Agricultural arts: Intermediate. Grades 8–9. Provides a wide variety of information and experience in agriculture on an exploratory basis immediately prior to the time when a boy makes a tentative occupational choice and plans his senior high school programme.

Agricultural arts: General. Grades 10–12. Main subjects: the propagation, care and use of plants and trees, elementary landscaping and the care of poultry and small animals.

Agricultural arts: Horticulture. Grades 10–12. Main subjects: the propagation, care and use of ornamental plants, and ornamental and fruit trees, elementary landscaping.

Vocational agriculture. Main subjects: animal science, plant science, agricultural economics and farm management, farm mechanics, marketing of farm products, soil conservation and maintaining a favourable environment for farm living. Boys who enrol in vocational agriculture participate in the Future Farmers programme and in its citizenship and leadership training activities.

Young Farmers programme. For young men 16 years of age or older, working on their farms or employed in agriculture. Minimum of 30 clock hours of organized evening class instruction during the year.

Elementary gardening (agricultural science). Grades 4, 5 and 6, 90 minutes per week. Encourages careful observation, exploration, and experimentation in activities pertaining to gardening.

Business education. Business subjects offered in Hawaii's secondary schools include: book-keeping, business arithmetic, business English, business law, clerical practice, co-operative office training, co-operative retail training, economics, general business, machine calculation, office machines, office practice, salesmanship, shorthand, store service, typing and typography.

In the larger high schools where business course offerings are more extensive and more highly specialized, students may follow one of four sequences: stenography, book-keeping, clerical training, and retailing or distributive trades. Students who demonstrate high vocational competency may acquire work experience through the co-operative retail training and the co-operative office training courses. In 1958, 168 firms employed 171 co-operative retailing and office training students, the gross earnings of the latter totalling $100,272 or an average of $586 per student.

Homemaking education. This includes child care and development, family and community relations, family economics, clothing, family health, food and nutrition, housing and home equipment and furnishing. The individual problems studied are related to the needs, interest and abilities of the individuals served.

A basic 2-year curriculum, covering all areas of homemaking is offered—the first year course at either the 8th or 9th grade level and the second in grades 10–12. For practical work the school is usually equipped with one 'all-purpose' room with an attractive homelike atmosphere.

Students in advanced classes study homemaking with emphasis on planning for their future families. Family economics, family health and home management are stressed. 'Home experiences', providing learning experiences which cannot easily be duplicated in the classroom, are an important part of the homemaking programme.

The Future Homemakers of America, a national organigramme of activities supplementing class work and offers zation of girls enrolled in homemaking classes, has a pro- opportunities and training in leadership.

Industrial arts education. Students are given an opportunity for the study of man and industry through experience of industrial processes and techniques. Industrial arts education enriches other programmes such as mathematics, science and language arts by bringing theory and practice closer together.

Industrial arts is a required programme in the 8th or 9th grades with an introductory exploratory course called general shop, including mechanical drawing, woodwork, metalwork, plastics and electricity. Elective courses in the 10th, 11th and 12th grades include auto mechanics, electricity and radio, general metals, mechanical drawing and architectural draughting, printing, and woodwork.

Trade and industrial education. Hawaii's technical schools, operated by the Vocational Division, were established in 1925 when the Smith-Hughes Act was extended to Hawaii. The trade and industrial education programme, provided in five technical schools, gives pre-employment training in aircraft mechanics (airframe and powerplant), auto body repair and painting, auto mechanics, business education (accounting, clerk-typist and secretarial science) cafeteria management, carpentry and cabinet-making, commercial baking, commercial sewing, cosmetology, diesel mechanics, drafting, building trades, electricity, electronics, engineering aid, hotel and restaurant cooking, hotel room girl and room boy training, machine shop, garment power machine operation, practical nursing, refrigeration and air conditioning, sheet metal working, waiter and waitress training, welding.

These technical schools are an integral part of the public school system of Hawaii, organized and maintained to provide preparatory training for specialized occupations. Instruction is geared to the requirements of business and industry. The workshops and laboratories have up-to-date tools and equipment and the students are given intensive practical training.

Upon completion of a unit course at any of the technical schools, a student is qualified to enter directly into the occupation for which he was trained or may take further training by indenture as an apprentice in certain trades.

The trade and industrial education service supervises and evaluates programmes offered, purchases supplies and equipment, selects and places new teachers, plans long-term goals, carries on teacher training in conjunction with the University of Hawaii, plans for and participates in research projects, supervises the evening programme, promotes training for industry as needed, acts as an *ex officio* member of the Territorial Apprenticeship Council and works with other agencies in the development of new programmes.

Occupational information and guidance service. This service, under the Department of Public Instruction, seeks to promote and develop effective educational-vocational guidance programmes in the public secondary schools of Hawaii. The objective is to help students discover, use and develop natural abilities so that they may live and make a living to the best advantage of themselves and of society. As a basis for effective counselling and guidance, data are collected on family background, physical well-being, personal adjustment, general academic ability, achievement in curricular and non-curricular activities, interests, aptitudes and occupational experiences. Besides specific classroom study units, occupational information is provided through library reference shelves on vocations, bulletin board displays, excursions to local businesses and industries, outside speakers for assemblies and career programmes, audio-visual aids, career clubs and related activities.

Following the choice of an appropriate occupational goal toward which to work and study, each student is encouraged to develop a long-range educational-vocational plan with the assistance of his teacher-counsellor. These plans take into account not only the school subjects needed but also desirable extra-curricular activities, work experiences and leisure-time activities. The approval of the parents is required in addition to that of the school authorities. The complete guidance programme includes periodic follow-up contacts with former students to provide a guide for curriculum adjustments and to enable the school to continue to help former students with adult education services.

Other specialized schools

The Honolulu Academy of Arts, a private art centre and museum in Honololu, conducts a full-time art school, founded in 1947. Subjects taught include basic and advanced drawing and painting, design and commercial art, landscape, portrait, flower and Chinese brush painting, basic and advanced sculpture. The art school offers a 2-year course of study, with a third year of 'technical studies' available for advanced students. Part and full-time scholarship funds are available.

The Punahou Music School, begun in 1919, offers a programme of special study in music and dancing.

Out-of-class activities

Both public and private secondary students participate widely in out-of-class activities. All have student governments and many social activities are enjoyed, including school dances, picnics, excursions and athletic meetings, and a great variety of school sports and games. School clubs include science, language, photography, literary and dramatic clubs, Future Teachers, Future Farmers, Future Homemakers, Future Business Leaders of America, Young Farmers, Newman Clubs, Christian Clubs, etc.

TRENDS AND PROBLEMS

General education. One of the main concerns of the educational authorities in Hawaii is to provide an appropriate programme for the broad spectrum of abilities found in the usual school-age population. For this reason, the Department of Public Instruction has divided its curricula into the subject areas described above. These are generalized fields, and students are not kept rigidly within their limits; a minimum set of electives is provided—or at least attempted—in all the schools. In addition there is a common general education programme required of all students, regardless of their long-range educational and vocational goals.

The inability of Hawaii's high schools to offer as broad a programme as the authorities would like is partly due to the fact that the pupil-teacher ratio is the same for both elementary and secondary schools. In the smaller schools, primarily in rural areas, it is impossible to have a sufficiently numerous teaching staff to provide a wide range of subjects. The only solution would be to treat the high schools on a totally different basis from the rest of the educational programme as regards pupil-teacher ratio, administrative and supervisory support, guidance facilities and student extra-curricular supervision and control. Unfortunately, this has become a matter for contention between the two groups of educators—elementary school and high school.

Of increasing concern to the educational authorities is the improvement of science, mathematics and foreign language courses. Renewed efforts in this sense are being made through the appointment of additional educational consultants and the use of National Defense Education Act funds. Unfortunately, these funds are inadequate and additional money will have to be raised locally.

Another matter receiving increased attention is the education of exceptionally gifted young people. Much is being done through the use of 'honours programmes' and through accelerated classes which provide instruction in mathematics, science, and literature at college level.

Vocational education. A fundamental shift in the character of Hawaii's economy has brought about a transition from an economy devoted primarily to commodity production (agriculture) to one in which service industries are now the most important element. Moreover, the integration of the Hawaiian economy into the national economy is now proceeding at a more rapid pace; each year an increasing number of high school graduates go to the mainland to continue schooling or enter employment. Particular attention therefore needs to be given by vocational education to providing more training opportunities not only for students entering local employment but for those who seek employment in mainland communities.

Of those who graduate from secondary schools, approximately 50 per cent seek education beyond high school before entering employment. This trend will require greater emphasis on specific vocational training at the post-high school level. In the skilled occupations a new level of employee, called a technician, is increasing in importance. American industry indicates that five technicians are needed for every one graduate engineer. To meet this growing need, new vocational training programmes in such subjects as communications and electronics technology have been developed for selected vocational students at the post-high school level.

It is estimated that the total population of Hawaii will increase in 20 years by 200,000. The great increase in the number of young people requiring employment after graduation from secondary school will necessitate an expansion of vocational courses.

[*Text prepared by the U.S. Office of Education, Department of Health, Education and Welfare, Washington, D.C., in June 1959.*]

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STATISTICS

Population (mid-year 1957 estimate): 613,000.
Area: 6,423 square miles; 16,636 square kilometres.
Population density: 95 per square mile; 37 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment of pupils at all levels of education was estimated at 170,000, or about 28 per cent of the total population. About half the total enrolment was in primary grades 1–6; higher education accounted for about 5 per cent. Between 1953 and 1957, the increase in enrolment was about 8 per cent. (See Table 2.)

Enrolment trends in secondary education, 1930–57. Table 1 shows that the average enrolment in general secondary schools, grades 9–12, public schools only, was two and a half times higher in the 1945–49 period than in the period 1930–34. For the periods since 1950, enrolment figures refer to grades 7–12 in both public and private schools; thus the average number of pupils exceeds the estimated population 15–19 years old.

Examination results in secondary education, 1953–57. The total number of secondary school graduates was as follows: 1953/54, 4,775 (F. 2,458); 1955/56, 5,233 (F. 2,604); 1957/58, 5,434 (F. 2,683).

Educational finance, 1955/56. For the school year beginning in September 1955, total expenditure for public schools, not including higher education, amounted to 39 million U.S. dollars, or an average of $70 per inhabitant. Recurring expenditure was 86 per cent of the total. (See Table 3.)

Source. United States of America: Office of Education, Department of Health, Education and Welfare, Washington, D.C., reply to Unesco questionnaire.

1. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled [1]		Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	Total	Per cent female			
1930	...	...			
1931	9 588	44			
1932	...	...	10	36	*28*
1933	10 493	43			
1934	...	...			
1935	12 675	44			
1936	...	...			
1937	16 993	47	17	43	*40*
1938	...	...			
1939	21 510	48			
1940	...	...			
1941	15 799	42			
1942	...	...	19	64	*30*
1943	22 399	51			
1944	...	...			
1945	23 930	52			
1946	...	...			
1947	25 000	52	25	56	*45*
1948	...	...			
1949	25 000	48			
1950	45 265	...			
1951	45 561	...			
1952	46 165	...	47	45	*104*
1953	46 700	...			
1954	49 138	...			
1955	52 341	...			
1956	55 920	...	56	52	*103*
1957	58 817	...			

1. From 1930 to 1949 data refer to enrolment in grades 9–12 of public secondary schools. From 1950 to 1957 data refer to secondary public and private schools, grades 7–12.

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1957/58	...	...	...	11 596	...
	Kindergartens, private	1957/58	...	...	...	4 088	...
	Total	**1957/58**	**...**	**...**	**...**	**15 684**	**...**
	,,	1956/57	...	...	...	14 790	...
	,,	1955/56	...	...	...	13 852	...
	,,	1954/55	214	...	...	13 118	...
	,,	1953/54	217	...	...	11 558	...
Primary	Primary schools (grades 1–6), public	1957/58	...	...	...	68 845	...
	Primary schools (grades 1–6), private	1957/58	...	...	...	12 391	...
	Total	**1957/58**	**...**	**...**	**...**	**81 236**	**...**
	,,	1956/57	...	...	...	79 738	...
	,,	1955/56	...	...	...	77 589	...
	,,	1954/55	220	...	...	75 137	...
	,,	1953/54	212	...	...	71 879	...
Secondary *General*	Secondary schools (grades 7–12), public	1957/58	...	...	...	47 671	...
	Secondary schools (grades 7–12), private	1957/58	...	...	...	11 146	...
	Total	**1957/58**	**...**	**...**	**...**	**58 817**	**...**
	,,	1956/57	...	...	...	55 920	...
	,,	1955/56	...	...	...	52 341	...
	,,	1954/55	156	...	...	49 138	...
	,,	1953/54	158	...	...	46 700	...
Vocational	Vocational schools, public and private						
	Total	**1957/58**	**...**	**...**	**...**	**...**	**...**
	,,	1956/57	...	...	...	...	...
	,,	1955/56	*41	...	...	*3 286	...
	,,	1954/55	46	176	...	2 810	...
	,,	1953/54	54	[1]185	...	[2]2 719	...
Higher	University of Hawaii, public[3]	1957/58	1	807	301	7 287	2 910
	Liberal Arts School, private	1957/58	1	23	7	214	30
	Junior College, private	1957/58	1	21	6	164	102
	Total	**1957/58**	**3**	**851**	**314**	**7 665**	**3 042**
	,,	1956/57	1	...	...	6 577	2 736
	,,	1955/56	1	492	135	6 273	2 642
	,,	1954/55	1	...	...	5 364	2 292
	,,	1953/54	1	546	169	4 619	2 155
Special	Schools, public	1957/58	...	...	...	2 046	...
	Schools, private	1957/58	...	...	...	86	...
	Total	**1957/58**	**...**	**...**	**...**	**2 132**	**...**
	,,	1956/57	...	...	...	1 996	...
	,,	1955/56	...	...	...	2 012	...
	,,	1954/55	...	...	...	1 795	438
	,,	1953/54	...	...	...	1 815	453
Adult	Adult courses						
	Total	**1957/58**	**...**	**...**	**...**	**...**	**...**
	,,	1956/57	...	...	...	...	...
	,,	1955/56	676	...	...	9 644	5 058
	,,	1954/55	796	*345	...	13 114	...
	,,	1953/54	838	*411	...	13 439	...

1. Not including data for one private school.
2. Not including data for two private schools.
3. The university provides teacher training.

3. EDUCATIONAL FINANCE, 1955/56 (in thousand U. S. dollars)

A. RECEIPTS BY SOURCE

	Amount
Total receipts[1]	**37 145**
Federal Government	4 075
Territorial revenue	5 181
Local authorities	26 054
Tuition fees and other receipts from parents	1 451
Private gifts and grants	95
Other sources, not specified	289

B. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[1]		**39 157**
Recurring expenditure		33 673
For central administration	1 409	
For instruction		
Salaries to teachers, etc.[2]	18 439	
Other instructional expenditure[2]	1 569	
Higher education	1 865	
Other recurring expenditure	10 391	
Capital expenditure		5 109
Debt service, payment of interest[2]		375

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure[1]	**33 673**	**100.0**
Central administration	1 409	4.18
Instruction	21 873	64.96
Primary and secondary education	20 008	59.42
Higher education	1 865	5.54
Other recurring expenditure, not specified	10 391	30.86

1. Public schools only.

2. Not including data for higher education.

PANAMA CANAL ZONE

THE EDUCATIONAL SYSTEM

The basic authority under which public educational facilities are provided in the Canal Zone is Section 5 of Title 2 of the Canal Zone Code. There is no body of school laws, the school system being governed by administrative regulations.

The United States Congress initially appropriates funds for the entire cost of the Canal Zone Government, including its educational programme. Amounts expended by the Canal Zone Government for the provision of education to employees of agencies of the United States and their dependents, other than the Panama Canal Company and the Canal Zone Government, less tuition fees paid by such employees and their dependents, are repaid to the Canal Zone Government by such agencies.

Tuition fees received by the Canal Zone Government and the amounts paid by other government agencies are deposited in the United States Treasury. The difference between the total of these amounts and the total cost of operating the schools is repaid to the Treasury by the Panama Canal Company, which is required by law to reimburse the Treasury, as nearly as possible, for the net difference between the appropriation for the Canal Zone Government and the receipts for its services.

Appropriations of Congress cover salaries of teachers and other staff members, costs of school buildings, classroom equipment, library and textbooks, and certain other school supplies.

There is no subsidization or subvention of private education.

Non-resident children who are not dependents of United States citizens in United States Government employment are charged tuition fees.

The Canal Zone public schools are administered under the immediate supervision of the Superintendent of Schools, subject to the general direction of the Civil Affairs Director of the Canal Zone Government.

School physicians and nurses are provided by the Health

Bureau of the Canal Zone Government, which is also responsible for the inspection of sanitation. The school health programme is jointly supervised by the Superintendent of Schools and the Health Director.

School buildings are inspected annually by the Maintenance Division of the Panama Canal Company.

Structure of the school system. The educational ladder comprises elementary schools, consisting of a kindergarten class for 5-year-olds followed by grades 1 to 6, six years' secondary education (grades 7 to 12) and junior college (grades 13 and 14). Separate schools are provided for children of United States citizens and for the children of citizens of the Republic of Panama who live in the Canal Zone. What are known as United States schools and Latin American schools differ mainly in that the former are conducted in English with Spanish as second language, and the latter in Spanish with English as second language; the former follow the general pattern of schools in the United States, and the latter the pattern of those in the Republic of Panama. These differences are maintained so that the children will be properly prepared to take their place in their respective countries.

School attendance is not compulsory at any grade level in the Canal Zone but represents a high percentage of children of appropriate age (over 95 per cent in grades 1 to 6).

THE DEVELOPMENT OF SECONDARY EDUCATION

The United States of America secured control of the Panama Canal Zone in 1904 and in September of that year the Isthmian Canal Commission authorized the establishment of a school system. The first public school was opened on 2 January 1906 and a limited number of secondary classes were organized in 1907. In 1909 the first four-year high school was established. The Canal Zone Junior College was opened in 1933. In 1954 the language of instruction in schools for the children of residents other than United States citizens was changed from English to Spanish. A recent development in secondary education has been the establishment of 'advanced achievement classes' for the brighter students.

Administration. Secondary education is organized, administered and controlled by the Division of Schools.

The Superintendent of Schools is assisted in the supervision of public secondary schools by the following officials: an assistant superintendent; an assistant to the superintendent in general charge of secondary education; a supervisor of instruction in charge of classroom supervision, materials of instruction, and curricular development in the Latin American schools; a supervisor of Spanish in charge of the Spanish language programme in the Latin American schools and of Spanish as a secondary language in the United States schools; a supervisor of physical education and athletics in both United States and Latin American schools; supervisors of music.

All members of the supervisory staff are required to hold a master's degree, to have had training in the field of specialization and appropriate experience, and to possess the necessary aptitude. They are appointed by the Superintendent of Schools with the concurrence of the Civil Affairs Director.

There is only one private secondary school; it is recognized by the Canal Zone Government but is not directly supervised by the Superintendent of Schools nor does it receive any support from public funds.

TYPES OF SECONDARY EDUCATION

As already mentioned, the secondary course lasts 6 years and covers grades 7 to 12. It is divided into junior and senior stages: 2 + 4 in United States schools; 3 + 3 in Latin American schools.

Secondary schools in the Canal Zone provide courses in general education, commercial education and, to a limited extent, in vocational training. There are special classes for handicapped children but no special schools as such. Curriculum and methodology in the secondary schools for United States citizens follow the general pattern of schools in the continental United States. In the Latin American secondary schools practices are, in general, those of public schools of the Republic of Panama. Teachers are given considerable leeway in the use of their own methods.

The school year runs from the beginning of May to the beginning of February. Additional vacations are taken in September and at Christmas and public holidays are also observed.

Promotions or retentions are made at the end of the school year after evaluation by teachers and principals of the child's record. Special end-of-year tests help to determine final grades. Educational, physical, and medical records are kept which follow the child from grade to grade and from school to school, and which are used extensively by teachers for diagnosis and remedial work. Reports are made to parents at the end of each 6-week period.

Teaching staff. In the United States schools, secondary teachers for grades 7 and 8 must have a bachelor's degree from a recognized college or university in the United States with not less than 15 semester hours of professional courses, must be 21 years of age, and have specialized in the field in which application is made. Teachers in grades 9 to 12, and principals, must have a master's degree in addition to the other qualifications.

The minimum qualification for Latin American teachers, grades 7 to 12, is a bachelor's degree from the University of Panama or an equivalent school.

Teachers and principals are appointed by the Superintendent of Schools with the concurrence of the Civil Affairs Director.

Teachers in the United States schools are protected by United States Civil Service regulations; those in the Latin American schools by related Panama Canal Company-Canal Zone Government regulations. All teachers have tenure after a year's probation, are eligible for pensions, and utilize the health services provided by the Canal Zone Government.

[*Text prepared by the U.S. Office of Education, Department of Health, Education and Welfare, Washington, D.C., in June 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 57,000.
Area: 553 square miles; 1,432 square kilometres.
Population density: 103 per square mile; 40 per square kilometre.

Summary of school statistics, 1953–57. In the school year 1957/58, total full-time enrolment was 11,500, representing 20 per cent of the total population. Although from 1953 to 1957 total enrolment increased by only 2 per cent, enrolment in junior and senior high schools increased by 21 per cent and in vocational schools by 23 per cent. Combined enrolment in junior and senior high schools and in vocational schools increased from 30 per cent of total enrolment in 1953/54 to 36 per cent in 1957/58. The number of girl pupils cannot be determined accurately; it may be said to be about half of total enrolment in primary and general secondary schools. The pupil-teacher ratio in primary schools was 35 in both 1953/54 and 1957/58. In 1953/54, and 1954/55, more than three-fourths of the primary school teaching staff and about half of the secondary staff were women. (See Table 2.)

Enrolment trends in secondary education, 1930–57. From 1930–34 to 1955–57, average yearly enrolment in general secondary schools increased from 900 to 2,300 pupils. During the period concerned, the secondary enrolment ratio doubled, rising from 23 for 1930–34 to 46 for 1955–57. (See Table 1.)

Examination results in secondary education, 1953–57. The number of secondary education certificates awarded was 349 in 1953/54 (165 to girls) and 440 in 1957/58 (210 to girls).

Thus the number of certificates increased by 26 per cent whereas, during the same period of time, secondary school enrolment increased by only 21 per cent.

Educational finance, 1955/56. During the fiscal year beginning in September 1955 about 3 million dollars were spent on public schools. Of this total, recurring expenditure represented about 94 per cent and capital expenditure 6 per cent. (See Table 3.)

Sources. United States of America: Office of Education, Department of Health, Education and Welfare, Washington, D.C., replies to Unesco questionnaires.

1. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled		Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General				
	Total	Per cent female			
1930	...	...			
1931	769	50			
1932	...	...	0.9	4	*23*
1933	1 006	48			
1934	...	...			
1935	1 132	48			
1936	...	48			
1937	955	50	1.0	5	*20*
1938	...	...			
1939	1 040	46			
1940	...	...			
1941	1 318	51			
1942	...	...	1.3	11	*12*
1943	1 252	51			
1944	...	...			
1945	1 360	50			
1946	...	...			
1947	1 633	51	1.6	7	*23*
1948	...	51			
1949	1 929	50			
1950	...	...			
1951	...	...			
1952	...	...	2.1	5	*42*
1953	2 104	...			
1954	...	...			
1955	*2 000	...			
1956	*2 000	...	2.3	5	*46*
1957	*3 000	...			

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	United States kindergarten, public	1957/58	10	...	...	642	...
	Latin American kindergarten, public	1957/58	3	...	...	53	...
	Total	**1957/58**	**13**	**...**	**...**	**695**	**...**
	,,	1956/57	14	[1] ...	[1] ...	653	...
	,,	1955/56	14	[1] ...	[1] ...	759	...
	,,	1954/55	14	24	24	726	390
	,,	1953/54	14	26	26	960	484
Primary	United States elementary schools, public	1957/58	11	*127	...	4 037	...
	Latin American elementary schools, public	1957/58	4	*65	...	2 204	...
	Total	**1957/58**	**15**	***192**	**...**	**6 241**	**...**
	,,	1956/57	16	[2] *368	...	6 174	...
	,,	1955/56	16	[2] *362	...	6 333	...
	,,	1954/55	16	194	167	6 456	3 253
	,,	1953/54	17	197	159	6 598	3 323
Secondary *General*	United States junior-senior high schools, public	1957/58	4	*80	...	2 330	...
	Latin American junior high schools, public	1957/58	4	[3] *74	...	1 023	...
	Total	**1957/58**	**8**	***154**	**...**	**3 353**	**...**
	,,	1956/57	8	[1] ...	[1] ...	3 147	...
	,,	1955/56	8	[1] ...	[1] ...	2 908	...
	,,	1954/55	6	100	53	2 762	1 394
	,,	1953/54	6	[4]103	[4]55	2 775	1 395
Vocational	Latin American vocational schools, public						
	Total	**1957/58**	**2**	[1] ...	[1] ...	**748**	**...**
	,,	1956/57	2	[1] ...	[1] ...	693	...
	,,	1955/56	2	[1] ...	[1] ...	597	...
	,,	1954/55	2	[4]26	[4]8	579	210
	,,	1953/54	2	[4]30	[4]11	607	230
Higher *Teacher training*	Latin American junior college, public						
	Total	**1957/58**	–	–	–	–	–
	,,	1956/57	–	–	–	–	–
	,,	1955/56	1	[1] ...	[1] ...	7	...
	,,	1954/55	1	...	...	9	...
	,,	1953/54	1	3	–	46	22
General and technical	Canal Zone Junior College, public						
	Total	**1957/58**	**1**	**...**	**...**	**170**	**...**
	,,	1956/57	1	[1] ...	[1] ...	198	...
	,,	1955/56	1	[1] ...	[1] ...	193	...
	,,	1954/55	1	25	9	189	102
	,,	1953/54	1	28	10	236	120
Special	Classes for speech defective children	1957/58	...	...	...	109	...
	Classes for mentally handicapped children	1957/58	...	...	...	*45	...
	Special class for physically handicapped children	1957/58	1	...	...	5	...
	Other special classes	1957/58	4	...	...	95	...
	Total	**1957/58**	**...**	**...**	**...**	**254**	**...**
	,,	1956/57	–	–	–	–	–
	,,	1955/56	–	–	–	–	–
	,,	1954/55	–	–	–	–	–
	,,	1953/54	–	–	–	–	–
Adult	Evening and week-end classes[5]						
	Total	**1957/58**	**...**	**...**	**...**	**...**	**...**
	,,	1956/57	...	...	...	...	...
	,,	1955/56	...	...	...	...	...
	,,	1954/55	53	[6]17	[6]7	403	231
	,,	1953/54	32	[6]17	[6]7	404	246

1. Teachers included in primary education.
2. Teachers for all levels of education.
3. Including teachers of Latin American vocational schools.
4. In addition, there were part-time teachers.
5. Including summer session classes of the Canal Zone Junior College.
6. Number of different teachers who taught during the year; these teachers were also employed in the Canal Zone Junior College.

3. EDUCATIONAL FINANCE, 1955/56 (in thousand U.S. dollars)

A. RECEIPTS BY SOURCE

	Amount
Total receipts[1]	**3 026**
Federal Government	2 992
Tuition fees and other receipts from parents	34

B. EXPENDITURE BY PURPOSE

		Amount
Total expenditure[1]		**3 224**
Recurring expenditure		3 023
For central administration	140	
For instruction		
Salaries to teachers, etc.[2]	1 967	
Other instructional expenditure[2]	183	
Higher education	74	
Other recurring expenditure	659	
Capital expenditure		201

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent
Total recurring expenditure[1]		**3 023**	**100.0**
Central administration		140	4.6
Instruction		2 224	73.6
Primary and secondary education	2 150		71.1
Higher education	74		2.5
Other recurring expenditure, not specified		659	21.8

1. Public schools only.

2. Not including data for higher education.

PUERTO RICO

THE EDUCATIONAL SYSTEM

The public educational system of Puerto Rico was created pursuant to the School Law of 31 January 1901, which provided for the establishment and maintenance of a system of free public schools under a Commissioner of Education appointed by the President of the United States of America and directly responsible to him.

The Constitution of the Commonwealth of Puerto Rico, which took effect on 25 July 1952, provides for a system of free and entirely non-sectarian public education. In the primary grades education is compulsory to the extent permitted by the facilities of the Commonwealth. Free secondary education is among the constitutional rights of all Puerto Rican children.

The Secretary of Education, as the director of the school system is now called, is appointed by the Governor of the Commonwealth of Puerto Rico with the advice and consent of the Senate. He still enjoys most of his former powers, but is subject to such laws as the Commonwealth Legislative Assembly may adopt from time to time regarding schools.

Factors affecting the provision of education. Puerto Rico was a colony of Spain from the time of its discovery by Christopher Columbus at the end of the fifteenth century until 1898 when it was ceded to the United States as a result of the Spanish-American War. All but a small proportion of its inhabitants are of Spanish origin and possess the language, culture, feelings, and attitudes of Spain, modified by tropical conditions and more than half a century of close ties with the United States. Other sources of the present population may be traced to the native Indians who inhabited the island before its discovery, the African negro slaves who were brought in by the Spanish settlers, and minor groups from other countries.

The population of Puerto Rico has grown by leaps and

bounds since 1900. Although there are indications that the curve of population growth is tapering off, a continued high rate of increase is to be expected for some years. The island, whose natural resources are extremely limited, has more than 600 inhabitants per square mile and over-population constitutes one of its most critical problems. A little over a decade ago, the Commonwealth Government launched an industrialization programme known as 'Operation Bootstrap'. Some 500 new factories have been established which have brought about a rapid rise in the average family income and have produced marked changes in the socio-economic structure and the living patterns of the island. The people are adjusting themselves to new conditions, developing new insights, and facing new problems. With the wider scope for economic and political action that it now has, Puerto Rico is tackling its problems with determination.

Role of public authorities. Prior to 1946–47, the municipal governments participated with the island government in the support of public education. This constituted a continuous drain on their meagre resources, and sometimes the municipalities were not able to meet their ordinary needs. In view of this situation, the Legislative Assembly of Puerto Rico in 1947 declared education to be the concern of the central authorities, and since then the cost of all educational services throughout the country has been borne by the Commonwealth Government.

Role of private agencies and other government agencies. In accordance with Law No. 2 of 22 August 1958, private schools may be accredited by the Secretary of Education provided that they comply with the rules and regulations laid down by him for this purpose. There are 112 accredited private schools and 9 special schools under the jurisdiction of government agencies other than the Department of Education, with a total enrolment of 55,729 pupils. The number of junior and senior high school students attending these schools is 19,693.

THE DEVELOPMENT OF SECONDARY EDUCATION

The Puerto Rican high school during the first three decades of the present century was the same as the traditional high school in the United States, and was based on the completion of the 8-year elementary school or its equivalent. The programme of studies was organized around the traditional subjects of the American high school curriculum and was offered in two types of school: high schools and continuation schools.

On 31 March 1931 the Congress of the United States made federal aid for vocational education available to Puerto Rico. The Commonwealth Legislature has consistently voted funds to match federal appropriations made under the Smith-Hughes and George-Barden Acts and the vocational education programme has grown uninterruptedly during the last two decades.

The Occupational Information and Guidance Service was introduced in 1939 and developed rapidly. The guidance programme received additional impetus after the adoption of Law No. 414 of 23 April 1946, which provided for the creation of the post of Teacher Adviser in Vocational Guidance, as a means of increasing the efficiency of the vocational schools. Further help has been afforded by the appropriation of funds for testing and counselling services under the National Defense Education Act of 1958.

In 1942 the educational system was reorganized. The junior high school was created and the 6-3-3 plan adopted in lieu of the traditional 8-4 organization.

Administration

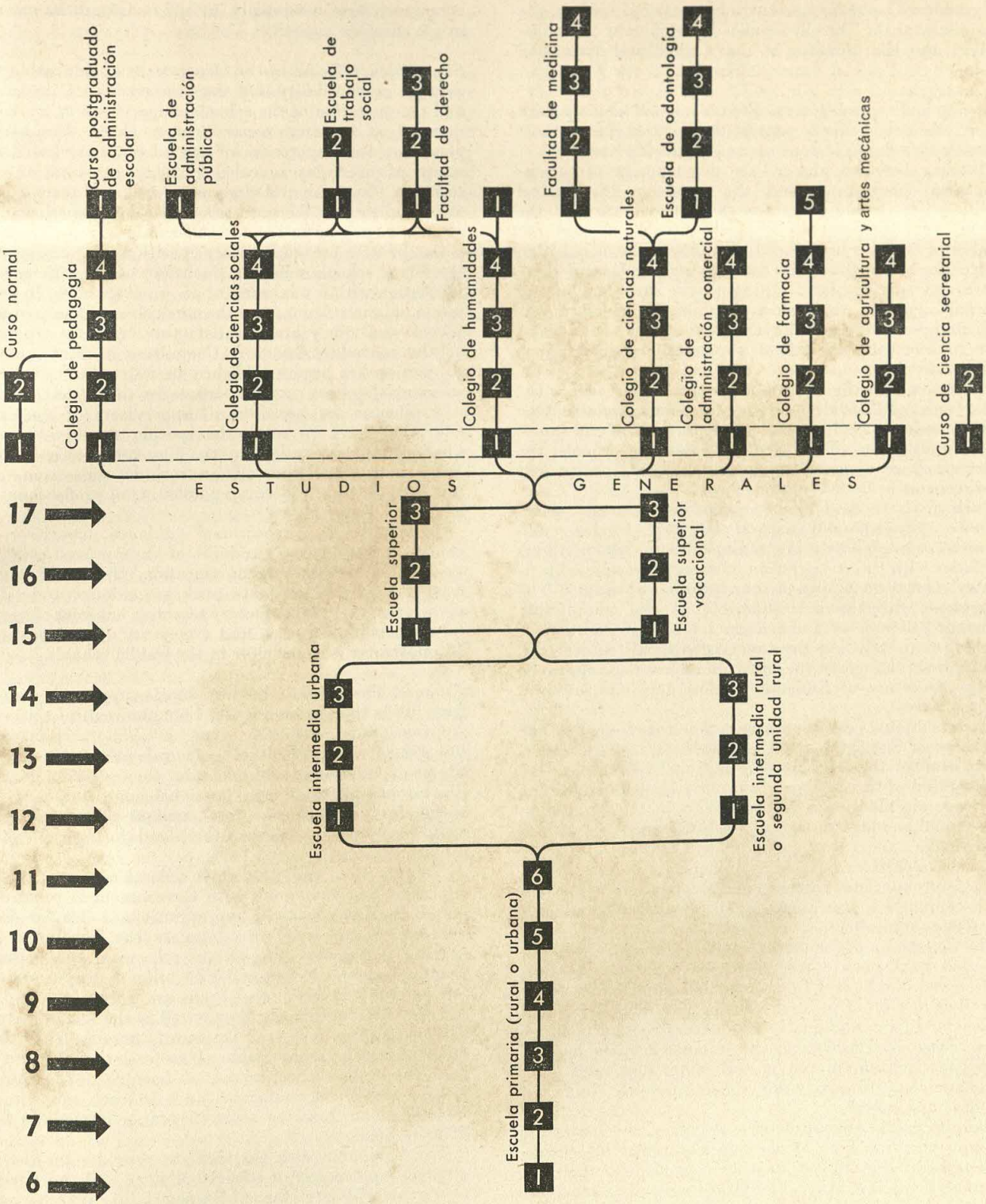
The public school system is a moderately centralized organization and the Secretary of Education is the source of all educational policy.

In the school districts the superintendent of schools is responsible for executing the major policies and plans of the Department, as well as for planning the local educational programme. District officers and individual teachers are encouraged to adapt Central Office proposals to suit local conditions.

Policies for the development of the vocational education programme are established by the Commonwealth Board for Vocational Education. The Secretary of Education, as the executive officer of this board, is responsible for carrying out its policies and the provisions of the Acts of Congress relative to vocational education. The other members of the Commonwealth Board are the Secretary

GLOSSARY

colegio de administración comercial: college preparing for administrative careers in business.
colegio de agricultura y artes mecánicas: agricultural and engineering college.
colegio de ciencias naturales: natural science college.
colegio de ciencias sociales: college of sociology.
colegio de farmacia: college of pharmacy.
colegio de humanidades: liberal arts college.
colegio de pedagogía: teacher training college.
curso de ciencia secretarial: course of secretarial training.
curso normal: teacher training course.
curso postgraduado de administración escolar: post-graduate course in school administration.
escuela de administración pública: graduate school of public administration.
escuela de odontología: school of dentistry.
escuela de trabajo social: graduate school of social welfare.
escuela intermedia rural o segunda unidad rural: rural lower general secondary school (known as a 'second unit school').
escuela intermedia urbana: urban lower general secondary school.
escuela primaria (rural o urbana): primary school (rural or urban).
escuela superior: upper general secondary school.
escuela superior vocacional: upper vocational secondary school.
estudios generales: course of general education given in the first year of study at post-secondary institutions.
facultad de derecho: faculty of law.
facultad de medicina: faculty of medicine.


Curso normal
Curso postgraduado de administración escolar
Colegio de pedagogía
Escuela de administración pública
Colegio de ciencias sociales
Escuela de trabajo social
Facultad de derecho
Colegio de humanidades
Facultad de medicina
Colegio de ciencias naturales
Escuela de odontología
Colegio de administración comercial
Colegio de farmacia
Colegio de agricultura y artes mecánicas
Curso de ciencia secretarial
E S T U D I O S G E N E R A L E S
Escuela superior
Escuela superior vocacional
Escuela intermedia urbana
Escuela intermedia rural o segunda unidad rural
Escuela primaria (rural o urbana)
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6

of Agriculture and Commerce, the Secretary of Labour, the Administrator of the Economic Development Administration, and the Director of the Agricultural Extension Service.

Planning and control. Puerto Rico is a small country with a relatively homogeneous population. For this reason, most planning for schools is done on an island-wide basis.

Planning has two phases: the development of the instructional programme and the provision of physical facilities. The latter comprises the determination of the number of classrooms to be built every year and the number of teachers necessary to man them, the acquisition of sites for school buildings and the preparation of blueprints and specifications. Owing to the large amount of internal migration that takes place on the island, it has been found expedient to have a local census taken every year to ascertain the school population in the various communities.

There is a Director of Curriculum and Supervision in the Department of Education and two assistant directors. One of these assistants is in charge of administration and supervision in all grades of primary and secondary schools; the other has been assigned to curriculum development and improvement in both types of schools.

Each of the several major subject departments—social sciences, physical and natural sciences, English, and Spanish—is headed by a programme director who performs his duties with the co-operation of supervisors and subject-matter specialists known as curriculum technicians. The programme director is responsible to the appropriate Assistant Director of Curriculum for the preparation of teaching materials and the supervision of his subject. All fundamental changes in the curriculum have to be approved by the Secretary of Education before they are put into effect.

The vocational education programme is prepared by the Secretary of Education with the assistance of the supervisory staff of the Division of Vocational Education. One of the duties of the director of that division is to advise the Secretary on changes or readjustments in the curriculum that should be made to keep abreast of progress in modern technology.

Local committees have been organized to represent the different occupational interests of the community and these local committees are represented on a Commonwealth advisory committee.

The selection, development, and use of basic printed materials have been entrusted to the Office for the Production and Purchase of Textbooks. Books and manuscripts, as well as any other printed teaching materials to be used in the schools, are examined by this office. Recommendations for purchase or revision must be submitted to the head of the Department for approval. All major purchases must be channelled through the Commonwealth Office of Purchase and Supply.

Planning in the school districts is carried out under the direction and guidance of the superintendent of schools. Committees made up of teachers, principals, assistant superintendents, and other supervisory personnel participate with the superintendent in a supervisory council. Officials from the Central Office and outstanding citizens in the community are occasionally invited to attend the meetings in an advisory capacity.

Supervision. Officials of the Department of Education have over-all responsibility for the supervision of instruction and the operation of the schools. Supervision as a whole is directed at the improvement of teaching. Emphasis is placed on the importance of careful planning based on a study of needs as revealed through consultation with teachers, observation of classroom work, and tests. It aims at capitalizing on the teacher's ability and experience, and at encouraging initiative and self-reliance.

Candidates for supervisory positions in the general secondary schools must be Bachelors of Arts, Science, or Education with a minimum of 15 semester hours in supervision, administration, and the curriculum of the secondary school, and two years of satisfactory teaching experience at the secondary level. A Committee of Standards for Promotion has been established to assist the Secretary in selecting the most capable persons for these positions.

Applicants for positions as supervisors of vocational education have to meet the specific requirements and qualifications prescribed in the Commonwealth Plan for Vocational Education. These include possession of a university degree and varying amounts of professional and educational experience.

To qualify as a vocational guidance supervisor, the candidate should be a graduate of an approved college or university with training in education. He should have at least one year of graduate work in guidance and related areas, two years of satisfactory teaching, one year of successful counselling services, and two years' experience as an administrator or supervisor in the public schools.

Finance. The public school system is supported primarily from funds appropriated by the Commonwealth Legislature. Appropriations for the year 1957/58 amounted to $60,438,345. The Federal Government of the United States of America provides help for the operation of school lunch-room programmes, vocational education, and education for veterans. The total amount of federal money spent in public education on the island during 1957/58 was $9,883,324.

In order to be able to receive federal aid for vocational education, the Commonwealth Government is required to match the Congressional appropriations dollar for dollar. Schools are not reimbursed unless the vocational programme is handled through the officers of the Commonwealth Board for Vocational Education and the conditions for federal disbursement of funds are fully met.

Funds are not directly distributed to the school districts. The needs of each district are met in accordance with the financial resources available. However, the Secretary of Education, under Section 6A of Law No. 472 approved 15 May 1947, may allocate funds to each municipality, including San Juan, to meet the minor immediate needs of the schools.

The Commonwealth Government provides for the construction and repair of school buildings and the purchase and repair of equipment. Responsibility for the actual construction and major repairs of existing plant facilities rests with the Department of Public Works. The Division

of School Facilities Planning advises the Secretary on building plans and co-ordinates the efforts of both departments.

The municipalities have been vested with authority to negotiate loans to construct buildings for the exclusive purpose of replacing premises rented for school use. The buildings so constructed will be ceded to the Commonwealth Government on a rental basis, and will become the property of the Government when their cost and the loans negotiated for their erection have been paid. The needs of the schools regarding equipment and other supplies are also met from Commonwealth funds.

Salaries of all duly certificated public school teachers are paid in accordance with the schedule fixed by Law No. 19 of 22 June 1956. Teachers start with a minimum of $150 a month and yearly increments of $5 up to a maximum of $210. Provisional teachers have a starting salary of $130 and yearly $5 increases until the maximum rate of $190 has been reached. Additional amounts are payable to teachers who hold university degrees, to English teachers who undertake studies in English-language countries, and in respect of teaching experience.

The salaries of vocational teachers are fixed by the Commonwealth Board for Vocational Education. In no case are these salaries lower than those established for academic teachers by the Commonwealth Compensation Law.

Buildings and equipment. Under present standards, junior high school buildings should be able to accommodate not less than 300 pupils and not more than 1,200. The maximum walking distance between the pupils' homes and the school should be one and a half miles. Senior high school buildings should hold from 300 to 500 students. The minimum size of sites for both junior and senior high school buildings varies according to the number of rooms and floors. Classrooms should have a floor area of at least 621 square feet. Rooms for home economics, industrial arts, and physical education should be 1,008 square feet in area. The school luncheon-room should be large enough to house 60 per cent of the school enrolment. There are also standard requirements for offices, storage space, lighting, ventilation, sanitation facilities, etc. No standards for equipment have been established as yet, but recommendations to this effect have already been submitted.

Social welfare services. The principal welfare services are transportation, hot lunches, shoes, scholarships, and rehabilitation. Transportation includes school bus services in several districts and direct payment to needy students to enable them to attend area trade schools located at a considerable distance from their homes. The School Lunchroom Division of the Department of Education is supplied with funds by the Federal and Commonwealth Governments, and has been authorized to accept donations of property, funds, foodstuffs, equipment, and materials. A fund of $200,000 annually has been created for the purchase of shoes to be distributed among needy students in all types of schools. A total of 185,166 pairs of shoes have been distributed since 1955/56. The Commonwealth Legislature has created a special scholarship fund for financially dependent public school pupils who are proficient in their studies.

TYPES OF SECONDARY EDUCATION

There are five main types of secondary schools in Puerto Rico: (a) the second unit or rural junior high school; (b) the rural senior high school; (c) the urban junior high school; (d) the urban senior high school, and (e) the vocational high school. Other types of schools offering high school education are the evening high school and the summer high school.

Counselling services have been instituted to help pupils in choosing the type of secondary education best suited to their needs and abilities, and in formulating their educational and vocational plans.

Students graduating from high schools may go on to college or enter employment. A follow-up study of 8,328 high school graduates from the 1957 class revealed that 3,748 entered college and 3,005 are gainfully employed.

During the 1958/59 school year more than 200 students were granted scholarships to pursue advanced studies in local and foreign universities. The sum of $235,000 is set aside every year for this purpose. Scholarships are awarded to students of poor families who are interested in doing advanced work in the fields of medicine, agronomy, engineering, architecture, art, diplomacy, music, and many other professions.

Technical courses are available at the Miguel Such Metropolitan Vocational High School, Rio Piedras, to train high school graduates for positions as technicians or engineering assistants.

The Itinerant Teachers of Young and Adult Farmers' Program is another opportunity available to high school graduates. Emphasis is given in this programme to the intelligent and effective use of those farm resources that may bring about a rise in the income of farmers.

All schools begin on the first Monday in August and close at the end of May. The school year is divided into two semesters, the second beginning after Christmas. The school week consists of five working days, Monday to Friday. There is a two-week vacation at Christmas and one week at Easter. Secondary schools are organized in one of two ways: (a) single session, with a school day of 360 minutes; and (b) interlocking, in which classes are held for two different groups of pupils by different teachers during a 300-minute session each.

June is known as 'Activity Month'. During this month no actual classroom teaching takes place. Teachers devote their time to attending summer school, travelling, preparing teaching materials and tests, and in other similar activities. July is a vacation month.

General secondary schools

Secondary education in Puerto Rico seeks to continue the cultural development begun in the elementary school, to prepare for higher education students who are interested in continuing at that level, and also to provide for those students who will take up a vocation on leaving high school. The aim of the general secondary school is to give all pupils a body of knowledge and experience that will help them to meet the common needs of all citizens, providing for individual differences through the exploration of abilities and interests.

Junior and senior high schools. The basis for admission to junior high school is graduation from the 6-year elementary school. Admission may also be obtained by means of examination or certificate granted by the Division of Free Studies and Examinations of the Department of Education.

The curriculum in the secondary schools is organized around five major areas or fields: sciences, mathematics, social studies, English and Spanish. Other subjects include music, art, industrial arts, physical education and health education.

General science and general mathematics are offered as full-year courses in the junior high school. The sciences in the senior high school are biology, chemistry, physics, and physical sciences, only one of which is required for graduation.

The social studies courses in grades 7, 8 and 9 are concerned with the geography, history and general problems of the world with special emphasis on those of Puerto Rico. The senior high school courses deal with the development of the United States as a nation, world problems, the development of culture by ages or movements, and the interdependence of Puerto Rico and other countries of the world.

Industrial arts is a course offered both for its cultural value and as a pre-vocational subject. It does not aim to develop experts in any of the various areas covered by the programme but rather to provide the student with a certain amount of experience of the various trades and professions related to industry, e.g., woodwork, metalwork, general electricity, graphic arts, general crafts, planning and drawing, communication and transport.

Industrial arts is a required subject in grades 8 and 9. Each course covers the fundamental skills of the area or occupational field as well as related information, including planning, social and economic implications of industry, guidance, science, health, safety, and consumer information. Class periods vary from 75 minutes in schools under the interlocking system to 85 in schools operating on a full-day programme.

Industrial arts is offered in the senior high school curriculum as an elective course to students who want to broaden their general culture and those who are thinking of entering industry. This course is organized to provide mechanical skills useful in the home and a knowledge of crafts and general graphic arts. Classes meet for two 100-minute periods a week or for five 50-minute periods a week.

Some industrial arts teachers are in charge of a work-experience programme. Under their guidance, students are given an opportunity to work in school-approved and school-supervised employment. They carry a regular school load besides devoting 15 hours per week to supervised out-of-school educational activities. Students receive high school credit for work performed under this programme. They also receive pay from their employers subject to the laws and regulations of the Department of Labour.

Music, art, health education and physical education have each been allotted a 50-minute period per week in the junior high school. Physical education is prescribed as an elective subject in the senior high school with a daily 50-minute period of instruction.

In all types of schools English is taught as a second language, with emphasis on oral mastery as well as developing skill in reading and writing.

The students' work is graded according to the following scale: 3.50–4.00 (A), 2.50–3.49 (B), 1.60–2.49 (C), 0.80–1.59 (D), 0.00–0.79 (E). Twelve credit units are required for graduation from the senior high school, as follows: English 2, Spanish 2, mathematics 1, science 1, Puerto Rican history ½, American history ½, general history 1, and electives 4.

Teaching staff. A register containing the names of all suitable applicants is prepared at the beginning of every semester. Candidates must either (a) possess the degree of Bachelor of Arts in Secondary Education, or the degree of Bachelor of Arts in Elementary Education—in which latter case they must have 'majored' in any of the subjects taught in the secondary schools and completed a basic course in secondary education, or (b) hold the degree of Bachelor of Arts or Science, and in addition have completed (i) a minimum of 24 semester hours in education, of which not less than 12 must be in secondary education; (ii) a course in practice teaching in the secondary school or its equivalent; and (iii) majored in any of the subjects taught in secondary school or in related areas.

When persons with the required training are not available, provisional teachers may be appointed.

Any duly certificated teacher who has satisfactorily completed a probationary period of two years is entitled to a permanent contract.

Evening high schools: Their chief object is to provide the regular high school programme to young people who were not able to complete their formal education earlier. Classes meet for three 2-hour sessions a week.

The unit method of teaching is used in all courses. Subject content is presented in the form of units or tasks, which consist of several assignments and exercises to be made up by the student. The teacher's role is that of counsellor. He gives advice and direction, furnishes the proper motivation for attacking the work, and clears up difficulties to facilitate independent study by the pupils. During regular class meetings, audio-visual aids are used liberally, especially still pictures, slides and films. Group and panel discussions, forums and lectures are frequently held in the activity period.

Summer schools. These are held each year for a period of eight weeks, beginning early in June. Three types of students are admitted: (a) regular day high school students who lack one unit of credit for graduation; (b) students who need two credits for graduation, but whose grade index is not lower than 3.00; and (c) students with a grade index of at least 2.50 who stand a good chance of gaining admission to any university in the country.

The Morovis Plan. The plan was first established in 1948/49 as an experiment at Morovis, a small town in the interior, and was later extended to other places. It was designed to furnish secondary education opportunities to towns which had neither senior high schools nor facilities to transport students to communities where such schools were functioning.

The plan permits the enrolment not only of school-age children but also of adults interested in acquiring a high

school education. The present programme of studies is identical with that of the regular high schools, and pupils may take as many courses as are offered.

The Morovis Plan schools are being discontinued in some towns with the opening of regular high schools and the extension of free transport facilities.

The Division of Free Studies and Examinations. For the benefit of students outside the regular high schools this division conducts examinations leading toward the high school diploma. These examinations are held in the months of June and December of each year for the purpose of determining the basic knowledge of the examinee in the fundamental fields required for high school graduation. The Secretary of Education has been authorized by law to award to persons who have successfully passed these examinations a diploma which is equivalent to a high school diploma for all academic and legal purposes.

Recently the division has inaugurated television courses with credit in physical sciences, algebra, and the history of music, in order to help out-of-school adolescents and adults gain a high school education. About 600 students are enrolled in these courses.

Special schools. The Public Welfare Division of the Department of Health maintains the following special schools for physically, mentally and emotionally handicapped children of secondary school age: the Commonwealth Home for Boys and the Commonwealth Home for Girls, two industrial schools for delinquents, two juvenile homes, and a school for the blind. These institutions are firmly committed to the over-all education and rehabilitation of the children in their care.

Instructors are paid a bonus of $25 per month in addition to their salary as prescribed under the salary schedule for public school teachers.

Vocational and technical schools

Vocational work is offered in three types of school: vocational high schools, comprehensive schools, and rural and urban junior high schools.

The vocational high schools are trade schools. Comprehensive high schools are regular senior high schools with a trade and industrial department; these schools also have general, college preparatory, and vocational courses in business education and education for distributive and diversified occupations. Agriculture is taught in more than one hundred 'second units' or rural junior high schools and four urban junior high schools.

Trade and industrial programmes. There are three types of programme, designated A, B and C, and entrance requirements differ for each one. The minimum age for admission to the Type A programme is 16 or 17 years, depending upon the duration of the course. Students who have reached their eighteenth birthday and who are employed in a trade or an industrial occupation may enrol in part-time and evening extension courses. Pupils beginning the Type B programme must be at least 15. Admission to Type C programmes is restricted to youths who have reached their eighteenth birthday and to boys and girls 17 years of age who have left the all-day schools.

The Type A programme is planned to give training in the manipulative part of the work and also mathematics, drawing, and science related to it. Shop teachers are required to follow the course of study drafted for each trade. The school year should be 9 months in duration and students should work 30 hours per week. At least 15 hours in periods of not less than 3 consecutive hours should be spent in shopwork each week. About 25 per cent of the school day should be devoted to related instruction. Shop and trade practice teachers should hold a high school diploma or its equivalent; they should have at least 3 years, experience as journeyman in the trade to be taught, and about 225 hours of instruction in approved professional courses in vocational education within 3 years after accepting employment as shop teachers.

The character and content of the courses of study for Type B programme is the same as for Type A except that the related instruction should be co-ordinated with shop work. This kind of instruction is given as the need for it arises in shop classes. Not less than 3 consecutive hours per day should be spent in practical work.

The Type C programme is a special type of all-day pre-employment course offering training for any length of time. Instruction is given in intensive courses in order to equip learners with the basic skills, technical knowledge, and related industrial information which will enable them to obtain a job and advance in it. Classes may be held for any length of time. Assistant supervisors and local directors may serve as co-ordinators.

Business education. There are three different types of courses: secretarial, clerical, and book-keeping. The programme is operated under a co-operative part-time plan in which the student works in an office during one semester of his senior year and attends classes during the other semester.

Education in distributive occupations. Distributive occupations are those related to the marketing or merchandizing of goods or services, and include retailing, wholesaling, manufacturing, storing, transport, and finance. During the last two years of school the student works a half-day in a business establishment and attends classes during the other half. Students should work at their occupation at least 15 hours a week for 35 weeks during the year. They spend a similar amount of time in completing the requirements for the high school diploma. The work is supervised by a teacher co-ordinator who visits the students on the job; confers with supervisors and employers to determine students' training needs; prepares course outlines; and selects instructional materials. Co-ordinators are often able to place graduates in suitable jobs.

Students employed on the part-time plan receive wages on the same basis as other workers performing similar duties.

In-service training of teachers is conducted by itinerant teachers and/or by the Commonwealth Supervisor of Distributive Occupations. Instructors are visited at least three times a year and are given individual assistance in planning their work and organizing and conducting classes. Conferences and workshops are held when needed. Whenever it is possible, advisory committees made up of

representatives from different types of business, civic organizations, and employee groups are appointed and their advice is sought on such matters as ways of improving the training programme, the occupational needs of workers, and the preparation and use of instructional materials.

Education in diversified occupations. The diversified occupations programme seeks to enable a student to go directly from school to full-time employment. The programme operates on a co-operative basis between the school, which assumes responsibility for the student's general academic and technical instruction, and local business and industrial establishments, which organize practice periods in their respective trades or occupations.

Candidates for admission to the various courses must have reached their sixteenth birthday, and must have obtained a grade of at least 'C' for their previous work. They must be physically and mentally fit. All candidates must secure their parents' consent to enrol and undergo a probationary period which may extend from six to eight weeks in their respective establishments before being finally accepted for this programme.

Representative occupations or trades for boys include drafting, furniture finishing, office machine servicing, and machine lathe operations.

Girls receive training as beauticians, dieticians, doctors' assistants, dressmakers, florists, laboratory assistants, librarians, laboratory technicians, and nursing aides.

In order to approximate more nearly to an actual job situation, the student-trainee receives a nominal wage during his training period.

Agricultural courses. Instruction is given in three different kinds of classes: (a) all-day classes for pupils attending rural junior high schools; (b) classes for out-of-school young farmers; and (c) classes for adults who are already operating farms.

The 3-year curriculum for rural junior high schools includes both vocational and non-vocational subjects. The latter, i.e., English, Spanish, mathematics, the physical sciences and the social sciences, are the same as those required of regular academic students. The former include animal husbandry, dairying, poultry, field crops, horticulture, soils, farm mechanics, marketing, rural economics, farm management, food conservation, accounting, and the like. In this way graduates are better qualified for eventual admission to colleges of agriculture or other schools.

Teachers of agriculture with three all-day groups are required to teach three classroom sessions per day and must devote at least 450 minutes per week to the supervision of home projects. However, variations from this schedule may be arranged to suit local conditions.

Instruction is of a practical nature and is related to the problems the students actually face. Supervised farm programmes have been established to provide students with an opportunity to apply the knowledge and skills being learned. Each vocational agriculture centre has a farm of from 5 to 30 acres for this purpose. Supervised practice affords experience in co-operative planning, thus fostering the development of the abilities needed for group action, and students are required to have at least six months of such practice each year.

Every teacher of agriculture is expected to keep in contact with his pupils for some time after they leave school. He encourages them to become farmers, tenant farmers, share croppers, farm managers, or to take up other occupations related to farming.

Students are eligible for membership in the Future Farmers of America, an organization which provides activities for the development of those leadership qualities which all farmer-citizens should possess.

Agriculture teachers' qualifications include a bachelor's degree in agriculture with a minimum of 12 credits in methods of teaching vocational agriculture, supervised farming, practice farming, etc. They must have either been raised on a farm or have had at least two years' farming experience. Both new and experienced teachers receive in-service training from their supervisors by means of suggested reading and courses, group meetings, conferences, workshops, and classroom visits.

Home economics education. Home economics is a required subject in the eighth and ninth grades and an elective in the senior high school programme. On this level, boys as well as girls have opportunities to receive additional training in home economics through short intensive courses on consumer problems, family relationships, education in family finance, home nursing, and other related topics. Junior high school boys may also acquire home-making experiences if home economics teachers are allowed to exchange classes with vocational agriculture or industrial arts teachers for two, three or four weeks during the year. By this technique they become familiar with clothing selection and care, personal grooming, food selection and preparation of simple nourishing meals, table manners, boy and girl relationships, and other aspects of home-making. The girls profit by learning about simple home repairs and gardening.

The home economics teacher is usually required to take four classes daily; in addition, time is provided for the supervision of home experience (by which pupils apply what they have learned in home economics classes to actual situations), home visits, club work, and other activities related to the home-making programme.

Young people who have left school are reached through the organization of formal and evening classes, and through programmes provided by the Department of Education television station.

The University of Puerto Rico is the only accredited institution in the Commonwealth for the training of home economics teachers. Prospective teachers follow a 4-year course. The first two years of the course are of a general nature, while the last two are more specialized and professional. After a thorough course in teaching methods and techniques, the prospective teachers spend eight weeks doing practice teaching in urban and rural schools under the direction of trained supervisors.

Vocational work in special schools. Reference has already been made to institutions administered by the Department of Health. Students in these institutions who have normal intelligence attend public high schools to receive instruction in academic subjects, and also enrol in vocational courses.

For those who are mentally retarded, special treatment is given at their respective institutions. They are organized

in groups of 15 to 20 according to age when this is possible. The boys take such vocational courses as auto mechanics, bookbinding, printing, tailoring, electricity, shoemaking, carpentry, woodwork, and vocational agriculture. The girls receive instruction in home economics, embroidery, hand and machine sewing, canning of fruits and sweets, native handicrafts, and many other trades and occupations.

Students may work as apprentices in shops, business establishments, homes, offices, beauty parlours, etc. Apprentice training serves the dual purpose of assisting children in the reciprocal processes of self-identification and socialization.

TRENDS AND PROBLEMS

The Commonwealth Government spends nearly one-third of the budget for the whole island in providing for its educational services. In spite of this, a great number of children are still not attending school, mainly because of the shortage of facilities. To make up for this shortage, the teacher's load has been increased to alarming proportions and more than 80 per cent of the enrolment is organized in double and interlocking sessions. A considerable number of pupils leave school prematurely.

New buildings are needed to house the growing school population and to replace more than 1,300 rented rooms. About 1,500 additional rooms will be needed to accommodate adequately the population of secondary school age by 1975. The dearth of classrooms and qualified teaching personnel is reflected in the amount and quality of the instruction imparted in the schools. During 1958/59, 38.8 per cent of all junior high school students and 16.7 per cent of all senior high were attending schools organized on an interlocking schedule. This means that a considerable proportion of secondary school students are not receiving the benefits of a full day's work.

An additional problem of the first magnitude is the need to supply the schools with a sufficient number of properly trained teachers. In August 1958 there were 1,698 secondary school teachers with provisional certificates out of a total teaching force of 3,547. The shortage is acute in every field, particularly in science and mathematics. During the school year 1957/58 there were only 5 fully qualified physics teachers and 39 mathematics teachers against an estimated minimum need of 46 and 526 respectively. In a country where Spanish is the vernacular there was a shortage of 350 certificated teachers of Spanish. About 40 per cent of the secondary school teachers leave teaching in order to take positions in government or industry which offer higher salaries. To provide one teacher for every 40 pupils the secondary schools will need over 6,000 more teachers by 1975.

A third problem is related to the provision of suitable teaching materials. Funds have been allocated to meet this need in accordance with a six-year plan. It has been estimated that over 9½ million textbooks are at present required for the public schools, but so far only a little more than half this number have been made available. The Department has recognized the need to prepare books to replace materials which were completely unsuited for teaching English as a second language and to supply Spanish materials dealing with Puerto Rican life.

No less important than the foregoing is the need to reduce the yearly number of drop-outs. Of all the pupils who enrolled in 1942/43 only 43 per cent reached the twelfth grade in 1957/58. The Committee on Human Resources has fixed a retention rate of 84.4 per cent in grades 11–12 for 1975. Except in the 9th and 10th grades, the present achievement of the schools indicates that a great deal of effort must be expended to reach the desired goals. A survey conducted in May 1958 showed that 9,640 students dropped out of high school during 1957/58. The main reasons for these drop-outs were illness, poor achievement, and economic problems. It is expected that the various welfare services provided for secondary school students will help to check withdrawals.

Finally, the work of the schools is seriously complicated by the teaching of English as a second language. From the beginning the aim of the Department of Education has been to develop a system of bilingual education which would ensure the conservation of Spanish and the acquisition of English. For about half a century, English was used as the medium of instruction in the public schools, on the theory that pupils would acquire a command of this language if they were continuously exposed to it. After many years of obervation, testing and experiments, it was found that this policy was defeating itself, inasmuch as pupils were neither acquiring English nor obtaining satisfactory results in the other subjects taught in English. This failure has been attributed to poor teaching, the use of wrong methods, and the fact that English was taught to the Puerto Rican child as it was taught to the American child. In 1934 Spanish became the official vehicle of instruction in the elementary schools and English acquired the status of a special subject; the amount of teaching time allotted to English was increased from 45 to 90 minutes daily. The new language policy, which was extended to the secondary schools in 1949, does not mean that the people of Puerto Rico have abandoned their interest in English. On the contrary, they are all the more convinced of the necessity of mastering English because of the cultural, political and economic advantages it gives, and the Commonwealth Legislature appropriates considerable sums of money each year for this purpose.

The vigour with which the people are attacking the problems outlined in this report bears witness to the faith they have placed in education as an effective means of overcoming Puerto Rico's economic and social limitations.

[*Text prepared by the U.S. Office of Education, Department of Health, Education and Welfare, Washington D.C., in May 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 2,316,000.
Area: 3,435 square miles; 8,897 square kilometres.
Population density: 674 per square mile; 260 per square kilometre.

Summary of school statistics, 1953–57. During the school year 1957/58 total enrolment was about 638,000 pupils, of whom 83 per cent were in elementary schools (grades 1–8), 14 per cent in secondary schools (grades 9–12) and 3 per cent in institutions of higher education. The school-going population represented approximately one-fourth of the total population. Of the 582,000 pupils enrolled in public schools, 49 per cent were girls. Total enrolment in public schools in 1957/58 was 12 per cent higher than in 1953/54 (female enrolment increased by 10 per cent during the same period). Except in the University of Puerto Rico, more than half the teaching staff were women; they represented 85 per cent for primary education and 64 per cent for secondary education. The pupil-teacher ratio was 60 in elementary schools and 18 in secondary schools. (See Table 3.)

Enrolment trends in secondary education, 1930–57. Data concerning the number of pupils in public secondary schools (grades 9–12) are given in Table 1. As this increase in enrolment was far higher than the corresponding increase of the population 15–19 years of age the secondary enrolment ratio shows a marked and steady rise.

Examination results in secondary education, 1953–56. Certificates granted to the pupils of public schools in 1956/57 numbered 10,080 as compared with 8,916 in 1953/54. The proportion granted to girls was 56 per cent in 1956/57 and 53 per cent in 1953/54.

Educational finance, 1955/56. In the fiscal year beginning September 1955, a total of 67 million dollars was spent on public schools. Of this amount, 17 per cent was contributed by the Federal Government, 14 per cent by territorial revenue, 66 per cent by local authorities and the remainder from tuition fees, private gifts, grants, etc. Recurring expenditure represented 96 per cent of the total expenditure. (See Table 2.)

Sources. United States of America: Office of Education, Department of Health, Education and Welfare, Washington, D.C., replies to Unesco questionnaires.

1. TRENDS IN SECONDARY EDUCATION, 1930–57

School year	Number of students enrolled[1]		Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	Total	Per cent female			
1930	...	...			
1931	7 190	48			
1932	...	...	7	192	*4*
1933	7 766	47			
1934	...	...			
1935	10 572	48			
1936	...	...			
1937	12 329	51	13	201	*6*
1938	...	...			
1939	16 477	52			
1940	...	...			
1941	16 418	54			
1942	...	...	21	214	*10*
1943	25 310	54			
1944	...	...			
1945	35 969	53			
1946	...	...			
1957	44 000	50	43	222	*19*
1948	...	...			
1949	48 000	48			
1950	...	...			
1951	55 000	45			
1952	...	...	56	229	*24*
1953	57 000	51			
1954	...	...			
1955	67 000	51			
1956	...	...	72	240	*30*
1957	76 000	51			

1. General education data on the number of pupils attending grades 9–12 in public full-time day schools only.

2. EDUCATIONAL FINANCE, 1955/56 (in thousand U.S. dollars)

A. RECEIPTS BY SOURCE (PUBLIC SCHOOLS)

	Amount
Total receipts	**66 924**
Federal Government	11 649
Territorial revenue	9 334
Local authorities	44 092
Tuition fees and other receipts from parents	1 367
Private gifts and grants	69
Other sources, not specified	413

B. EXPENDITURE BY PURPOSE (PUBLIC SCHOOLS)

		Amount
Total expenditure		**66 667**
Recurring expenditure		63 804
For central administration	5 971	
For instruction		
Salaries to teachers, etc.[1]	22 524	
Other instructional expenditure[1]	1 805	
Higher education	4 616	
Other recurring expenditure	28 888	
Capital expenditure		2 863

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION (PUBLIC SCHOOLS)

	Amount	Per cent
Total recurring expenditure	**63 804**	**100.0**
Central administration	5 971	9.4
Instruction	28 945	45.4
Primary and secondary education	24 329	38.13
Higher education	4 616	7.23
Other recurring expenditure, not specified	28 888	45.3

D. RECEIPTS BY SOURCE (PRIVATE INSTITUTIONS OF HIGHER EDUCATION)

	Amount
Total receipts	**1 496**
Federal Government	23
Local authorities	1
Tuition fees and other receipts from parents	862
Private gifts and grants	407
Other sources, not specified	203

E. EXPENDITURE BY PURPOSE (PRIVATE INSTITUTIONS OF HIGHER EDUCATION)

		Amount
Total expenditure		**1 913**
Recurring expenditure		1 525
For central administration	291	
For salaries to teachers, etc.	593	
Other recurring expenditure	641	
Capital expenditure		388

F. DISTRIBUTION OF RECURRING EXPENDITURE (PRIVATE INSTITUTIONS OF HIGHER EDUCATION)

	Amount	Per cent
Total recurring expenditure	**1 525**	**100.0**
Central administration	291	19.1
Instructional expenditure for higher education	593	38.9
Other recurring expenditure, not specified	641	42.0

1. Not including data for higher education.

3. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Elementary schools (grades 1–8), public	1957/58	1 754	*8 100	*6 900	*489 000	*240 000
	Elementary schools (grades 1–8), private	1957/58	100	*860	...	*40 000	...
	Total	**1957/58**	**1 854**	***8 960**	**[1]*6 900**	***529 000**	**[1]*240 000**
	,,	1956/57	1 873	[1]*8 000	[1]*6 800	[1]*483 000	[1]*242 000
	,,	1955/56	1 906	*8 590	[1]*6 700	*514 000	[1]*246 000
	,,	1954/55	...	...	...	...	...
	,,	1953/54	1 889	[1]*6 700	[1]*5 800	[1]*448 000	[1]*224 000
Secondary *General*	Secondary schools (grades 9–12), public	1957/58	423	*4 200	2 700	*76 000	*39 000
	Secondary schools (grades 9–12), private	1957/58	86	...	...	*13 000	...
	Total	**1957/58**	**509**	**[1]*4 200**	**[1]2 700**	***89 000**	**[1]*39 000**
	,,	1956/57	[1]374	[1]*4 100	[1]2 600	...	...
	,,	1955/56	424	*4 270	[1]2 400	*79 300	[1]*34 000
	,,	1954/55	...	...	...	...	...
	,,	1953/54	393	[1]*3 300	[1]*2 200	[1]*57 000	[1]*29 000

1. Public schools only.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Higher							
General and technical	University of Puerto Rico, public	1957/58	1	2 545	934	16 753	7 178
	Liberal Arts College, private	1957/58	3	270	149	3 510	1 478
	Total	**1957/58**	**4**	**2 815**	**1 083**	**20 263**	**8 656**
	„	1956/57	4	...	...	18 680	8 137
	„	1955/56	4	1 892	703	17 629	7 953
	„	1954/55	4	...	...	15 649	7 401
	„	1953/54	4	1 366	569	14 095	7 231

VIRGIN ISLANDS

THE EDUCATIONAL SYSTEM

The powers of Government in the Virgin Islands are derived from Acts of the United States Congress. The Revised Organic Act of 1954 (Acts of Congress, 22 July 1954, Ch. 558, 68 Stat. 497) provides for a Department of Education, headed by a Commissioner of Education who is appointed by the Governor with the advice and consent of the Legislature. Prior laws, ordinances, and executive orders dealing with education were consolidated in the Virgin Islands Code, which was adopted by the Legislature of the Virgin Islands on 16 May 1957.

The Department of Education exercises general control over the enforcement of laws relating to education. The Department includes a Board of Education and a Board for Vocational Education, members of which are appointed by the Governor. The Board of Education has authority to establish, maintain and manage the public schools of the Virgin Islands. The Board for Vocational Education has jurisdiction over industrial, trade, home economics, and distributive education; it also provides for investigations and studies to be made of vocational education.

There are a number of private schools, including parochial institutions. Teachers in these schools must be licensed by the Board of Education, whose decisions in the matter are subject to review by the Governor. Private schools may apply to the Commissioner of Education for a certificate of accreditation, which is granted to those meeting certain prescribed standards; accredited schools are inspected at least once a year.

The population of the Virgin Islands is predominantly Negro. English is the language in common usage, and is the language of instruction in the schools.

THE DEVELOPMENT OF SECONDARY EDUCATION

The Virgin Islands of the United States of America were formerly the Danish West Indies. In 1841 several public schools were opened on the island of St. Croix, but under Danish administration education was provided mainly by the Protestant and Catholic Churches, with financial assistance from the Government and under its general supervision. Attendance was compulsory between the ages of 7 and 13. Free education at the secondary level was virtually non-existent.

When the islands were transferred to United States control in 1917, steps were taken to secularize the schools and to extend educational opportunities. Government aid to church schools was discontinued, public schools were placed under the supervision of a civilian director, and the foundations were laid of a comprehensive public educational system.

The 6–3 plan of school organization was adopted and teachers volunteered their services after school hours to assist the few students who wished to continue their schooling beyond grade 9. With the beginning of the school year 1931/32, the St. Thomas Junior High School was reorganized as a 6-year junior-senior high school (grades 7 to 12) and became the first full-term secondary school in the Virgin Islands; it is now known as the Charlotte Amalie High School. The Christiansted High School was an outgrowth of a vocational institute established in 1932, jointly sponsored by the Department of Education and the Agricultural Experiment Station and financed by a federal appropriation. When the institute was discontinued, the Department of Education assumed direct responsibility for

a limited programme in agricultural training, and the students in academic classes were enrolled in the senior division of what became the Christiansted High School. Graduates of the Frederiksted Junior High School in St.Croix, the only remaining 3-year secondary school, go on the Christiansted High School.

Besides the public secondary schools there are three high schools operated by the Roman Catholic Church; the Catholic schools are organized on the 8–4 pattern.

Administration

Laws applicable to education in general are deemed to apply to education at the secondary level. The Department of Education must supply free textbooks. The Commissioner of Education administers the high school equivalency programme for young adults, regulates the admission, dismissal, and transfer of pupils, and administers the apprenticeship training programme. Compulsory school attendance begins when children are at least 5 years 6 months' old at the beginning of a school year and ends with the school year nearest the fifteenth birthday.

In the public school system, policy planning for the secondary programme as a whole, curricula, personnel, finance, etc., are the special province of the head of the secondary schools section of the Division of Educational Programs. He works closely with principals and teachers, and with the Commissioner of Education, whose decisions, subject to budget provision and adoption by the Board of Education, establish the extent and pattern of the secondary programme in the public school system.

In the parochial schools, the programme is established and controlled by the authorities of the Roman Catholic Church.

Inasmuch as there are no regional or local authorities or boards, the Department of Education has direct control of public secondary schools. There are no other public authorities administering schools at the secondary level, but other executive departments of the Virgin Islands Government co-operate with the Department of Education in matters which come within their respective areas of competence, e.g., the Department of Finance, the Department of Public Works, the Department of Health (medical examinations and free clinical services), the Department of Public Welfare (assistance to needy parents and children) and the Virgin Islands Employment Service (assistance in placing graduates and working students).

Supervision of various aspects of school operation is carried out by officials of the Department, reporting directly to the Commissioner of Education. No routine inspection is made of non-public schools, but only as occasion demands or warrants.

Parent-teacher associations are active and helpful in some of the high schools.

Finance. Except for federal aid to specific phases of secondary education, all funds for support of education are derived from appropriations made by the Virgin Islands Legislature from the over-all revenues of the Virgin Islands. These revenues are derived chiefly from real property taxes, income tax, trade and gross receipts taxes, custom dues and from licences, fees, fines and penalties. Annual appropriations are based on estimated requirements prepared by the Department of Education.

For the year 1959/60 an appropriation of $1,630,500 was approved by the Governor for the Department of Education, representing approximately 22 per cent of the estimated total revenues of the Virgin Islands Government from all sources. Of this amount, the sum of $410,000 was budgeted for secondary education, approximately equal to 25 per cent of the estimated expenditure of the Department, exclusive of federal aid.

Funds are not distributed to schools. All school expenses are handled directly by the Department of Education, including payment of teachers, janitors, clerks, purchase of books and equipment, and other operating and maintenance costs. No fees are charged.

Assistance to parents is provided only in the case of high school students from the island of St. John attending school in St. Thomas; the parents of such students receive $20 per month.

Buildings and equipment. All public secondary schools are now housed in new, well designed, fireproof buildings. These include, besides regular classrooms, auditoriums, libraries, clinic rooms, well equipped laboratories and shops, spacious luncheon rooms and kitchens. They are located on grounds providing ample space for building expansion and facilities for outdoor athletic and recreational activities.

School welfare services. Free medical and dental care and free hospitalization are provided for all children whose parents cannot afford regular fees. Bus transport is free for pupils who live beyond reasonable walking distance from a high school, and lunches are provided for all pupils who choose to participate in the lunch programme.

TYPES OF SECONDARY EDUCATION

Public secondary schools are of the comprehensive type. The smaller Roman Catholic high schools are 'general' secondary schools, providing mainly the academic type of programme in traditional subjects, but including in some instances training in typing, stenography, and related commercial subjects, and also, of course, religious education and training.

In recent years, especially with the expansion and development of vocational facilities since the beginning of federal aid in 1950, efforts have been made to organize and develop guidance services in the public high schools. It is probable that in the near future additional trained personnel may be engaged.

There are no institutions, nor any regular or continuing programme or service to provide for further education and training of secondary school leavers, although there have been sporadic courses from time to time when justified by the demand and when funds have been available.

For all public schools, elementary and secondary, the school year begins early in September and ends on the last Friday of June. Schools observe all public holidays and have two weeks' vacation at both Christmas and Easter. The school week is from Monday to Friday. Most high

school students are in class for about four and a half hours daily, but those in trades and industry courses in the vocational programme have a 6-hour school day.

Secondary school programmes. These include general, academic (college preparatory), and vocational education. As regards aims, there are two statements which are intended to serve those responsible for administration of the school system. One is the report of the Educational Survey of the Virgin Islands, submitted to the Secretary of the Navy on 30 January 1959. The report lists objectives of education directly related to the social, economic, and cultural needs of the Islands: rebuilding family life to provide each child with protection and training in a wholesome environment; establishing good health habits to reduce the high death rate and particularly the high infant mortality rate; industrial training to build a productive economic life; encouraging community participation in the improvement of schools and all other public enterprises; acquiring skills in reading, writing and arithmetic, and cultural attainments in music, arts and crafts, all of them closely related to local conditions rather than adopted bodily from the continental United States. The other list of objectives is contained in the report of the Virgin Islands White House Conference Committee to the White House Conference on Education in 1955. The report stated that the schools should develop individuals who think critically, have a sense of spiritual and cultural values, are conscious of civic responsibilities, and aware of good human relations, both individual and world-wide.

In the years immediately following the addition of the senior high school grades to the two former junior high schools, the programme of studies followed a traditional pattern aimed, principally, at qualifying graduates for admission to colleges and universities in the United States. Enrolment in the senior division in those years was highly selective, and a majority of the graduates did pursue higher education. With increasing enrolments, however, in both the junior and senior divisions, these schools tended to accept and retain more and more children of secondary school age and those qualifying for and choosing to pursue higher education constituted a small minority of all pupils completing the secondary course. The first attempt at differentiation resulted in the adoption of two patterns or programmes of study: one the 'general course', for those who would not or could not qualify for higher education, and the other the 'academic' or college preparatory programme. Domestic science and manual training had been included in the junior high school programmes and were extended as subjects in the senior divisions, especially for students in the general course.

This arrangement fell far short of serving the best interest of the rapidly growing number of high school graduates each year who would be seeking employment in trades, offices, or business in their communities. Greater diversification of programmes, especially in upper grades, came with the addition of a 'commercial' programme in St. Thomas in 1935, and in 1940, in a limited way, a programme in trades for boys. It was not until 1950, however, with the extension to the Virgin Islands of federal aid for vocational education, that these schools began to assume present-day patterns.

The public secondary schools now accept and retain virtually all students who complete elementary school and choose to enter and complete secondary education. In the junior division, homogeneous grouping on the basis of achievement determines the organization of classes within grades. In the senior division, owing to the diversity of programme, placement depends more upon aptitude, interest, and the pupil's prospective career upon graduation, although ability and past achievement are considered in counselling students concerning choice of programme.

Achievement testing. Comprehensive tests are administered each year to all students in the ninth and twelfth grades, and the results are reviewed in comparison with established norms. Quarterly reports are made by teachers to parents, giving ratings using an A B C D E system. Teacher-prepared examinations are given at mid-year and at the end of the school year. A final rating of 'D' is accepted as satisfactory for completion of a given subject but an average of 'C' is required for promotion to a higher grade.

Teaching staff. All teachers are required by law to hold a Teacher's Certificate issued by the Commissioner of Education. There is no mention in law of specific requirements for qualification of teachers for duty in secondary schools as distinguished from teachers in general. A recent ruling of the Board of Education demands a minimum of completion of two years (or 60 semester hours) of post-high school training in an accredited institution to qualify for certification. It has also been decided that secondary teachers should hold a degree from an accredited college or university, and that the candidates' preparation should include completion of two or more courses in education and a major in the subject to be taught. Virtually all high school teachers now in service possess this qualification, and a substantial number in each school hold a master's degree.

The majority of the teachers employed are natives of the Virgin Islands who have completed secondary education in the Island high schools and higher education in institutions in the United States. The remaining teachers have been recruited from the United States or from Puerto Rico.

Out-of-class activities. Students in the two larger high schools participate to a fair extent in athletic sports and games. There are inter-class competitions and an annual inter-island competition between the two public high schools during the Easter vacation, including contests in baseball, volley ball, soft ball, and track and field events. A Girl Guide troop is sponsored by the Charlotte Amalie High School, which has also a Future Nurses Club and a Chapter of the Future Homemakers of America.

TRENDS AND PROBLEMS

It is unlikely that the secondary schools will undergo marked changes in basic organization or pattern in the near future. However, continuing efforts will be made toward revision of course content better to meet the abilities, aptitudes and interests of the pupil.

With respect to enrolments, the trend in recent years has

been towards an annual increase, especially at the secondary level. As secondary education has ceased to be the privilege of a rather select group and become available to the majority of children of secondary school age, a number of problems have arisen. The urgent need for teachers has made it necessary to engage not only persons who have chosen to make teaching their career, but others who look upon it more as a job than a vocation. This attitude may, in part, account for a certain deterioration in pupil morale in the higher grades. It is hoped that better methods will be found of helping teachers to meet imaginatively the challenges implicit in offering educational opportunity to all children. It is also hoped that improved planning, guidance and instructional methods will at the same time permit better adaptation of programmes to suit the needs of particular groups, especially among students pursuing a general course. Efforts along these lines should raise teacher performance and pupil morale.

It is expected that there will be a growing demand for expansion of facilities for vocational education to serve the interests of the majority of pupils who, upon leaving secondary school, will seek employment locally in trades, offices, or business establishments.

[*Text prepared by the U.S. Office of Education, Department of Health, Education and Welfare, Washington, D.C., in August 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 31,000.
Area: 133 square miles; 344 square kilometres.
Population density: 233 per square mile; 90 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment in kindergartens, primary and secondary schools was 8,696 pupils, representing about 28 per cent of the total population. Nearly three-fourths of all pupils were in public schools, where the average number of pupils per teacher was 30. Between 1953 and 1957 school enrolment increased by 13 per cent. (See Table 1.)

Enrolment trends in secondary education, 1930–57. Table 3 shows rapid increase in enrolment of public schools during the period, so that the average for 1955–57 was nine times as high as that for 1930–34. For the most recent period, the average enrolment represented about 90 per cent of the estimated population 15–19 years old.

Examination results in secondary education, 1955–57. The annual numbers of graduates from secondary schools were as follows: 1955/56, 150 (F. 76); 1956/57, 137 (F. 69); 1957/58, 183 (F. 92).

Educational finance, 1955/56. Total expenditure for public schools amounted to 1.1 million U.S. dollars for the school year beginning in September 1955. This represented an average expenditure of about $46 per inhabitant. About 88 per cent of the receipts for public education was derived from the Territory. (See Table 2.)

Source. United States of America: Office of Education, Department of Health, Education and Welfare, Washington, D.C., reply to Unesco questionnaire.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary[1]	Kindergartens, public						
	Total	**1957/58**	[2] ...	[2] ...	[2] ...	**312**	...
	„	1956/57	[2] ...	[2] ...	[2] ...	324	...
	„	1955/56	9	13	...	338	166
	„	1954/55	9	11	11	325	162
	„	1953/54	8	10	10	299	157

1. Private kindergarten and nursery schools are included in primary schools.

2. Included in primary schools.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary[1]	Elementary schools, public	1957/58	[3]28	214	...	4 122	...
	Elementary parochial schools, private	1957/58	[3]8	...	...	[5]2 077	...
	Elementary schools, private	1957/58	[3]5	...	...	[5]228	...
	Total	**1957/58**	[3]41	[4]214	...	[5]6 427	...
	„	1956/57	[3]40	[4]207	...	[5]6 393	...
	„	1955/56	27	[6]202	...	5 536	...
	„	1954/55	33	[7]148	[7]131	5 391	...
	„	1953/54	32	[8]142	[8]127	5 385	...
Secondary	Secondary schools, public	1957/58	[2]...	[2]...	[2]...	1 957	...
	Secondary schools, private	1957/58	[2]...	...	...	[2]...	[2]...
	Total	**1957/58**	[2]...	...	...	[9]1 957	...
	„	1956/57	[2]...	...	...	[9]1 887	...
	„	1955/56	...	...	...	2 350	...
	„	1954/55	6	[10]82	[10]55	2 092	...
	„	1953/54	6	[10]85	[10]56	2 021	...
Adult	Adult courses, public						
	Total	**1957/58**	...	...	...	...	...
	„	1956/57	...	...	...	...	...
	„	1955/56	...	...	...	...	...
	„	1954/55	11	9	7	[11]156	[11]125
	„	1953/54	14	13	8	[11]271	[11]183

1. Private kindergarten and nursery schools are included in primary schools.
2. Included in primary schools.
3. All schools.
4. All public teaching staff.
5. Including pupils of the private secondary schools.
6. Public primary and secondary teachers only.
7. Not including 4 (F. 3) part-time teachers.
8. Not including 5 (F. 4) part-time teachers.
9. Public schools only.
10. Not including part-time teachers.
11. Total annual enrolment; there may be duplication as individual students are able to enrol in several courses.

2. EDUCATIONAL FINANCE, 1955/56 (in thousand U.S. dollars)

A. RECEIPTS BY SOURCE

	Amount
Total receipts[1]	**1 198**
Federal Government	143
Territorial government	1 051
Tuition fees and other receipts from parents	1
Gifts	3

B. EXPENDITURE BY PURPOSE

		Amount
Total expenditure[1]		**1 099**
Recurring expenditure		1 080
For central administration	119	
For instruction		
Salaries to teachers, etc.	600	
Other instructional expenditure	32	
Other recurring expenditure	329	
Capital expenditure		19

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount	Per cent
Total recurring expenditure[1]	**1 080**	**100.0**
Central administration	119	11.0
Primary and secondary education	632	58.5
Other recurring expenditure, not specified	329	30.5

1. Public schools only.

3. TRENDS IN SECONDARY EDUCATION, 1930–57[1]

School year	Number of students enrolled by type of education		Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General and vocational				
	Total	Per cent female			
1930	...	...			
1931	162	46			
1932	...	...	0.2	2	*10*
1933	219	47			
1934	...	...			
1935	229	56			
1936	...	...			
1937	308	53	0.3	2	*15*
1938	...	...			
1939	470	48			
1940	...	...			
1941	443	53			
1942	...	...	0.5	2	*25*
1943	500	56			
1944	...	...			
1945	669	56			
1946	...	...			
1947	860	...	0.8	2	*40*
1948	...	...			
1949	976	...			
1950	1 900	...			
1951	1 947	...			
1952	1 975	...	2	2	*100*
1953	2 021	...			
1954	2 092	...			
1955	*1 700	...			
1956	1 887	...	1.8	2	*90*
1957	1 957	...			

1. Data refer to public schools only, except from 1950 to 1954, when they refer to public and private schools.

AMERICAN SAMOA

American Samoa is an insular possession of the United States of America administered by the Department of the Interior. It comprises the eastern islands of the Samoan group, which lie approximately 2,300 miles south-west of Hawaii and 1,600 miles north-east of the northern tip of New Zealand, in a direct line. There are seven islands in the American Samoa group. The capital, Pago Pago, and the central administrative offices are on the island of Tutuila.

THE EDUCATIONAL SYSTEM

The statutory basis of the educational system as a whole is found in Chapter 8, Education, Sections 561–83 of the Code of American Samoa dated 11 June 1949. The educational system is organized into an elementary division, grades 1–9, and a secondary division, grades 10–13. However, for the purposes of this chapter, secondary education will be considered as covering grades 7–13.

The main aim is to provide training which will enable the people to serve more effectively within their social, economic, professional and political structure. (A total of 37.5 per cent of all high school graduates since the first graduating class of 1950 is now employed by the Government of American Samoa.) At the same time, it is believed that the school system should provide a suitable background for those who will find it possible to take advantage of opportunities for higher education in the United States of America or other countries. Along with mastery of English (the official language), the aim is to provide mastery of basic skills related to science, medicine, law, business, the arts and other fields. As the Samoans are influenced more and more by contact with Western civilization, the Government of American Samoa recognizes its responsibility for preserving Samoan culture while encouraging all changes beneficial to health and well-being.

The Government also wishes to help the Samoan people, through education, to preserve and develop their economic resources, so that they may be able to cope with the problem of an expanding population and the increasing demands which accompany modern society, and to become as self-supporting as possible.

In line with these objectives, the policy of the Department of Education is as follows:

Curriculum. (a) Instruction in both the Samoan and English languages in the elementary schools; (b) the fundamental processes of reading, writing, and arithmetic; (c) science and health; (d) social studies with emphasis on Samoan culture, government and environment; (e) vocational preparation; (f) a vocational pursuit.

School organization. Continuation of the village elementary schools (grades 1–6); the junior high schools (grades 7–9); the senior high school (grades 10–12); the vocational school (grades 10–12) (the two latter schools for a select group of junior high school graduates); and the post-high school teacher training college (grade 13). It is proposed to expand this latter programme to a 2-year course.

Compulsory education. Continuation of the long-established and popular policy of compulsory education from age 7 to 15.

Buildings and equipment. Maintenance of buildings and equipment to keep pace with an expanding population. The general policy is that the financing of education should be a matter for co-operation between the local communities and the Government, but that as a school becomes more advanced in character the Government should provide additional support. In the elementary schools the villages provide the school buildings and teachers' living quarters; the Government provides teachers, equipment and supplies. In the junior high schools, high school, vocational school, dependents' school, demonstration school and teacher training college, the Government has sole responsibility.

Scholarships. Provision of scholarships and special training for qualified Samoans in needed fields as available.

Standards. Maintenance of the policy of upgrading the entire school system as rapidly as possible, initial emphasis being placed on the five junior high schools, which will prepare a better trained group of young people for the high school and for community life. Special attention is given to the teacher training college and the related demonstration school.

The Governor of American Samoa is ultimately responsible for all public education. He is advised on policy matters by a Board of Education consisting of seven members, including the Director of Education as chairman, three members appointed by the Governor, and three members elected to represent the three districts of American Samoa.

In addition to the public school system there are seven private schools run by four religious organizations: an elementary school (grades 1–6), a junior high school (grades 7–9), and five combined elementary-secondary schools (grades 1–9). About one-sixth of the total number of school-age students attend these schools. Another mission has under construction a junior-senior high school, with plans to add elementary and junior college divisions.

THE DEVELOPMENT OF SECONDARY EDUCATION

When the United States of America assumed control of Tutuila in 1900, the only school then existing on the island was one for boys conducted by the London Missionary Society. The first government school, a primary institution, was opened in 1904, and was followed by several others. However, the public school system did not really start till 1921.

During World War II the secondary schools were closed. The big addition to post-war Samoan education came with the founding of the high school in 1946; in 1948 the high school and Feleti school were combined into one institution known as the High School of American Samoa. In 1952 the teacher training classes, a part of the high school since its establishment, were set up as an independent, post-secondary institution, known since 1957 as the Feleti Memorial Teacher Training College. This school provides the highest academic training available in the territory.

A vocational programme was offered as part of the high school curriculum until 1952, when a separate Vocational School of American Samoa was established.

Administration. Secondary policy is planned and carried out by the Director of Education, the Superintendent of Secondary Education, the Supervisor of the Vocational School, and the Supervisor of the Teacher Training College and Demonstration School.

The function of the Office of the Director of Education is the general administration of the school system in direct regard to objectives and long-range plans set forth by the Governor of American Samoa. The office is also responsible for co-ordinating the activities of private schools, in order to ensure the fulfilment of basic educational objectives and policies, and for educational public relations on the village and district level.

The Division of Secondary Education controls the administration of grades 10 to 13, including the high school, vocational school, and teacher training college. It is responsible for the selection of textbooks, the management of secondary education budgets, the supervision of entrance examinations, the establishment of rules and regulations covering training, and the application of curricula set forth

and approved by the Director of Education. It conducts an adult educational testing programme.

The Director of Education supervises and inspects all schools. Inspection of junior high schools is carried out by the Superintendent of Elementary Education, the Village Schools Supervisor, and an Education District Supervisor. Supervision of other secondary schools (high school, vocational school and teacher training college) is undertaken by the persons responsible for these schools, the Superintendent of Secondary Education (who acts as high school principal), the Supervisor of the Vocational School, and the Supervisor of the Teacher Training College and Demonstration School.

A Samoan Public Health Nurse makes at least weekly visits to the outlying junior high schools. The services of the Hospital of American Samoa are available daily to all secondary school students in the Pago Pago Bay area.

Public education in American Samoa is financed by the Government of American Samoa out of funds derived from local revenues (about 33 per cent), supplemented as necessary by federal grants (about 66 per cent). Private schools receive no financial support from the Government. The Department of Budget and Finance makes funds available on a quarterly basis to the Department of Education. Funds for building construction and maintenance are budgeted for and expended by the Department of Public Works, not the Department of Education. The Frederic Duclos Barstow Foundation for American Samoans, of Honolulu (Hawaii), gives some financial aid to secondary education. During the 1958/59 academic year it provided scholarships, partial subsistence, or transportation funds to students, funds for teachers from Hawaii and the mainland to attend the Teachers' Institute in Samoa, and for a Samoan educational administrator to attend the South Pacific Commission Regional Education Seminar in Australia.

TYPES OF SECONDARY EDUCATION

Almost all children who complete grade 6 continue their education in the junior high schools (grades 7–9); on completion of grade 9 students are awarded either a certificate of attendance or a certificate of graduation. Education beyond junior high school includes the high school, the vocational school and the nursing school. Entrance to these is through an examination taken yearly by all 9th-grade students in public and private schools.

Administration and instruction in the junior high schools are carried out by locally-educated Samoans. The English-Samoan language ratio for instruction is 75 per cent to 25 per cent. The present junior high school curriculum consists of general science, social studies, arithmetic, English, reading, spelling, music and art, health, and practical agriculture. Social studies includes Samoan culture (grade 8) and Samoan government (grade 9). Instruction is based principally on standard junior high school textbooks published in the United States of America.

The High School of American Samoa. The course covers grades 10 to 12, admission being based upon examination of grade 9 students. The language of instruction is English, and the pupils use standard high school textbooks published in the United States. The subjects, which meet the requirements of United States certification agencies, are English, ancient history, world history, United States history, biology, physics, chemistry, senior science, business mathematics, algebra, geometry, shorthand, typewriting, bookkeeping, and office practice. Grade 11 students choose a general or commercial course to continue through grade 12. A diploma of graduation is awarded on completion of grade 12. The teachers are all university graduates.

Students who desire university or advanced technical school training usually go to Hawaii or to the mainland of the United States. A few high school graduates are sent to the Central Medical School in Suva, Fiji, for training as medical and dental practitioners, pharmacists and laboratory technicians; and two junior high school students are sent every year to the Central Agricultural School in Apia, Western Samoa.

The Vocational School of American Samoa. This school, which is composed of grades 10–12, provides special training in crafts and the use of trade tools. Boys, who are selected 9th-grade graduates, are trained in cabinet work, carpentry, machine work, electricity, boat repairing, sawmilling, auto mechanics, and plumbing—with the ultimate objective of doing work typical of local conditions. The curriculum also includes blue-printing, surveying, English and mathematics. Second- and third-year training is offered to outstanding students. These grade 11 and 12 students also attend high school classes in English and science. On completion of grade 12, a diploma of graduation is awarded by the High School of American Samoa.

The nursing school. This school for girls, who are selected 9th-grade graduates, is a 4-year institution operated by the Department of Medical Services. In addition to their professional studies and nursing practice, the girls attend high school classes in science, mathematics and English. At the completion of their course they are awarded a Nursing Certificate and a diploma of graduation from the High School of American Samoa.

Industrial training. There is no formal system of apprenticeship. Instruction exists informally in 'on-the-job' training for the young helpers of specialists, technicians and mechanics employed by private industry or by the Government of American Samoa.

Teacher training. The Feleti Memorial Teacher Training College operated as a 1½-year course from February 1958 until June 1959, but plans have been made to extend the programme to a 2-year course. Students admitted must be high school graduates. The function of the college is to train teachers in the basic skills of instruction, with special reference to teaching in the elementary schools. Courses offered in the college include English composition, general science, conservation of resources, the Pacific region, basic English usage, child growth, the teaching of science in the elementary school, exploring the elementary school curriculum, Samoan culture, and practice teaching. Graduates from the college are employed immediately upon graduation to teach in the elementary and junior high schools.

A Teachers' Institute is held yearly to keep Samoan educators abreast of new techniques and methods. It lasts five weeks and is attended by all Samoan teachers, principals, and supervisors. Instruction is provided by teachers from the United States mainland.

Out-of-class activities. Pupils at the high school elect every year a student council comprising a president, vice-president, secretary, treasurer, and class representatives; they also have their own police and court organizations for law enforcement within the school. Four times a week there are 'activity' periods related to homemaking, athletics, the band, the school yearbook, the newspaper, and the library.

High school, vocational school and junior high school pupils all participate in interschool games, as part of a planned recreational programme of the Department of Education.

TRENDS AND PROBLEMS

To meet the unprecendented demand in Samoa for secondary education beyond the ninth grade, opportunities will have to be widened. Unless this is done, the present 30 per cent of 9th-grade graduates who can be accommodated in senior high school will decrease to around 10 or 15 per cent as the junior high school enrolment expands.

The Department of Education is planning to build one 25-room, two 20-room, and two 15-room junior high schools, one 16-room and three 10-room additions to the high school, a high school auditorium, a 15-room teacher training college and demonstration school, and a 10-room school for English-speaking pupils.

In developing the educational programme, care will be taken to provide for the needs of all students, bearing in mind that over 50 per cent of the secondary school graduates leave American Samoa for Hawaii or the mainland.

A government scholarship programme is essential in order to provide education abroad for qualified students who wish to train themselves for service in Samoa. There is also a great need of locally prepared textbooks for Samoan students.

Adequate and attractive salaries should be provided for teachers so that they will remain in the profession. In order to meet the demand for qualified teachers, the teacher training programme should be expanded to a 2-, 3- and finally a 4-year course.

Mobile libraries of supplementary reading materials to visit the village schools and junior high schools would greatly improve the standard of instruction.

[*Text prepared by the U.S. Office of Education, Department of Health, Education and Welfare, Washington, D.C., in July 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 21,000.
Area: 76 square miles; 197 square kilometres.
Population density: 276 per square mile; 107 per square kilometre.

Summary of school statistics, 1953–57. During the 1957 school year 6,000 pupils were enrolled at educational institutions. Total enrolment was 9 per cent more in 1957 than in 1953 although 3 per cent less than in 1956. Primary enrolment (grades 1–9) increased by 10 per cent between 1953 and 1957 while secondary enrolment (grades 10–12) decreased by 11 per cent during the same period.

Between 1953 and 1957 the proportion of girls enrolled at primary schools increased slightly from 45 per cent in 1953 to 47 per cent in 1957. The proportion of girls in secondary schools was 28 per cent in 1957 compared with 12 per cent in 1953.

The teaching staff numbered 278 in 1957 as compared with 192 in 1953; women represented 34 per cent of the primary teaching staff in 1957. There were 23 pupils per teacher in primary education in 1957 compared with 30 pupils per teacher in 1953. (See table.)

Enrolment trends in secondary education, 1953–57. The number of pupils enrolled in public secondary schools (grades 9–12) increased from only 72 in 1937 to 500 in 1957 with a peak of 655 in 1947.

Examination results in secondary education, 1953–57. In 1953/54, 11 certificates were awarded to pupils of public schools, 48 (F. 7) in 1955/56, and 53 (F. 19) in 1957/58.

Educational finance, 1955/56. For the fiscal year beginning September 1955 receipts from the Federal Government amounted to 295,000 U.S. dollars. Of this sum $45,000 was spent on central administration and $247,000 on public primary and secondary education. Receipts from local sources are not known.

Sources. United State of America: Office of Education, Department of Health, Education and Welfare, Washington, D.C., replies to Unesco questionnaires.

SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Elementary schools (grades 1–9), public	1957	50	210	58	4 753	2 209
	Elementary schools (grades 1–9), private	1957	6	46	30	1 058	526
	Total	**1957**	**56**	**256**	**88**	**5 811**	**2 735**
	,,	1956	54	222	64	5 975	2 854
	,,	1955	56	204	61	5 913	2 759
	,,	1954	58	178	...	5 870	2 783
	,,	1953	58	177	...	5 282	2 406
Secondary *General*	Secondary school (grades 10–12), public						
	Total	**1957**	**1**	**16**	**8**	**196**	**54**
	,,	1956	1	12	7	256	77
	,,	1955	1	10	6	279	95
	,,	1954	1	[1]11	5	206	32
	,,	1953	1	[1]11	5	232	28
Vocational	Vocational school, public						
	Total	**1957**	**1**	**4**	–	**47**	–
	,,	1956	1	3	–	70	–
	,,	1955	1	3	–	56	–
	,,	1954	1	2	–	46	–
	,,	1953	1	2	–	32	–
Teacher training	Teacher training college, public						
	Total	**1957**	**1**	**2**	**2**	**14**	**6**
	,,	1956	1	5	3	14	1
	,,	1955	1	2	1	17	1
	,,	1954	1	1	–	16	6
	,,	1953	1	1	–	26	4

1. In addition, there was one part-time teacher.

GUAM

THE EDUCATIONAL SYSTEM

The Territory of Guam forms one single public school district; local public school districts like those commonly found in the United States of America do not exist. General policies for the administration of the school system are contained in Public Law 83, First Guam Legislature.

In accordance with provisions of the Organic Act of Guam, the Department of Education is under the general cognizance of the Governor of the Territory. The Department is administered through the Territorial Board of Education and the Director of Education. The board is appointed by the Governor, with the confirmation of the Legislature. Voting members, five in number, are required to be citizens of the United States and legal residents of Guam; in addition, there are two non-voting members who represent branches of the armed forces stationed on the island.

All executive and administrative functions of the Department are invested in the Director of Education, a United States civilian, who is the executive officer of the board. He is assisted by two superintendents of schools: one has general charge over personnel and the instructional programme, the other is in charge of business affairs. In addition, there are four school programme consultants, four specialists in subject areas, twenty-two elementary school principals, one junior high school principal, one junior-senior high school principal, one senior high school principal, and a Dean of the Territorial College of Guam.

The public schools have educational objectives similar to those commonly established for public schools on the American mainland. However, in view of the fact that the physical and social environment of Guam is in a number of respects unlike that which prevails on the mainland, certain adjustments have to be made. Some of the educational objectives of the public school system are: (a) to

provide a free, public school education for all children between the ages of 6 and 16 inclusive—such education to be provided without distinction as to sex, race, or religion; (b) to instil in students a deep and abiding faith in democracy as a way of life and a willingness to accept the responsibilities and obligations which are inherently a part of the democratic way of life; (c) to discover and awaken the capacities of children so as to permit them to utilize effectively the common arts of communication; (d) to give meaningful instruction in the English language; (e) to provide knowledge and an appreciation of local history, customs, and cultural institutions so as to prepare the individual for effective living in his own community.

Attainment of these objectives is sought at all levels of the public school system—primary, secondary and higher.

Education at primary level, known as elementary education, comprises the biggest division in Guam's educational system. In a general sense it is defined, for purposes of instruction, as being the educational programme provided for pupils enrolled in grades 1 to 6 inclusive.

Generally speaking, secondary education in the public schools is defined as being the educational programme provided for pupils enrolled in grades 7 to 12 inclusive.

At the present time there are two institutions of higher education: the Territorial College of Guam and the Father Duenas Memorial School. The Territorial College, operated by the Government, offers a 2-year course. The Father Duenas School is both a high school and a minor preparatory seminary of the Roman Catholic church.

THE DEVELOPMENT OF SECONDARY EDUCATION

Public education in Guam dates from 22 January 1900, when the first American governor issued General Order No. 12 placing education 'under the supervision and exclusive control of the Government'. The order also provided for compulsory attendance between 8 and 14 years of age; the leaving age was later raised to 16.

High school courses were first offered on the island of Guam in the year 1917; they were designed primarily for the purpose of upgrading teachers in the public schools. Naval officers served as instructors.

George Washington High School, Guam's only public high school now operating, was established in 1936. Like its predecessors, the pre-war Washington High School offered only a limited number of non-academic subjects. In the academic field, a standard high school curriculum prevailed. Until the Territorial College of Guam was established in 1952, the overwhelming majority of Guamanian students could expect no formal education beyond the twelfth grade, as few could afford to pursue further studies in mainland colleges or universities.

Vocational education has been a part of Guam's school programme for many years. As early as the first decade of American rule, a system of apprenticeship training was inaugurated in the island's schools. In 1917 an industrial arts teacher was recruited from the Philippines and local crafts and practical arts became an important part of the curriculum. An agricultural school, established in 1905, was incorporated into the public school system in the 1930s. By 1941 vocational education, operated in conjunction with the Public Works and other departments, was an important part of the island's educational programme.

At the present time public secondary education consists of the programmes offered to pupils in grades 9 to 12 inclusive at George Washington High School. As of 23 January 1959 enrolment was 1,853. Other high schools (with enrolment figures at the same date) are the Father Duenas Memorial School (Roman Catholic), 142; the Academy of Our Lady of Guam (Roman Catholic), 184; and the Far Eastern Island Mission Academy (Seventh Day Adventist), 18.

Administration. Provisions for the administration of public secondary education come within the arrangements for the whole system as described above.

Planning and policy functions affecting public secondary education are exercised by the Territorial Board of Education, the Director of Education, the Superintendent of Schools, and the principal of the George Washington High School. It is anticipated that a secondary school programme consultant will be employed shortly; he will act in an advisory capacity in all matters related to public secondary education. Teachers too are expected to participate in the formulation of certain policies.

Control of secondary education passes from the Territorial Board of Education and the Director of Education to the Superintendent of Schools, thence to administrators of schools at the secondary level. This is true primarily of public secondary schools. Board of Education control over private secondary schools is exercised only in the matter of pupil attendance.

The Territorial Government is responsible for the financial support of public secondary education and funds are appropriated out of general revenues. Supplementary federal funds are made available for various programmes. Government expenditure on public education covers construction and maintenance of buildings, salaries of teachers and other staff members, equipment and supplies, and transport of pupils living a prescribed distance from school. With the exception of books and transport, education in private secondary schools is provided at no expense to the Government.

Standards are laid down for buildings and equipment. General purpose classrooms are required to have an area of 900 square feet per room with 30 students per class. Special rooms including art and music rooms, workshops, science laboratories, rooms specially equipped with audio-visual aids, library and cafeteria are necessarily larger. Other provisions are shower facilities for athletic activities, health room, teachers' lounge, maintenance room, and administrative offices including business office, mimeo and workroom, and offices for the principal, assistant principal, and counsellors. Lighting and sanitary standards conform to the recommendations of the National Education Association and the Department of Health, Education and Welfare.

TYPES OF SECONDARY EDUCATION

George Washington High School, Guam's only public high school, offers four types of curriculum: college preparatory,

commercial, vocational, and general educational. Courses are offered in 11 departments: art, commercial, English, foreign language, health and physical education, home economics, industrial arts and vocational education, mathematics, music, science, and social studies.

To graduate from the high school a student must have completed 16 units in academic courses and 2 units in non-academic courses, a total of 18 units. An academic unit is a full-credit course of 55-minute periods 5 days per week for a minimum of 36 weeks; or two one-semester courses, totalling one full credit.

As of 14 May 1957 George Washington High School was granted membership of the North Central Accreditation Association of Secondary Schools and Colleges.

The private secondary schools seek to fulfil the educational aims and objectives of the churches which sponsor these schools.

TRENDS AND PROBLEMS

The problems of secondary education in Guam are in many respects similar to those which prevail in communities in the United States, but are more complex owing to local conditions and the great distance between Guam and the mainland. Recruitment of teachers, for example, is adversely affected by the fact that the current salary schedule is not competitive with those existing in many states, by the higher cost of living, and the shortage of government housing. Personnel turnover on Guam creates problems. Since the teachers are coming into a new environment the orientation period is longer than for most staff changes in the United States. Replacement of teachers during the school year is difficult. Vacancies during the school term are created more often on Guam than in mainland schools, because teachers who are armed forces dependents are subject to transfer at any time; but few qualified substitute teachers are available. There are also the psychological implications of teachers accepting a contract knowing that they will probably not stay beyond the time of the initial contract.

[*Text prepared by the U.S. Office of Education, Department of Health, Education and Welfare, Washington, D.C., in June 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 38,000.
Area: 206 square miles; 534 square kilometres.
Population density: 184 per square mile; 71 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58 total enrolment in public schools was 13,000, an increase of 24 per cent over the figure for 1953. The Territorial College doubled its enrolment during this period. The proportion of girls may be estimated at about half of the total enrolment. The pupil-teacher ratio changed very little from 1953 to 1957, going from 29 to 28 in elementary schools and from 27 to 24 in the public high school. (See Table 1.)

Enrolment trends in secondary education, 1931–57. From 1931 to 1955, enrolment in the public secondary school increased from 91 to 2,238. Since the total population is relatively small, the secondary enrolment ratio is quite sensitive to any fluctuations and this explains the very high increase from only 5 in 1931 to 48 in 1955–57. (See Table 3.)

Examination results in secondary education, 1953–57. In 1957/58, 324 certificates were granted to pupils of public schools, an increase of 59 per cent since 1953. Girls obtained 52 per cent of the certificates awarded in 1953 and 60 per cent in 1957.

Educational finance, 1955/56. During the fiscal year beginning in September 1955, 96 per cent of the recurring expenditure was covered by local authorities. Of the total expenditure on public schools, 63 per cent was recurring expenditure and 37 per cent capital expenditure. (See Table 2.)

Sources. Guam: Annual reports of the Governor of Guam. United States of America: Office of Education, Department of Health, Education and Welfare, Washington, D.C., replies to Unesco questionnaires.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57[1]

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Elementary and junior high schools, public						
	Total	**1957/58**	**22**	**367**	...	**10 377**	...
	„	1956/57	20	...	...	9 631	...
	„	1955/56	22	394	...	9 011	...
	„	1954/55	22	290	...	8 762	4 174
	„	1953/54	22	293	...	8 517	...
Secondary *General and Vocational*	Secondary school, public						
	Total	**1957/58**	**1**	**84**	...	**2 037**	...
	„	1956/57	1	78	...	1 996	...
	„	1955/56	1	78	...	2 238	...
	„	1954/55	1	72	...	1 996	1 017
	„	1953/54	1	63	...	1 679	890
Higher	Territorial College, public						
	Total	**1957/58**	**1**	**17**	**2**	**521**	**239**
	„	1956/57	1	...	...	473	198
	„	1955/56	1	25	7	242	130
	„	1954/55	1	...	...	219	104
	„	1953/54	1	27	9	260	139
Adult	Adult vocational courses, public						
	Total	**1957/58**	...	...	...	***450**	...
	„	1956/57	...	...	...	...	...
	„	1955/56	...	...	...	...	...
	„	1954/55	43	...	...	483	...
	„	1953/54	...	...	...	...	...

1. Data refer to public schools only.

2. EDUCATIONAL FINANCE, 1955/56 (in thousand U.S. dollars)

A. RECEIPTS BY SOURCE

	Amount
Total receipts[1]	**2 338**
Federal Government	70
Territorial Government	2 238
Tuition fees and other receipts from parents	30

B. EXPENDITURE BY PURPOSE

		Amount
Total expenditure[1]		**3 700**
Recurring expenditure		2 331
For central administration	100	
For instruction		
Salaries to teachers, etc.[2]	1 522	
Other instructional expenditure[2]	380	
Higher education	67	
Other recurring expenditure	262	
Capital expenditure		1 369

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent
Total recurring expenditure[1]		**2 331**	**100.0**
Central administration		100	4.3
Instruction		1 969	84.5
Primary and secondary education	1 902		81.6
Higher education	67		2.9
Other recurring expenditure, not specified		262	11.2

1. Public schools only.

2. Not including higher education.

3. TRENDS IN SECONDARY EDUCATION, 1931–57[1]

School year	Number of students enrolled by type of education		Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General and vocational				
	Total	Per cent female			
1931	91	34	0.1	2	5
1935	140	41			
1936	...	...			
1937	229	61	0.2	2	9
1938	...	...			
1939	319	61			
1949	1 142	...	1.1	3	34
1950	...	...			
1951	1 285	...			
1952	1 604	...	1.6	4	36
1953	1 679	53			
1954	1 996	51			
1955	2 238	...			
1956	1 996	...	2.1	4	48
1957	2 037	...			

1. Data refer to public schools only.

PACIFIC ISLANDS

Trust Territory

The Territory consists of over 2,000 islands and atolls lying between latitudes 1° and 20° north and longitudes 130° and 172° east—a vast area of the Pacific roughly equivalent to the land area of the United States. The islands belong to three main groups, the Marshalls, the Carolines and the Marianas,[1] but are at present administered as seven districts: Saipan, Rota, Koror, Yap, Truk, Ponape and the Marshalls. The indigenous inhabitants, broadly classed as Micronesians, are at various stages of social evolution. Nine individual languages, with distinctive dialects, are spoken and there is considerable cultural diversity.

THE EDUCATIONAL SYSTEM

The Code of the Trust Territory of the Pacific Islands places on the High Commissioner responsibility for establishing and operating a free public school system. The code also establishes a Department of Education, headed by a Director of Education who is on the staff of the High Commissioner and responsible to him for the general supervision and administration of education throughout the Territory. At district level these duties are performed by district departments of education, headed by district educational administrators. To ensure that the people shall be the ultimate source of educational authority provision has been made within the code for the organization of district and community boards of education. In lieu of regularly constituted boards of education, district congresses or community councils may have an educational committee. As far as possible, all persons concerned with educational administration participate in the formulation of policy and they, in turn, are guided by the desires and needs of the people themselves; thus the formulation of educational policy for whatever level of education is a two-way process, coming from the 'grass roots' upward at the same time as it is going from the Director of Education downward. Other departments—Fisheries, Agriculture, Communications, Public Health, Public Works, Finance,

1. Although geographically within the Marianas, Guam has been a United States possession since 1898 and does not form part of the Trust Territory.

Administration, etc.—co-operate with the Department of Education in matters coming within their respective competencies. It is recognized by all government personnel that the prime function of the administration of the trusteeship is education.

In addition to schools maintained by public funds, there are a number of schools operated by Protestant and Catholic missions. They are required to meet curriculum standards established for all schools of the Territory but are free of any other regulations. The Bill of Rights in the Code of the Trust Territory prohibits the use of public money for religious institutions or personnel, but the Education Department helps mission schools by supplying advice and encouraging mission teachers to attend training seminars conducted by district departments of education.

The school system in Micronesia follows a 6-3-3 pattern: six years of primary education in the elementary school (grades 1 to 6); three years of lower secondary education in the intermediate school (grades 7 to 9); and three of upper secondary in senior high school (grades 10 to 12). There are no institutions for higher education in the Trust Territory; scholarships are available to enable selected students to continue their studies overseas.

The code requires compulsory school attendance of all children between 8 and 14, although attendance regulations can be adapted to meet local situations. These laws on compulsory education apply only to elementary schools. Sometimes children entering grade 1 are younger than the legal commencing age. Education begins in the native tongue, English being introduced as a subject of instruction as soon as the pupils are ready for it and provided that the teacher is literate in English.

THE DEVELOPMENT OF SECONDARY EDUCATION

Education under German (1885–1914) and Japanese (1914–44) administration did not provide for secondary schooling in the islands. The first statement of American educational policy was included in a directive of 12 December 1945: it set a pattern for education which was adapted to island living, appreciative of indigenous culture, conducted in so far as possible by native teachers and directed towards eventual self-government. The first instructions implementing this policy and establishing a uniform educational system were promulgated in May 1946. In May 1947 the present organization of a 6-year elementary school and 3-year intermediate (junior secondary) school was established.

The provision of secondary schools grew out of the plans regarding teacher training. Three levels were presented. The first was for apprentice teachers whose formal schooling in the past was scarcely equivalent to that of a 6-grade school. The second included teachers to be trained in a model intermediate school established in each district. These model schools, which opened in early 1948, taught general subjects and provided pre-professional training in teaching, medicine and nursing, and vocational training in trade, agriculture and business. The third level of teacher education was provided for selected teachers at an advanced school in Guam, designated as the Marianas Area Teacher Training School. A year later this school was moved to Truk where it became a 2-year school known as the Pacific Islands Teacher Training School.

In the meantime the trusteeship agreement between the United States of America and the United Nations Security Council had come into force on 18 July 1947, and at the end of June 1951 the administration of the Pacific Islands was transferred from the United States Navy to the United States Department of the Interior. Promulgated in 1952, the Trust Territory Code (Chapter 8: Education) now forms the legal basis of the education system. Section 565 specifically mentions that the free public school system 'shall, within the limit of funds available, consist of elementary, intermediate, professional and technical, and adult education'.

One of the first changes of policy after the transfer to the Department of the Interior was to take teacher education out of the intermediate schools and make them institutions chiefly responsible for general education and such vocational courses as agriculture and workshop training. The Pacific Islands Teacher Training School was changed to the Pacific Islands Central School (PICS) and its programme became one largely devoted to general education. It continued as a 2-year school until 1957, when the third year was added, thus completing the 12-year span of schooling in the islands.

At present each district except Rota has one public intermediate school located at the seat of district headquarters, and one district, Ponape, has a second intermediate school on the island of Kusaie. From September 1959 PICS will be housed in new buildings at Ponape. All these schools are boarding schools.

Administration. The more general aspects of policy and administration have been touched on in previous sections. Each district has two or more American teacher trainers. At least one of these trainers supervises teachers in intermediate schools, all of whom are Micronesians. The trainer's duties include improving the general and professional background of the teachers, helping to develop better programmes, teaching materials and aids, demonstrating methods and techniques.

All money expended for secondary education, including the financing of buildings and equipment and the payment of teachers' salaries, comes from grants provided by the United States Congress. The funds are allotted to each intermediate school by the District Administrator who apportions the money available for his district among the various activities. The Director of Education participates in determining the amount to be allocated for all secondary schools. No fees are charged at public schools.

The Public Works Department is charged with the responsibility of providing all buildings and equipment after consultation with the Director of Education. All new intermediate school buildings are required to be prefabricated metal buildings of rigid frame type. Because of tropical typhoons they must be able to withstand winds of a velocity of up to 125 miles per hour. New classrooms are to be 25 feet by 33 feet, allowing a minimum of 27½ square feet per pupil, 30 pupils per classroom. They will have a window area on each side of 6 feet by 33 feet, containing louvres instead of glass panes. Each room must reach a minimum standard of 12 foot candles of light.

In the matter of social welfare, intermediate school students are provided with counsel, health service and welfare benefits through the co-operation of various institutions.

TYPES OF SECONDARY EDUCATION

The district intermediate schools receive selected pupils from the various island elementary schools and provide a 3-year continuation of the general education programme of the latter. Selection is usually made by the teacher of the 6th-grade graduates from elementary school on the basis of their work. Quite often the community council has a say, in which case the son of a chief will have a better opportunity than will a child of lowly rank, a boy will be selected more often than a girl. Some district officers of education are now experimenting with tests.

From the public and private intermediate schools selected graduates go on to the Pacific Islands Central School which extends the general education curriculum for three more years and also offers a vocational programme. Here the methods of selection include a series of tests covering general knowledge of the territory, social studies, map study, English, science and mathematics. The tests have not been standardized. Recommendations of the intermediate school principal and teachers, of the American teacher supervisor of intermediate teachers, and in some districts of a scholarship committee are also taken into consideration.

The only type of further education in the islands open to the senior secondary school leaver is adult education. Scholarships are given every year, however, to selected students for two years of undergraduate study outside the Territory, usually in Hawaii. Another scholarship is granted to selected students who have completed this 2-year programme, enabling them to pursue undergraduate studies, including professional courses.

The opening of school, the school calendar and the school term are all matters for the educational authorities of each district to determine. So long as children are in school for 180 days per year, the district can plan its school programme so as to fit in with local activities, e.g., cash crop seasons. Assurance of regular attendance is a condition for entry to schools.

Curricula and methods. The development of the intermediate curriculum at the district level is a continuous process. In general it centres on a core of social studies through which students come to understand their own institutions, problems related to their economic welfare, their geographical environment and its effect upon their way of life, the historical background from which their society has evolved, and something about the outside world. Students take up as class projects consideration of the problems faced by local and district officials in the running of political affairs. More stress is placed upon the teaching of English as a second language, though it is not employed at the expense of the native languages. General arithmetic is related to problems of daily living. In health education a better understanding of personal, home, and community health and sanitation problems is taught. Science is integrated with social studies, agriculture and health education. Vocational programmes vary from one intermediate school to another: at one school, for example, seventh graders learn the correct usage of tools, and make clothes chests and other simple items needed in their dormitories or at home; eighth graders learn to draw house-building plans and to construct house frames, and ninth graders learn to draw boat-building plans and to construct boats. With the exception of classes in English, the pupils in intermediate schools are not grouped by ability or aptitude.

The programme at the Pacific Islands Central School is planned to broaden educational background, as well as to give some special training to provide potential leadership for Micronesian communities and districts. In the 'core' classes students study the needs and problems of Micronesia. They develop better understanding of how resources, work, wages and ways of life depend upon environment. Health education is continued. Increased emphasis is given to the subject of government, beginning at the family level and progressing to the community or village, island or atoll, the district, the Trust Territory and the world, including the United Nations. The teaching of science is integrated as much as possible with agriculture.

The core class, which is scheduled for two or more of the usual class periods, is the most important class in the intermediate schools and at PICS, especially during the first year, for this is where the student first learns to understand his classmates who come from different islands, and, in the case of PICS, speak different languages and belong to different cultures. It is also where the student establishes the greatest rapport with his teacher; the core teacher is his guide and counsellor for the year.

Achievement testing and reporting. No standardized achievement tests are given except as a method of selection of scholarship students. Because of divergent cultures each district is developing its own testing and evaluation procedures. Report cards are issued quarterly in some districts and twice a year in others.

Since the intermediate schools and the Pacific Islands Central School are fairly selective, most students who enter each level are automatically promoted unless they show complete lack of ability or interest or are otherwise maladjusted to the secondary school environment. Once a student is promoted to the second year, it is unusual for him not to graduate.

Teaching staff. In intermediate schools all the teachers are Micronesians. They are supervised by an American who guides and counsels them in teaching methods, classroom management, curriculum development, preparation and use of teaching materials, preparation and use of evaluation techniques and on all other aspects of a good educational programme. Intermediate school teachers are recruited from among successful elementary school teachers, graduates of the Pacific Islands Central School and scholarship students who have had two years of higher education in Hawaii.

At the Pacific Islands Central School the teachers are Americans but Micronesians are now being trained and will be fully prepared to take over in a few years' time.

Vocational and technical schools. Both vocational and general

education are integral parts of the curriculum in intermediate schools and the Pacific Islands Central School. In Palau there is a nursing school at secondary level, offering 20 months' basic training. Successful students are given certificates of graduation.

Teacher training schools. There is an education class at the Pacific Islands Central School but most teacher education is carried out in post-secondary district sessions providing practice training, oriented to the special needs of the district.

Out-of-class activities. The students elect officers for their classes and also choose representatives on the student council, which holds formal meetings and takes part in drafting most of the school rules. Great importance is attached to these activities as a means of helping Micronesians to learn self-government.

Since all secondary schools are boarding schools, social life cannot be neglected. Various activities are organized by the school government and supervised by teachers: appropriate movies and in some schools dances, school sports and games, photography clubs, music clubs, science clubs, agriculture clubs, etc. These activities can be considered as much a part of the curriculum of the secondary schools as are the regular classroom activities.

TRENDS AND PROBLEMS

Up to the present, each district intermediate school staff has developed its own curriculum content, teaching materials, time allotment and goals in accordance with general guide lines given in an Education Development manual. The Department is now turning its attention to the preparation of curriculum plans suitable for all intermediate schools but flexible enough to allow modifications to meet local needs, and to the building up in each school of a library of appropriate materials for teachers.

Curriculum revision and development of relevant teaching material are also needed at the Pacific Islands Central School, taking greater cognizance of goals to be achieved and content to be covered. Plans have been made for this work to begin in 1959. With the transfer of the school to its new site at Ponape, vocational education will be extended and improved, particularly workshop training and agriculture. Training in the domestic arts needs greater emphasis throughout the secondary programme.

Educators in the Trust Territory believe that the secondary schools should develop abilities which will help individuals function better as members of their social group. Granting that there are features of American and world culture the acquisition of which would benefit the Micronesians, it is not desirable or possible for them to substitute those of another people for their own ideas, beliefs, skills, arts and crafts, methods of thinking, customs and institutions. What can and should be done is to help them to evaluate other cultures and accept into their own what is adaptable and usable. It is the function of the secondary schools to help Micronesians to achieve this cultural synthesis.

[*Text prepared by the U.S. Office of Education, Department of Health, Education and Welfare, Washington D.C., in April 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 71,000.
Dry land area: 687 square miles; 1,779 square kilometres.
Population density: 103 per square mile; 40 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment exclusive of adult education was over 13,000, representing 19 per cent of the total population. As compared with 1954/55, enrolment had increased by 50 per cent.

In 1956/57, the proportion of girls among primary pupils was 47 per cent and among secondary pupils 34 per cent. In the same year the pupil-teacher ratio was 25 in the elementary schools and 12 in the schools of secondary education. (See Table 1.)

Enrolment trends in secondary education, 1950–57. The ratios obtained by relating the enrolment in general secondary education (averages for 1950–54 and for 1955–57) to the estimated population 15–19 years old are shown in Table 2.

Examination results in secondary education, 1953–57. During the school year 1957/58, the certificate of graduation from intermediate schools was granted to 338 pupils, of whom 127 were female. For 1953/54, the corresponding figures were 261 and 99. The proportion of girls in schools of secondary education changed very little from 1953/54 to 1957/58; nevertheless, certificates granted to girls, expressed as a percentage of the total number of certificates granted, increased during this same period from 18 to 38 per cent. The certificate of graduation from vocational school was obtained by 2 pupils in 1954/55, by 8 in 1955/56 and by 15 in 1956/57.

Educational finance, 1957/58. In the fiscal year beginning July 1957, total expenditure on education was almost double that of 1954/55. These amounts represent an average expenditure of $13 per inhabitant for 1957/58 and $7.5 for 1954/55. There was also an increase in the average cost per pupil—from $50 per pupil in 1954/55 to slightly less than $70 in 1957/58. (See Table 3.)

Sources. Pacific Islands: Office of the High Commissioner, Guam, replies to Unesco questionnaires.

1. SUMMARY OF SCHOOL STATISTICS, 1953–56[1]

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Elementary schools, public	1956/57	161	356	67	8 612	3 928
	Elementary schools, unaided private	1956/57	19	65	41	1 890	978
	Total[1]	**1956/57**	**180**	**421**	**108**	**10 502**	**4 906**
	„	1955/56	178	450	143	9 385	4 195
	„	1954/55	165	394	93	8 090	3 854
	„	1953/54	165	370	102	[2]7 258	[2]3 139
Secondary							
General	Intermediate schools, public	1956/57	6	64	10	826	178
	Secondary school, public	1956/57	1	7	3	127	12
	Intermediate schools, unaided private	1956/57	12	42	18	549	307
	Secondary schools, unaided private	1956/57	3	12	2	91	42
	Total[1]	**1956/57**	**22**	**125**	**33**	**1 593**	**539**
	„	1955/56	19	138	35	1 427	494
	„	1954/55	17	126	32	1 079	318
	„	1953/54	14	116	32	976	243
Vocational[2]	U.S. Weather Bureau training school	1956/57	1	2	–	11	–
	Nursing school	1956/57	1	3	3	7	6
	Total	**1956/57**	**2**	**5**	**3**	**18**	**6**
	„	1955/56	2	5	3	23	6
	„	1954/55	2	5	3	8	6
	„	1953/54	2	5	3	8	6
Adult[4]	Courses in various subjects						
	Total[1]	**1956/57**	**45**	**33**	**13**	**1 530**	**732**
	„	1955/56	39	26	10	756	281
	„	1954/55	26	21	8	495	161
	„	1953/54	44	28	9	884	175

1. In 1957/58, there were 11,696 (F. 5,248) enrolled in elementary schools, 1,493 (F. 473) enrolled in intermediate and secondary schools, 4,000 (F. 2,491) enrolled in adult education classes.
2. Excluding 1,106 pupils in primary and secondary schools together in the Saipan district.
3. In addition, in 1956/57, there were some short vocational courses (enrolment, 51).
4. In addition, there are 8-week teacher training courses held in each district every summer, attended by 302 (F. 67) students in 1956/57, 397 (F. 102) in 1955/56, 380 (F. 76) in 1954/55 and 320 (F. 92) in 1953/54.

2. TRENDS IN SECONDARY EDUCATION, 1950–57

School year	Number of students enrolled[1]		Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	Total	Per cent female			
1950	813	17			
1951	1 337	31			
1952	1 296	28	1.1	5	*22*
1953	...	...			
1954	1 079	29			
1955	1 427	35			
1956	1 593	34	1.5	5	*30*
1957	1 493	32			

1. Enrolment in general secondary classes (intermediate schools and high school).

3. EDUCATIONAL FINANCE, 1957/58 (in U.S. dollars)

A. RECEIPTS BY SOURCE

	Amount
Total receipts[1]	**900 127**
Federal Government	596 578
Local authorities	157 600
Tuition fees	60 000
Other receipts from parents	35 949
Gifts, endowments, etc.	50 000

B. EXPENDITURE BY PURPOSE

		Amount
Total expenditure[1]		**900 127**
Recurring expenditure		799 247
For administration or general control	69 410	
For instruction		
Salaries to teachers, etc.	420 480	
Other instructional expenditure	142 733	
Other recurring expenditure	166 624	
Capital expenditure		100 880

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**799 247**		**100.0**
Central administration		67 922		8.5
Instruction		[2]564 701		[2]70.7
Primary education	224 600		28.10	
Secondary education	258 313		32.32	
General and vocational	232 913		29.1	
Teacher training	25 400		3.2	
Higher education	69 788		8.73	
Adult education	12 000		1.50	
Other recurring expenditure		166 624		20.8
Municipal administrative costs	1 490		0.2	
Operation and maintenance	84 900		10.6	
Freight, transportation, etc.	80 234		10.0	

1. Closed account.

2. Includes $1,488 for expenditure on administration.

RYUKYU ISLANDS

THE EDUCATIONAL SYSTEM

After the reform of the Japanese educational system in March 1948 the same pattern of schooling was adopted for the Ryukyu Islands: six years of primary education (elementary school), three years of lower secondary education (junior high school), three years of upper secondary education (senior high school), and four years of higher education; the period of compulsory school attendance covers the first nine years of this course.

The only higher education available in the Ryukyus is provided at the University of the Ryukyus, founded in 1950, and at Okinawa Junior College, founded in 1958.

There are a number of kindergartens run by private organizations and by local agencies, without government subsidies, and special schools for the handicapped.

The Code of Education for the Ryukyus expressly stipulates that all education must be based on the universal principles of mankind, must encourage a love of truth and peace and a respect for the value of the individual, and must aim at producing men and women who will contribute to the building of a democratic and cultured society.

Within the constituted Government of the Ryukyus is a Department of Education with a Director of Education appointed by the Chief Executive.

A Central Board of Education, indirectly elected by the people through a caucus of members of local district boards of education, sets the broad policies for education within

the framework of laws, and is the governing board over government vocational high schools, schools for the handicapped, and government museums and libraries.

Public elementary and junior high schools are operated by 63 local school boards, members of which are elected by the people in their respective areas. Public senior high schools are operated by 14 'union districts', each of which is formed by the combination of several local districts; each local board is represented by one member on the board of the union district to which it belongs. Each union district employs a superintendent of education who is responsible for the administration of all public schools (elementary, lower and upper secondary) within the union area. To defray the expenses of the superintendent's office each local district in the union is responsible for a proportional share of the costs.

Parent-teacher associations have been organized in each district and in each school. These have played an important part in post-war education in the Ryukyus, particularly in the reconstruction of school facilities.

The inhabitants of the Ryukyu Islands have the same ethnic, cultural and religious background as the Japanese people and Japanese has been the common language of the islands for almost a century. The textbooks, curricula and courses of study current in Japan are used in the islands and Japanese instructors assist in the pre-service and in-service training of teachers.

THE DEVELOPMENT OF SECONDARY EDUCATION

Educational events from the turn of the century until the termination of World War II were identical with those in Japan.

With the cessation of hostilities an advisory council of leading Ryukyuans was established to assist the United States Military Forces provide aid to the local population and to advise on carrying out the functions of civil government. Within this council was a department of educational affairs. A few months later, in January 1946, by instruction of the United States Navy Military Government, a Department of Education was organized.

In March 1947 it was decided that eight years of elementary education would be made compulsory, a 4-year secondary school organization was mapped out, teachers were appointed, and full scale education resumed. At the same time vocational senior high schools were established to offer education at the secondary level for working youth. These vocational schools were abolished after one year of operation. One year later, following the educational reform in Japan, the 6-3-3-4 organization was adopted. In the spirit of equality of educational opportunity, upper secondary schools were decentralized where heretofore they had been operated only in urban areas.

In 1952 the Government of the Ryukyus was founded, with a central Department of Education. The educational system of the entire island chain was unified and on 28 February 1953 the Code of Education for the Ryukyu Islands was promulgated as Civil Administration Ordinance No. 66. The ordinance provided for the Central Board of Education and the local and union district boards of education already mentioned; thus the control and execution of educational administration were conducted through boards elected by the people. Provision was also made for fiscal independence of the districts by empowering the boards of education to levy an educational tax and to manage their own financial affairs. Although governmental subsidies remained a major source of educational support, local autonomy in the administration of the budget was assured.

Civil Administration Ordinance No. 66 was replaced by Civil Administration Ordinance No. 165 in March 1957. Certain provisions of the new ordinance which prohibited political activities by teachers, restricted official travel, placed employment of teachers on a contractual basis, and limited the time that a school principal could serve to a single term of five years in any one school and to ten years in total, were severely criticized by the teachers and there was agitation for the passage of local educational legislation.

In September 1957 four education laws closely patterned on corresponding laws in Japan were passed by the Legislature and became effective on 1 April 1958: the Basic Code of Education, the Board of Education Law, the School Education Law, and the Social Education Law. Ordinance No. 165 was rescinded with the exception of that portion that pertained to the University of the Ryukyus. In September 1958 two additional laws were passed by the Legislature, the Certification Law, and the Enforcement Law for the Certification Law, establishing qualifications for the certification of teachers and other educational personnel.

Administration

The principal functions of the Central Board of Education and of union and local district school boards have already been mentioned.

The Central Board also sets curriculum standards, authorizes textbooks for use in schools, and establishes standards and regulations to implement educational laws. Both local and union district boards are juridical bodies empowered to buy and sell school properties, to employ teachers and other employees of the school district, to set up local educational policies which are consistent with the regulations, standards and policies of the Central Board of Education and, with the approval of the Central Board of Education, to set up curriculum standards and to establish or abolish schools and other educational institutions.

Teachers of schools and educational institutions run by the Central Government are entitled to all the rights of civil servants, and are in a different category from those employed by local and union school districts. At the present time, neither central government employees nor local public personnel have a pensions system, but legislation to remedy this is under consideration.

The Director of Education exercises ministerial functions, advises on all educational matters administered by the Central Board and serves as the secretary and administrator of that body, conducts educational surveys and investigations, and makes recommendations to the board on matters which, in his opinion, are conducive to the improvement of education.

The Department of Education is a service agency for all

schools. Within the department are teacher-consultants and social education directors who give advice and counsel but exercise no direct control.

Each superintendent of education is the chief administrator of his employing board. His staff includes teacher-consultants and social education directors who serve all schools within the union district.

An Education Council advises the Chief Executive on educational matters, but has no administrative functions.

Finance. The support of education comes from tax revenues at both central government and local levels; from parent-teacher association fees and other local sources, such as donations from individuals, organizations and business firms; and from grants from the United States Civil Administration of the Ryukyu Islands.

Buildings and equipment. The law provides that the Government shall be responsible for the full cost of construction of school buildings, and may provide subsidies to school districts for equipment and teaching materials within the limits of the budget.

The minimum building allocation for junior high school students is fixed at 2 square metres per student.

In the senior high schools the minimum standard is 3.3 square metres per student enrolled in the academic courses and in commercial and homemaking vocational courses, and 4 square metres per student in other vocational courses. From the date of establishment of the regulations in May 1958 schools are allowed a 5-year period to comply with the minimum standards.

In art rooms, libraries and sewing-rooms the blackboards are required to have 100–200 luxes of lighting; in other classrooms and laboratories the requirement is 50–100 luxes.

School welfare services. Through the assistance of the United States Civil Administration of the Ryukyus Islands and American Welfare Agencies, one daily serving of milk is provided without cost to each school child. Under a similar programme, students attending evening courses, and going directly to the school from their place of employment, are provided with a hot meal.

Each child receives at least one free medical examination annually.

TYPES OF SECONDARY EDUCATION

The 6-3-3 system took effect on 1 April 1948 and the elementary school, junior high school and senior high school were unified into a single system.

The school year starts on 1 April and is divided into three terms—1 April to 31 August, 1 September to 31 December, and 1 January to 31 March. Instruction is not given on Sundays or on statutory holidays. Vacations are taken from 21 July to 31 August, from 25 December to 5 January, and from 25 March to 31 March. Schools are in session five and a half days a week and for at least 210 days each year. Class periods are usually of 50 minutes' duration with 10-minute intervals between classes.

General secondary schools

Junior high schools. The curricula are the same in urban and rural areas except for vocational and home economics courses which are modified according to the special requirements of the various localities. In some remote areas junior high schools are operated in combination with the elementary school. There is also a combined elementary and junior high school for the blind and deaf, and two combined schools for children suffering from leprosy. These are government schools and are established and governed by the Central Board of Education.

The basic subjects in the junior high school course and the number of 50-minute periods devoted to each subject per week are the same for each of the three years of study and are as follows: Japanese 5, social studies 4, mathematics 4, science 4, music 2, drawing and handicrafts 2, health and physical education 3, vocation and homemaking 3, English 3. Other subjects and activities bring the total number of periods per week up to 35 and the number per year of 35 weeks to 1,225.

Senior high schools. Pupils eligible to seek admission to senior high schools are graduates of junior high schools or schools corresponding thereto, or those who are recognized by the Central Board as having equivalent qualifications. Teachers of junior high schools and teacher-consultants serving in superintendents' offices or in the Department of Education guide students in the selection of their courses in the senior high schools. Standardized aptitude tests are administered annually to all third year pupils at junior high schools. Selection is based on the results of an entrance examination, administered simultaneously to all candidates in the Ryukyus, and on the record of the pupil for his three years in the lower secondary school, and is in accordance with the regulations of the school board which controls the upper secondary school. The number of pupils admitted to senior high school each year is about 60 per cent of the candidates and 50 per cent of the graduates of the junior high schools.

The upper secondary level is divided into the general course and the vocational course. The former is primarily designed for those intending to advance to institutions of higher education and the latter for those for whom it is anticipated that secondary education will be terminal (it will be referred to again under the section 'Vocational and technical schools'). Each of these courses may be taken either as a full-time course or a part-time course. The former is of 3 years' duration, while the latter is designed to meet the needs of the working youth who can only attend night courses, and requires 4 years attendance to cover the same curriculum as that provided by the daytime course.

The following subjects are required of all students: Japanese, mathematics (for one year), health and physical education, civics; any two of the following—Japanese history, world history, geography; and two science subjects (out of physics, chemistry, biology, geology). In addition, pupils taking the full-time general course must select a number of subjects (making up six credits[1]) from among arts, homemaking and vocational subjects, while those tak-

1. One credit equals one hour per week per year. Thus a subject for which the time-table provides three periods per week would, if taken for a year, give three credits.

ing the vocational course (including full-time and part-time courses) must take at least 36 credits in vocational subjects.

The minimum number of credits required for graduation is 85.

Teachers. At the present time the only teacher training institution in the Ryukyus is the University of the Ryukyus. However, many Ryukyuans attend Japanese universities and colleges and, on return to the islands, are employed locally. Teachers can get a temporary certificate based on one year of university attendance and a second class regular certificate based on two years of university training; for a first class regular certificate a degree is required and two years of certified successful teaching experience.

The University of the Ryukyus Extension Department offers training courses during vacation periods and correspondence courses. The Central Board of Education also operates training courses for teachers wishing to up-grade their certificates.

Out-of-class activities

All high schools have student organizations—the Student Council, which discusses and solves various student problems for the school as a whole, and the class student bodies, which deal with similar matters at class level. Students share among themselves functions belonging to school management that are related to their own welfare. Each school in the Ryukyus has a number of clubs for pupils interested in various cultural and sporting activities and each club conducts its activities under the guidance of a teacher.

Vocational and technical schools

Vocational education in general secondary schools. In the vocational and home economics courses of the junior high school emphasis is placed on understanding the social and economic aspects of industry, manual labour, and home life, and the acquisition of fundamental skills, etc., the main object being to provide a broad training in vocational subjects rather than to prepare the student for a particular occupation.

In addition to offering the general academic course which is primarily designed to meet entrance requirements for higher schools, public senior high schools may offer complete vocational courses to meet the same requirements as the courses offered in the specialized vocational and technical high schools, or they may offer individual subjects from the several vocational courses to meet the requirements of the local community.

Every public senior high school offers the general vocational course. At the present time, because of the lack of vocational equipment, the basic requirements of this course are almost the same as those for the general commerce course. In addition, each school offers elective subjects from other vocational courses, i.e., four senior high schools offer agricultural subjects and four, auto mechanics. Each senior high school also offers the home economics course for girls.

Agricultural high schools. The aim is to train agricultural technicians and skilled workers, and to prepare leaders who can develop the resources of the countries to which they may emigrate. The curriculum includes general and vocational subjects. Two hours a week are allotted to home projects, and through the Future Farmers of Okinawa (FFO) Club, skills learned at school are applied to the improvement of agriculture in the local community. The FFO holds a general meeting each year, in which technical contests, demonstrations, livestock judging contests, etc., are held.

Technical high schools. Technical education at secondary level is concerned with training the skilled workers who are to become a driving force for the improvement of industry in the Ryukyus. It aims at providing pupils with fundamental knowledge and skills based on actual shop practice. Students of the third year class are assigned to factories for on-the-job training for 10 days during summer and winter vacations.

Fishery high schools. These schools inculcate a knowledge of fishing and of the processing of marine products, fish propagation, marine engines, and radio communication. Third year students receive practical training for from two to three months on a boat owned by the school.

Commercial high schools. The course includes general and vocational subjects and trains pupils to be speedy and accurate in book-keeping, abacus work, and typing. Students are sent to commercial firms and to government offices for practical training periods of 20 days during summer vacations and 5 days during winter vacations.

Miscellaneous schools. This title is used to cover a great variety of private schools open to junior high school graduates or pupils of equivalent status, and providing various types of course ranging from one to two years. Most of them teach English and such vocational subjects as dressmaking, hairdressing, typewriting and cooking. They are all established with the approval of the Central Board of Education.

TRENDS AND PROBLEMS

Educational problems in the Ryukyus today are mainly of the type found in a period of reconstruction. The improvement of secondary education is closely related to the provision of more accommodation and equipment, the raising of teachers' qualifications and the establishment of better conditions of service. Although 30 per cent of the government budget is already devoted to education, the major problem is still one of finance.

A survey, carried out on 1 July 1958, of the junior high school graduates of 1 April 1957 gave the following result: number of graduates, 15,716; enrolled at higher schools, 50 per cent; gainfully employed, 35 per cent; unemployed, 12 per cent; unknown, 3.5 per cent. These figures show the necessity for providing two types of education—one for those who plan to go on to higher schools and the other for those who take up occupations. Up to now emphasis has been on providing for the former, at the expense of the latter.

Special needs in junior high school education are more facilities and equipment for vocational and homemaking courses, and improvement of the qualifications of the teachers in charge of these courses. Vocational and educational guidance services need to be developed and more attention given to moral education and guidance in daily living.

As regards upper secondary education, a survey of graduates from senior high schools in 1958 showed that of the 4,304 students who completed regular courses in local authority schools (mainly general education) 25 per cent enrolled in higher institutions, 32 per cent entered employment, 28 per cent were at the time unemployed, while the situation of the remainder was not known. In the same year 1,852 students completed regular courses in government senior high schools (vocational courses only); 11 per cent went on to higher education, 78 per cent into employment, 3 per cent were unemployed and no information was available on the remainder.

In the general course at senior high schools emphasis is being placed on increasing educational and vocational guidance and on strengthening moral education. On the vocational side, a 5-year promotion programme was begun in 1958 with the co-operation of the United States Civil Administration of the Ryukyu Islands. This plan involves the expenditure of $1.8 million for vocational equipment and approximately $1.5 million for the construction of workshops and special classrooms and for the training of vocational teachers. In vocational courses emphasis is placed on the acquisition of actual skills rather than the memorization of theory.

One of the special considerations in upper secondary education is the need to train persons who can contribute to the economy of the Ryukyus, in conformity with the Government's economic development programme.

[*Text prepared by the U.S. Office of Education, Department of Health, Education and Welfare, Washington, D.C., in June 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 838,000.
Area: 848 square miles; 2,196 square kilometres.
Population density: 988 per square mile; 382 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment (not including vocational courses for adults) was about 253,000 pupils, representing 31 per cent of the total population. The proportion of girls was 49 per cent in primary schools, 48 per cent in junior and senior high schools, 30 per cent in vocational schools, and 25 per cent at the university. Women teachers were 66 per cent of the teaching staff in primary schools, where the average number of pupils per teacher was 41 in 1957/58 as compared with 32 in 1953/54. Between 1953 and 1957, total pupil enrolment increased by 40 per cent, although enrolment in public junior and senior high schools decreased by 4 per cent. (See Table 1.)

Enrolment trends in secondary education, 1933–57. Data shown in Table 2 are not comparable between the periods 1933–40 and 1948–57, since they refer to different systems of school organization. Between 1948 and 1957, enrolment in general secondary education, public schools only, increased by nearly 30 per cent and in vocational schools the increase was almost threefold. Teacher training has been provided by the university since 1953. Average total enrolment in public secondary schools for the period 1955–57 represented 83 per cent of the estimated population 15–19 years old.

Examination results in secondary education, 1953–57. Between 1953 and 1957, the number of junior and senior high school diplomas increased by 24 per cent and 45 per cent respectively; the number of vocational high school diplomas more than tripled. Girls received 48 and 46 per cent of the junior and senior high school diplomas in 1957/58, but only 18 per cent of the vocational school diplomas. (See Table 4.)

Educational finance, 1956–57. For the fiscal year beginning in July 1956, total expenditure on education amounted to 6.4 million U.S. dollars, averaging about $8 per inhabitant. The Central Government provided 84 per cent of the total receipts for education, and the local authorities 8 per cent. Recurring expenditure was about 72 per cent of the total. (See Table 3.)

Source. United States of America: Civil Administration of the Ryukyu Islands, Office of Plans and Programs, reply to Unesco questionnaire.

1. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Kindergartens, public	1957/58	33	251	249	5 964	2 882
	Kindergartens and nursery schools, private	1957/58	31	...	...	...	...
	Total[1]	**1957/58**	**33**	**251**	**249**	**5 964**	**2 882**
	,, [1]	1956/57	60	215	...	10 885	...
	,, [1]	1955/56	93	275	272	12 642	6 193
	,, [1]	1954/55	123	317	314	17 223	8 611
	,, [1]	1953/54	120	331	328	16 546	8 413
Primary	Primary schools, public	1957/58	228	[2]3 121	2 050	129 353	63 344
	Primary schools, private	1957/58	2	5	4	179	88
	Total	**1957/58**	**230**	**[2]3 126**	**2 054**	**129 532**	**63 432**
	,, [1]	1956/57	191	[2]2 598	1 772	114 999	56 134
	,, [1]	1955/56	188	[2]2 414	1 624	105 349	51 415
	,, [1]	1954/55	188	[2]2 349	1 577	98 432	47 948
	,, [1]	1953/54	188	[2]3 026	1 739	95 451	46 608
Secondary *General*	Junior high schools, public	1957/58	165	1 535	463	47 325	22 914
	Senior high schools, public	1957/58	24	525	90	[3]13 459	[3]6 329
	Junior high schools, private	1957/58	2	5	2	65	26
	Senior high school, private	1957/58	1	19	3	[3]334	[3]182
	Total	**1957/58**	**192**	**[4]2 084**	**558**	**[3]61 183**	**[3]29 451**
	,, [1]	1956/57	162	[4]2 007	576	[3]64 393	[3]30 784
	,, [1]	1955/56	159	[4]2 025	611	[3]64 976	[3]31 108
	,, [1]	1954/55	157	[4]2 108	594	[3]66 003	[3]31 705
	,, [1]	1953/54	157	[4]1 845	518	[3]63 306	[3]30 549
Vocational	Agricultural and forestry high schools, public	1957/58	6	[5]173	24	[6]3 688	[6]1 217
	Commercial high schools, public	1957/58	2	[5]62	9	[6]1 620	[6]886
	Technical high schools, public	1957/58	2	[5]46	2	[6]1 185	[6]89
	Fishery high schools, public	1957/58	2	[5]49	2	706	–
	Total	**1957/58**	**12**	**[5]330**	**37**	**[6]7 199**	**[6]2 192**
	,,	1956/57	9	[5]313	27	[6]6 716	[6]1 887
	,,	1955/56	9	[5]244	25	[6]5 184	[6]1 373
	,,	1954/55	9	[5]209	19	[6]4 259	[6]1 131
	,,	1953/54	9	253	35	[6]4 196	[6]956
Higher	University						
	Total[7]	**1957/58**	**1**	**146**	**14**	**1 918**	**471**
	,, [7]	1956/57	1	132	13	1 719	411
	,, [7]	1955/56	1	116	10	1 485	365
	,, [7]	1954/55	1	82	5	1 258	252
	,, [7]	1953/54	1	76	5	1 116	217
Special	Primary schools for lepers	1957/58	2	2	1	22	9
	Junior high schools for lepers	1957/58	2	2	–	41	20
	School for blind children	1957/58	1	6	3	34	9
	School for deaf children	1957/58	1	6	5	87	11
	Reform school for boys	1957/58	1	2	–	35	–
	Total	**1957/58**	**7**	**18**	**9**	**219**	**49**
	,,	1956/57	...	**14**	6	206	59
	,,	1955/56	4	14	6	191	58
	,,	1954/55	4	14	6	272	80
	,,	1953/54	3	6	1	177	42
Adult	Vocational classes for adults						
	Total	**1957/58**	**158**	**5 962**	**...**	**478 788**	**302 341**
	,,	1956/57	158	4 768	...	416 602	273 980
	,,	1955/56	158	6 770	...	620 122	361 727
	,,	1954/55	158	7 905	...	694 166	398 263
	,,	1953/54	...	...	...	...	...

1. Public schools only.
2. In addition, there were about 200 part-time teachers.
3. In addition, the number of part-time students in senior high schools in 1957/58 was 1,448 (F. 668) in public schools and 316 (F. 106) in private schools.
4. In addition, there were about 160 part-time teachers.
5. Including part-time teachers; their number in all vocational schools was 32 in 1957/58, and 9 in 1956/57, 1955/56 and 1954/55.
6. Including part-time students; their number in all vocational schools was 785 (F. 232) in 1957/58, 612 (F. 189) in 1956/57, 463 (F. 155) in 1955/56, 261 (F. 93) in 1954/55, and 192 (F. 68) in 1953/54.
7. Including teacher training.

2. TRENDS IN SECONDARY EDUCATION, 1933–57

School year	Number of students enrolled by type of education[1]						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1933	3 605	41	1 081	24	120	...	4.9	*65	*7.5
1934	3 783	41	1 124	25	158	...			
1935	3 847	41	1 124	23	173	...			
1936	4 065	42	1 176	23	196	...			
1937	4 282	41	1 392	26	200	25	5.9	*64	9
1938	4 472	40	1 586	24	201	...			
1939	4 716	42	1 675	24	219	...			
1940	5 027	41	1 828	21	296	36	7.2	*63	11
1948	47 235	...	2 435	...	352	...	50	*100	*50
1950	52 438	...	1 568	...	...	...			
1951	58 872	...	3 143	...	...	...			
1952	58 873	...	2 944	...	...	...	*63	82	77
1953	63 306	48	4 196	23	–	.			
1954	66 003	48	4 259	27	–	.			
1955	64 976	48	5 184	26	–	.			
1956	64 383	48	6 716	28	–	.	70	84	83
1957	60 784	48	7 199	30	–	.			

1. Public schools only.

3. EDUCATIONAL FINANCE, 1956/57 (in U.S. dollars)

A. RECEIPTS BY SOURCE

	Amount
Total receipts[1]	**6 501 245**
Central Government	5 443 541
Local authorities	526 881
Tuition fees	15 129
Other receipts from parents	354 060
Gifts, endowments, etc.	128 918
Other sources, not specified	32 716

B. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure[1]		**6 418 169**
Recurring expenditure		4 612 481
For central administration	259 318	
For instruction		
Salaries to teachers, etc.	3 594 853	
Other instructional expenditure	109 907	
Other recurring expenditure	648 403	
Capital expenditure		1 783 124
Educational facilities	1 708 707	
Auxiliary facilities	74 417	
Debt service		22 564

C. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent	
Total recurring expenditure		**4 612 481**		**100.0**
Central administration		259 318		5.6
Instruction		3 704 760		80.3
Primary education	1 695 698		36.8	
Secondary education	1 661 791		36.0	
Higher education	254 885		5.5	
Special education	10 419		0.25	
Adult education	1 692		0.04	
Other education, not specified	80 275		1.7	
Other recurring expenditure, not specified		648 403		14.1

1. Closed account.

4. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Junior high school diploma . .	12 635	6 142	17 068	8 095	17 043	8 123	16 852	8 146	15 644	7 507
Senior high school diploma . .	3 102	1 481	3 548	1 716	3 966	1 918	4 177	1 950	4 495	2 071
Vocational high school diploma .	899	178	1 222	362	1 317	343	1 427	364	2 925	524

URUGUAY

THE EDUCATIONAL SYSTEM

The general principles governing education in Uruguay are laid down in the following articles of Section II, Chapter II, of the Constitution of 26 October 1951:

Article 68. 'Freedom of education is guaranteed. The law shall provide for State intervention only in so far as it may be required for the maintenance of health, good morals and public security and order. Every parent or guardian shall be entitled to select the teachers or institutions he wishes for the education of his children or wards.'

Article 69. 'Private educational institutions which provide free education for such number of pupils and in such form as may be determined by law, and cultural institutions, shall be exempt from national and municipal taxes as a subsidy for their services.'

Article 70. 'Primary education shall be compulsory. The State shall make the necessary provision to enforce this requirement.'

Article 71. 'Free official primary, secondary, higher, vocational, technical and artistic education, and physical training; the establishment of scholarships for further study and specialization in the cultural, scientific and industrial fields; and the establishment of public libraries, are recognized to be in the public interest. Special attention shall be paid, in all educational establishments, to moral and civic training.'

The organization of the educational system is laid down in the following articles of Section XI, Chapter II:

Article 204. 'Public higher, secondary and primary education, teacher training, vocational, technical and artistic education shall be administered by one or more autonomous councils.

'Other state educational services shall also be administered by autonomous councils when so determined by the Legislature on a two-thirds majority vote of all members of each House.

'For the preparation of laws relating to their services, the public education authorities shall be heard, in an advisory capacity, by the Parliamentary Commissions . . .'

Article 205. 'The councils administering the educational services shall be appointed or elected in such manner as may be established by a Law passed by an absolute majority of the votes of all members of each House.'

The procedures governing the duties and functions of the councils are set forth in the next two articles (Nos. 206 and 207).

The distinguishing features of education in Uruguay at all levels—from kindergarten to the end of the university degree course, and including general, vocational, technical, artistic and physical education—can be summarized as follows: all education provided by the State is completely free of charge; there is complete equality of access to education, irrespective of race, sex, religion or class; state-provided education is secular; freedom of education is guaranteed, except at the university level, where the University of the Republic alone is entitled to confer university degrees; primary education is compulsory.

The structure of the Uruguayan school system is shown in the diagram on page 1437.

Role of the public authorities

The administration of education is vested in the Consejo Nacional de Enseñanza Primaria y Normal (National Council for Primary Education and Teacher Training), the

Consejo Nacional de Enseñanza Secundaria y Preparatoria (National Council for Secondary and Preparatory Education), and the Universidad del Trabajo (Council for Vocational and Industrial Education), autonomous councils which operate under the auspices of the central Ministry of Public Education and Social Welfare.

The University of the Republic used to be administered by the University Council but acquired full independence under a recent Organic Law.

The Ministry's authority is mainly political; in technical matters, the various councils have considerable independence, though they endeavour to harmonize and coordinate their activities.

In addition to the schools, administered by the various councils, there are official educational establishments coming directly under the Ministry. They are the Escuela Nacional de Bellas Artes (National School of Fine Arts), and the Conservatorio Nacional de Música (National School of Music) which operates in association with SODRE (Servicio Oficial de Difusión Radioeléctrica), the official broadcasting service. At the local level, Montevideo also has a Municipal School of Dramatic Art and a Municipal School of Music, both of which are responsible to commissions of the capital's Departmental Council.

THE DEVELOPMENT OF SECONDARY EDUCATION

In Uruguay, there are three main types of secondary education: general secondary education, secondary-level vocational and technical education, and teacher training. Each of these three branches is quite separate from the others and has its own history.

General secondary education. The history of general secondary education falls into four periods:

1. From 1830 (the date of the first Constitution of the Republic) to 1885. During this period secondary education was academic and restricted to the upper classes of society.
2. From 14 July 1885 (promulgation of the law of Doctor Alfredo Vázques Acevedo) to 1911. This law set forth the aims of secondary education, which none the less remained essentially selective and academic.
3. From 1911 to 1935. This period saw the organization of general secondary schooling in two cycles (a basic 4-year course taken by all pupils followed by two years of specialization), the adoption of the principle of free provision of education, the establishment of provincial general secondary schools (*liceos departamentales*), the Women's University and the Night Secondary School (*Liceo Nocturno*), and the introduction of the system of promotion without examination for pupils who achieve a satisfactory standard in their work.
4. From 1935 to the present. Under the Organic Law of 1935 general secondary education became an autonomous branch of the educational system. The law established the National Council for Secondary and Preparatory Education in its present form, and provided for the participation of the teaching body in the administration of education.

Vocational and technical education. The principal events have been as follows:

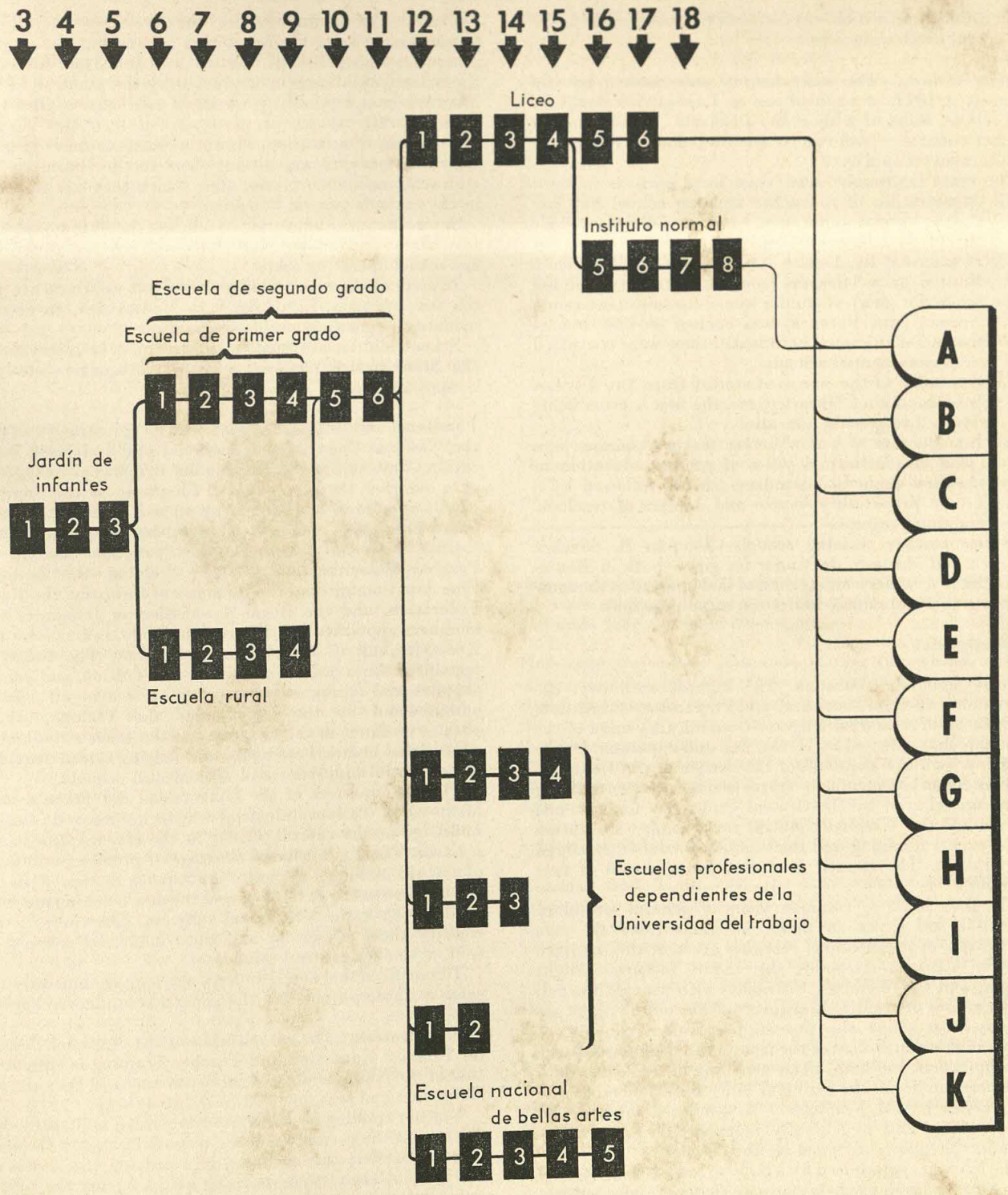
1879. Adoption of a law authorizing the Executive to draw up plans and regulations for craft training schools (*escuelas-talleres de artes y oficios*) on the European and United States pattern but adapted to local conditions. This law was to govern the activities of the trade instructors employed by the State to teach young delinquents, orphans, etc., in makeshift premises.
1915. Establishment of the Higher Council for Industrial Education (Consejo Superior de Enseñanza Industrial).
1916. Beginning of regularly organized courses, which included both artistic and industrial education.
1917. Division of vocational schools into three main types: building, mechanical and electrical engineering, and women's trades.
1934. Establishment of the Directorate-General of Industrial Education.
1942. Establishment of the Universidad del Trabajo del Uruguay (Council for Vocational and Industrial

GLOSSARY

escuela nacional de bellas artes: vocational training school of fine arts.
escuela de primer grado: incomplete urban primary school.
escuela rural: rural primary school.
escuela de segundo grado: complete primary school.
escuelas profesionales dependientes de la Universidad del Trabajo: vocational training schools of various types (agriculture, arts and crafts, building trades, commerce, mechanical and electrical trades, manual crafts for women, etc.) administered by the *Universidad del Trabajo*, an autonomous body responsible for vocational education throughout the country. Some of the schools also have courses at post-secondary level.
instituto normal: teacher training school.
jardín de infantes: pre-primary school.
liceo: general secondary school.

HIGHER EDUCATION

A. *Instituto de profesores:* teacher training college for secondary school teachers.
B. *Agronomía:* agriculture.
C. *Arquitectura:* architecture.
D. *Derecho y ciencias sociales:* law and social sciences.
E. *Ciencias económicas:* economics.
F. *Medicina:* medicine.
G. *Ingeniería:* engineering.
H. *Odontología:* dentistry.
I. *Química y farmacia:* chemistry and pharmacy.
J. *Veterinaria:* veterinary science.
K. *Humanidades y ciencias:* arts and sciences.


3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
Liceo
1 2 3 4 5 6
Instituto normal
5 6 7 8
Escuela de segundo grado
Escuela de primer grado
1 2 3 4 5 6
Jardín de infantes
1 2 3
1 2 3 4
Escuela rural
1 2 3 4
1 2 3
1 2
Escuelas profesionales dependientes de la Universidad del trabajo
Escuela nacional de bellas artes
1 2 3 4 5
A
B
C
D
E
F
G
H
I
J
K

Education) which was declared an autonomous body in the following year.

Teacher training. The early history was marked by the opening, in 1827, of a school run on Lancastrian methods, and, about 1850, of a short-lived Colegio Nacional and a teacher training school run by the Sociedad de Amigos de la Educación Popular.

The main landmarks since then have been as follows:

1877. Organization of a teacher training school by José Pedro Varela under the General Education Law (*Ley de la Educación Común*), Article 7.
1882. Foundation by Jacoba A. Varela of the Internado Normal para Señoritas (residential teacher training school for girls). A similar school for boys (Internado Normal para Varones) was opened in 1900 but at the end of that year both institutions were converted to non-residential schools.
1913. Extension of the course of studies from 3 to 4 years.
1939. Introduction of 7-year course, the first 4 years being devoted to general education.
1955. Introduction of a new 8-year teacher training plan (*plan magisterial*): 4 years of general education at the *liceo* (general secondary school), followed by a 1-year preparatory course and 3 years of teachers' training progress.

The two teacher training schools—Joaquín R. Sánchez for men and María S. de Munar for girls—both in Montevideo, have now been amalgamated and operate in the same premises in Montevideo, under the same principal.

Administration

General secondary education. The highest authority, the National Council for Secondary and Preparatory Education, is made up of a salaried Director-General, Chairman of the Council, who is elected by the council and appointed by the Ministry with the approval of the Senate of the Republic, and six honorary members—three elected by the teaching body, one elected by the Central University Council, one elected by the National Council for Primary Education and Teacher Training and one elected by the Universidad del Trabajo. The council is elected for a period of four years.

The four basic or common years of general secondary education are given in *liceos*. In Montevideo the two specialized, or preparatory, years are given at the Instituto Alfredo Vázquez Acevedo; the Liceo Nocturno (Night School) and the Women's University also provide the full 6-year course of studies. Elsewhere in the country there are various *liceos* which also provide preparatory courses.

The highest authority of the *liceo* is the headmaster, who sometimes has the help of an assistant headmaster, both being chosen from the national body of teachers on the basis of merit; the headmaster is appointed for a period of four years and is generally reappointed. *Liceos* enjoy considerable autonomy *vis-à-vis* the council.

The *liceos* are supervised by a body of inspectors recruited from the ranks of teachers; private *liceos* are also subject to inspection and must follow the official curricula, but are allowed some freedom in the choice of certain textbooks and the recruitment of teachers. Private *liceos* must be approved (*habilitados*) before they can operate. Their pupils benefit from the promotion system but the examination for which they sit must be held in a State *instituto*; the examination may be conducted by the teachers of the private school, but in the presence of a delegate of the State school.

Under the Constitution, the autonomous councils prepare their own budgets and submit them to the Executive for approval, amendment, etc., after which they are included in the nation's general budget.

Since secondary education in official schools is completely free, there is no student contribution of any sort to secondary school operating costs.

In spite of the new buildings being put up, there are still too few premises, particularly in Montevideo, to accommodate the growing student population.

Schoolchildren are medically examined at intervals by the State health services; vaccination against smallpox is compulsory.

Vocational and technical education. The governing body of the National Council for Vocational and Industrial Education (Universidad del Trabajo del Uruguay) is composed of a salaried Director-General, Chairman of the Council, who is appointed by the Executive, and an administrative board consisting of honorary members delegated by the Central University Council, the National Council for Primary Education and Teacher Training, the National Fine Arts Commission, the Chamber of Industry, the Rural Federation, and the Rural Association of Uruguay, two members appointed by the teaching body and two by the Executive, all of these being specialists. The board is appointed for a period of four years. Tuition and school supplies and equipment are provided free in all schools administered by the Universidad del Trabajo, which obtains its funds in the same way as the other autonomous educational bodies. Free board and lodging is also provided in residential industrial and agricultural schools.

The headquarters of the Universidad del Trabajo is in Montevideo. Various industrial schools are located in other buildings in the capital, either in the city itself or in the suburbs. There is a general shortage of premises and most of the old buildings are quite inadequate to cope with the steadily increasing enrolment and the new teaching methods used in the various technical subjects. Elsewhere in the country there are urban and rural industrial schools, as well as the agricultural schools.

The medical and social welfare services are basically the same as those provided in the general secondary schools.

Teacher training. The composition of the National Council for Primary Education and Teacher Training is similar to that of the National Council for Secondary and Preparatory Education and it is financed in the same way.

Teacher training by the State is provided in Montevideo. Because of the need of teachers, private institutes throughout the country are authorized to provide the necessary instruction, their students being prepared for the official examinations.

Students at teacher training schools enjoy the same privileges and medical and social welfare services as do those in the other branches of official education.

TYPES OF SECONDARY EDUCATION

The average age-range of students in all three main types of school at secondary level (general, vocational and teacher training) is the same (11 to 18 years). Admission to the university, however, can be gained only through the general secondary schools. The vocational education provided by the Universidad del Trabajo does not qualify students for admission to any faculty, while certificated teachers must take the preparatory course (upper cycle of general secondary course), although the equivalence of certain subjects may be recognized, before they can enter the university.

There are other establishments of a similar level, like the National School of Fine Arts, the National School of Music, the municipal schools of dramatic art, etc., which do not qualify for admission to the university.

The school year in Uruguay runs from the beginning or middle of March to November-December. Some agricultural schools adapt their time-tables so as to fit in with the seasonal aspects of farming. In general secondary and teacher training schools the examination periods for the various courses are November-December, February, May or July.

The school year is generally divided into three terms. Apart from the summer holidays (January and February), a week is given at Easter, two weeks in July and, nearly always, three to six days of spring holiday in September.

General secondary schools

The aims of general secondary education are laid down in Article 2 of the Organic Law on Secondary Education in the following terms: 'The essential aim of secondary education shall be to provide the students with a complete and rounded culture. The endeavour shall be to produce citizens who are aware of their duties to society . . . it shall be a continuation of primary education, leading on to higher education.'

Pupils who have completed six years of primary education in public schools can go straight on to the *liceo* provided that their average school marks are sufficiently high; if not, they must sit for an entrance examination. Pupils from private schools must take the entrance examination, in any case, at an official *liceo*. Entrance examinations are held simultaneously throughout the country and all pupils have the same examination papers, set by the council, in mathematics, Spanish, history and geography. For those who pass the written examination, admission to the *liceo* is automatic; if a pupil fails in some papers he is given an additional oral test in the subject or subjects concerned.

There is no fixed age-limit for admission to the *liceos* but the usual age of entrants is 12 years.

The different class teachers meet every three months and the average grading of each student is worked out from his or her marks in each subject. At the third and last meeting (which in the private *liceos* is presided over by a secondary education inspector) the average for the student's work over the whole year is calculated; if the average is up to a specified level the pupil is promoted to the next class above without examination. If it is below that level, the pupil must take an examination in each of his weak subjects; if it is quite inadequate, he is eliminated and must take the same class again.

TIME-TABLE FOR LOWER CYCLE OF GENERAL SECONDARY SCHOOLS

(in hours per week)

Subject	Year			
	1	2	3	4
Mathematics	5	4	3	3
Spanish	5	4	–	–
Literature	–	–	3	3
Geography	3	3	2	–
World history	2	3	–	–
World and American history	–	–	2	–
Uruguayan history	–	–	–	3
Philosophy	–	–	–	2
Zoology and botany	3	–	–	–
Anatomy and physiology	–	3	–	–
Biology and hygiene	–	–	–	2
Physics	–	–	2	3
Chemistry	–	–	3	3
Cosmography	–	–	–	2
French	3	3	2	3
English	–	–	3	3
Drawing	2	3	2	–
Handicrafts	(1)	(1)	–	–
Musical appreciation	1	1	1	–
Physical training	1	1	1	–
Civics	–	–	–	1
Total	25 (26)	25 (26)	24	28

University preparatory education. During the second cycle of general secondary education, i.e., the last two years of study, the subjects vary according to the faculty for which the student is preparing. There are preparatory courses for the following faculties: Law and Social Sciences, Notarial Studies, Medicine, Dentistry, Veterinary Science, Chemistry and Pharmacy, Engineering and Surveying, Architecture, Agronomy, Economics and Administration.

Class hours average 25 a week, while the number of subjects studied each year ranges from 5 to 8.

Teaching staff. Until 1949 the only method of training teachers for general secondary schools in Uruguay was that known as the *sistema de agregaturas*. Under this system, young people who had obtained their *bachillerato* (general secondary leaving certificate) were attached for training to a qualified teacher who guided, supervised and appraised their work in association with the inspector for the subject concerned.

To replace this system, the Instituto de Profesores de Enseñanza Secundaria (training school for secondary teachers) was set up under Article 49 of the Law of 2 July 1949. In the following year its name was changed to Instituto de Profesores Artigas. A commission appointed by the council submitted draft regulations in 1949 and a study plan in 1950.

Admission to the institute is subject to certain conditions of age and citizenship and to applicants having completed, at least, the full general or teacher training secondary course. Candidates must pass an entrance examination

which varies according to the subjects which they wish to teach. They must also be physically and psychologically suited for teaching. The studies last for three or four years.

Teachers trained at the institute are given priority when appointments are made to a certain number of posts, all of which are filled on a competitive basis, either by examination or on qualifications. Teachers already in service before the institute was created have retained their rank and a certain number of posts are also open, on a competitive basis, to candidates who have not graduated from the institute.

As a state official, a young teacher with an Instituto de Profesores diploma has an established career before him. His weekly classroom hours can be increased up to the maximum limit, with corresponding material and professional advantages, and he can rise to the rank of inspector, senior inspector, headmaster of a *liceo*, etc. His rights and obligations are governed by the Teachers' Statute and the Association of Secondary and Preparatory Teachers sees to it that the privileges of the teaching profession at this level of education are respected.

Vocational and technical schools

As we have seen, state vocational and technical schools are controlled by the Universidad del Trabajo, an autonomous body under the Ministry of Public Education.

The aims of the Universidad del Trabajo are set out in Article 4 of the Law of February 1943: provision of '. . . (a) general education calculated to raise the intellectual level of the workers and the standard of their technical training; (b) full instruction in technical, manual and industrial subjects, special attention being given to fields connected with the industries extracting or processing national raw materials; (c) further education for workers; (d) instruction in the applied arts; (e) aid in improving existing industries, encouragement of, and co-operation with, such new ones as may be introduced; (f) information on the structure and working of the nation's industries; (g) testing of technical aptitudes'.

The minimum age for admission to establishments under the Universidad del Trabajo is 13, but this may be lowered for candidates who are physically suitable and have the necessary educational background; in some specialized schools, particularly residential agricultural schools, the age-limit is 15 years. Candidates for admission must hold the school-leaving certificate showing that they have completed six years of primary schooling.

The following Schools are controlled by the Universidad del Trabajo:

Escuela Industrial de Mecánica y Electrotécnica. The school trains students for all trades and professions connected with mechanical and electrical engineering. Two levels of instruction are provided, the first for new entrants from the primary schools, the second for those who have completed the general secondary school course or the lower technical cycle. There are morning, afternoon and evening classes.

Escuela de Industrias de la Construcción. This school provides training courses for workers in the building industry, technical courses for general secondary school graduates and graduates of the three 3-year courses of the Universidad del Trabajo, and continuation courses for those already at work. The special subjects taught are many and varied and the hours vary accordingly.

Escuela de Artes Gráficas. Provides training in the various printing trades.

Escuela de Artes Aplicadas Decorativas. Courses in applied decorative arts.

Escuela de Industrias Navales. Offers instruction in many important nautical trades and occupations. The course is divided into three consecutive cycles, the first and second lasting 3 years each, and the third, 2 years.

Escuela de Comercio. The first cycle, lasting 2 years, provides a general commercial training; the second, a 1-year course, trains students for secretarial work in business.

Sección Fotocinematográfica. Takes students who have completed the first-year radio course given by the Escuela Industrial de Mecánica y Electrotécnica and trains them as film operators.

Escuela de Industrias Femeninas. Provides day and evening courses of varying length in women's trades.

Escuelas Industriales de la Unión y de El Cerro. These two industrial schools, located in populous districts of Montevideo, provide day and evening courses for both men and women in a variety of fields such as mechanical and electrical trades, modelling, blacksmithing, basket-making, carpentry, cutting and tailoring, etc.

Evening courses in theory. Supplementary technical training for workers.

Teacher training courses. Two-year training courses for industrial school-teachers are provided for graduates, who must be at least 18 years old, of the various schools. Classes are given in teaching methods, mathematics, drawing, language, technology and workshop practice. Candidates for the course must pass an entrance examination.

The institutions listed above are all situated in Montevideo. There are industrial schools in all the provincial capitals and in many of the inland towns and villages. Candidates for admission to these schools must be at least 12 years of age and have completed six years of schooling in an urban primary school or four years in a rural primary school. The courses given are on the same lines as those of the industrial schools in Montevideo. There are also the following specialized agricultural schools:

Escuela de Silvicultura de Maldonado. This residential school provides 2-year courses leading to the diploma of forestry expert. The minimum age of admission is 15 years.

Escuela de Lechería de Colonia Suiza. Provides a 3-year course leading to the diploma of dairy-farming expert and 2-year courses for dairy-workers.

Escuela de Enologia de El Colorado. Offers a 2-year course leading to the certificate of proficiency of trained cellarman, and a 3-year course leading to the diploma of oenologist. The minimum age of admission is 15 years.

Escuela Agropecuaria de Durazno. Provides a 2-year course for farm workers (stock-raising) and a 3-year course for agricultural and stock-farming specialists *(expertos agropecuarios)*. Classes in farm mechanics and the handling of agricultural machinery are other specialities of

this residential school, for which the minimum age of admission is 13 years.

Fourteen agricultural schools in other parts of the country offer 3-year courses leading to the diploma of agricultural specialist. The minimum age of admission to all of them is 13 years.

In addition there are various private industrial and agricultural schools, most of them run by religious educational institutions, which confer their own diplomas. Private industry usually trains its own technicians. In the field of commerce, there are many private business schools which prepare students for administrative work in both state and private organizations.

Teacher training schools

Before the 1955 plan was introduced, pupils who had completed the sixth year of primary schooling went directly to the teacher training institutes, where they were given four years of general education and three years of vocational training. Today they take the first part of this training in the general secondary *liceos*. After four years in the *liceo*, candidates who have obtained an average assessment of 'Good' over the four years can go straight on to the teacher training school; pupils with lower marks must first take an entrance examination.

Students who have completed the 6-year *bachillerato* course can enter the teacher training schools without an entrance examination.

The fact that all schools in Uruguay, both urban and rural, were staffed by qualified teachers made it possible, under the 1955 plan, to extend the teacher training course to four years in addition to the four years of basic general education.

In the provincial capitals and major towns elsewhere in the country there are also various private teacher training institutes whose students can sit for the official examination and obtain the official diploma, after which they enjoy the same rights in competition as graduates of the national teacher training schools. The same opportunities are also open to private students.

Lately there has been a considerable increase in post-graduate, refresher and specialized training courses for instructors at teacher training institutes, teachers in special branches of education, inspectors, etc.

Other specialized schools

Other secondary-level public schools like the National School of Fine Arts, the National School of Music and the municipal schools of dramatic art and music offer practical classes and theoretical courses of general culture. Candidates must pass an entrance examination.

Out-of-class activities

All secondary school students in Uruguay belong to federations and associations which are themselves members of the Federation of Uruguayan University Students, to which the student associations of the various faculties also belong. There is a very active student union life and the opinions of the federation carry great weight in the general life of the country in both the politico-ideological and cultural spheres. Theatrical activities are organized at nearly all *liceos*, and at the university itself there is an experimental theatre which is a centre of dramatic art for all students—from the university, and from secondary, industrial and other schools—who want to participate. Special free performances for students are put on regularly by the official musical and theatrical institutions.

Sports are controlled by the National Commission for Physical Education, which is also responsible for training PE instructors for student gymnastic classes. In both Montevideo and the rest of the country there are many playing fields run by this National Commission, where students can train prior to taking part in various sports and gymnastic contests (university championships and games) between *liceos*, schools, faculties, etc. Basketball, swimming, volleyball, football and athletics attract many participants.

[*Text prepared by the Unesco Secretariat in June 1960.*]

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STATISTICS

Population (mid-year 1958 estimate): 2,700,000.
Area: 72,172 square miles; 186,926 square kilometres.
Population density: 37 per square mile; 14 per square kilometre.

Summary of school statistics, 1953–57. In the school year 1957, total enrolment in public educational institutions was 337,000; allowing for private school enrolment, the total school-going population may be estimated at 400,000, which is about 15 per cent of the total population. Approximately three-fourths of these pupils were enrolled in primary schools and one-seventh in secondary schools. The proportion of girl pupils was about 50 per cent in the public pre-primary, primary and secondary schools and 56 per cent in the private primary schools. At one of the teacher training schools (Instituto Normal de Montevideo) 97 per cent of the pupils were girls. Between 1953 and 1957, there was an increase of 12 per cent in primary school enrolment, but only a 5 per cent increase in the number of teachers; hence the pupil-teacher ratio in 1957 was 33, as compared with 31 in 1953. In the public *liceos*, there were only 14 pupils per teacher in 1957. (See Table 2.)

Examination results in secondary education, 1953–57. The following data were reported on the number of certificates granted at the completion of teacher training courses: 'First grade' teachers' certificates—(1953) 204, (1954) 214, (1955) 327, (1956) 380, (1957) 162; 'National' teachers' certificates—(1953) 251, (1954) 190, (1955) 270, (1956) 471, (1957) 389.

Almost all the recipients of the first grade teachers' certificates were women (95–99 per cent). No sex distribution is available concerning the national teachers' certificates.

Educational finance, 1958. In the fiscal year beginning in January 1958, educational expenditure amounted to 148,335,916 pesos, averaging 55 pesos per inhabitant. Of this sum, 148,122,052 pesos came from the Central Government, 181,357 pesos from provincial authorities and 32,507 pesos from other sources not specified. The distribution of recurring expenditure by level and type of education is given in Table 1.

Source. Uruguay: Ministerio de Instrucción Pública y Previsión Social, reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1958 (in pesos)[1]

Recurring expenditure by level and type of education	Amount	Per cent
Total recurring expenditure	**148 335 916**	**100.0**
Primary education and teacher training	67 177 537	45.3
Secondary education	30 822 226	20.8
Vocational education	12 716 698	8.6
Higher education	31 379 234	21.1
Physical training	4 038 477	2.7
Other education, not specified	1 067 194	0.7
Other recurring expenditure, not specified	1 134 550	0.8

1. Official exchange rate: 1 peso = 0.48 U.S. dollar (approx.).

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery classes in primary schools, public	1957	260	260	...	8 805	4 211
	Nursery schools, private	1957	5	...	...	...	...
	Total[1]	**1957**	**260**	**...**	**...**	**8 805**	**4 211**
	„ [1]	1956	...	...	...	8 738	4 200
	„ [1]	1955	...	...	...	8 252	3 849
	„ [1]	1954	...	...	...	8 840	4 151
	„ [1]	1953	...	...	...	9 201	4 393
Primary	Primary schools, public	1957	1 806	7 006	6 413	239 009	112 328
	Primary schools, unaided private	1957	232	1 768	...	53 782	30 332
	Total	**1957**	**2 038**	**8 774**	**...**	**292 791**	**142 660**
	„	1956	2 027	8 630	...	286 294	139 889
	„	1955	2 012	8 564	...	274 702	134 377
	„	1954	1 975	8 406	...	266 578	130 909
	„	1953	1 961	8 353	...	260 304	...
Secondary *General*	*Liceos*, public	1957	81	3 919	...	54 957	...
	Liceos, private	1957	...	...	...	...	...
	Total[1]	**1957**	**81**	**3 919**	**...**	**54 957**	**...**
	„	1956	...	...	...	...	...
	„	1955	121	...	...	49 104	26 077
	„	1954	116	2 347	...	46 399	24 315
	„	1953	106	[2]2 589	...	42 465	22 027
Vocational	Technical schools, public	1957	46	...	...	16 508	...
	Agricultural schools, public	1957	17	...	...	632	...
	Total[1]	**1957**	**63**	**...**	**...**	**17 140**	**...**
	„	1956	...	...	...	...	...
	„ [1]	1955	...	...	...	14 651	5 864
	„	1954	...	...	...	...	...
	„	1953	...	...	...	...	...
Teacher training	Teacher training schools, public	1957	2	174	93	1 315	[3]1 110
	Teacher training private schools, unaided	1957	20	512	...	923	...
	Total	**1957**	**22**	**686**	**...**	**2 238**	**[3]1 110**
	„	1956	24	[3]189	[3]100	[3]1 330	[3]1 264
	„	1955	24	722	...	3 301	[3]1 170
	„	1954	23	768	...	3 424	[3]1 072
	„	1953	23	[3]271	[3]150	[3]956	[3]919

1. Public schools only.
2. Including assistants (*ayudantes*).
3. Montevideo Institute only.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Higher							
Teacher training	Institute for secondary teachers, public						
	Total	**1957**	**1**	...	...	**103**	...
	"	1956	1	...	...	116	...
	"	1955	1	...	...	131	...
	"	1954	1	...	...	129	...
	"	1953	1	...	...	105	...
General and technical	Faculties, public						
	Total	**1957**	**10**	**1 809**	...	[4]**14 853**	...
	"	1956	10	...	...	16 025	...
	"	1955	10	...	...	14 419	...
	"	1954	10	...	...	13 754	...
	"	1953	10	...	...	12 856	...
Special	School for deaf mute children	1957	1	27	20	158	78
	School for disturbed children	1957	1	15	12	97	–
	School for mentally handicapped children	1957	1	17	16	186	64
	Special classes for handicapped children	1957	90	...	...	720	...
	Classes in hospital	1957	3	...	...	75	...
	Total[5]	**1957**	**3**	**59**	**48**	**441**	**142**
	" [5]	1956	3	61	50	410	128
	" [5]	1955	4	61	49	384	119
	" [5]	1954	4	47	37	386	107
	" [5]	1953	4	46	35	374	98
Adult	Evening courses of primary education						
	Total	**1957**	**72**	**220**	**138**	**6 451**	**2 778**
	"	1956	...	...	...	...	...
	"	1955	...	...	...	...	...
	"	1954	...	...	...	...	...
	"	1953	...	...	...	...	...

4. Not including enrolment in Faculty of Chemistry and Pharmacy where, in 1956/57, 1,953 (F. 723) students were enrolled.

5. Not including data on special classes attached to regular schools and in hospitals.

VENEZUELA

THE EDUCATIONAL SYSTEM

The Venezuelan educational system is based on explicit constitutional provisions.

The Constitution reserves to the Central Government the power to lay down general educational and cultural principles and standards and to prescribe how educational and cultural institutions, associations and services shall function. (Article 60.)

At the same time it states that—subject to due conformity with national laws and regulations—education is among the services which local authorities have power to organize. (Article 21.)

It goes on to guarantee freedom of education to Venezuelan residents, subject to such limitations as may be prescribed by law. (Article 61.)

The principles contained in these three articles are developed in the Education Act, the first two clauses of which lay down respectively the aims of education and the principle of state supervision in the following terms:

1. The object of public education is the intellectual, moral and physical development of the people. The pursuit of this object must be adapted to the purpose of training citizens who are capable of sharing effectively in the fulfilment of Venezuela's destiny and who are imbued with the principles which inform Venezuelan democracy and with the conscious desire for international co-operation.

2. The State exercises supervision over schools to ensure the fulfilment of the objects it assigns to education and the requirements of the law and regulations.

Private persons may found and maintain schools subject to the limitations prescribed by law. Accordingly the institutions dealt with in the Education Act are classified respectively as public and private, the former being those established and maintained by the national administration, the states, the federal territories, local authorities and autonomous bodies and the latter those established and maintained by private individuals.

To safeguard the cultural heritage of the nation, it is prescribed by law that all instructional activities in schools shall be conducted in Spanish, save for the teaching of foreign languages, and on the understanding that works in languages other than Spanish may be consulted.

The Ministry of Education is required to provide the necessary co-ordination in respect of the teaching in all public schools, the opening and location of schools, the appointment of teachers and all matters affecting the organization of the public education service.

Primary education is compulsory from the age of 7, and free of charge in all public schools.

The structure of the Venezuelan school system is shown in the diagram on page 1445.

THE DEVELOPMENT OF SECONDARY EDUCATION

Venezuela's first Code of Public Education was promulgated in 1843; it specified that the subjects to be taught in the National Colleges (secondary level) should be Latin, Spanish, and philosophy. On completion of certain formalities and with presidential authorization, such colleges could transform themselves into universities.

In 1881 the Division of Public Education (Ministry of Internal Affairs) was raised to the status of an independent Ministry. There followed a succession of sporadic additions and amendments to the Public Education Code of 1843 and to the Decree on Compulsory Primary Education of 1870, which were, however, consolidated in a single legislative instrument with the promulgation of the second Public Education Code in 1897. Early in the present century, approval was given successively to the Codes of 1904, 1905, 1910 and 1912, all of which provided for free compulsory public primary education and for liberty of education, but imposed a progressively heavier measure of centralized state control. During this period, nothing was done about secondary education and there was no sharp line of demarcation between it and primary; in their curricula schools at secondary level followed the pattern of the French classical *lycée*.

In 1914 the Federal Executive promulgated an Organic Decree on National Education which broke with the legislative tradition of state-imposed limitations on the freedom of education, and confirmed that principle unreservedly. Only as regards examinations, which it sought to make more severe, did the decree provide for state supervision.

In 1915 the National Congress legislated anew on education but, far from consolidating everything in a single code, it produced both an Organic Education Act and a series of separate Acts on state certificates and degrees, public primary education, public secondary education, public teacher training schools, higher education, special education, state inspection of education and compulsory education. Secondary education was divided into two cycles, a 4-year general cycle and a 2-year specialist cycle with separate streams for mathematics and mathematical sciences, biological sciences and philosophy and letters.

The above legislation with the corresponding regulations and curricula remained in force until 1924 when the new Education Act cut down secondary education to a single undifferentiated 4-year course.

The political and social changes which took place in Venezuela from 1936 onwards brought with them new educational ideas strongly influenced by pedagogic missions from other Latin American countries. After two abortive attempts to change the outdated legislation on education, a National Education Act was finally passed in 1940. The change in its title alone—*educación* instead of *instrucción*—is an indication of the new attitude prevailing.

GLOSSARY

ciencias: see *liceo.*

curso prevocacional: upper primary classes with practical bias leading to vocational education.

escuela agrícola: vocational training school of agriculture.

escuela artesenal: vocational training school for artisans.

escuela de administración: vocational training school for office workers.

escuela de artes y oficios para mujeres: vocational training school of home economics and women's occupations.

escuela de servicio social: vocational training school for social welfare workers.

escuela militar: vocational training school for one or other of the armed services.

escuela normal: teacher training school.

escuela primaria: primary school.

escuelas de música y bellas artes: vocational training schools of music and fine arts.

escuela técnica industrial: vocational training school for mechanics, electricians, plumbers, metal workers, cabinet makers, etc.

humanidades: see *liceo.*

instituto de comercio: vocational secondary school of commerce.

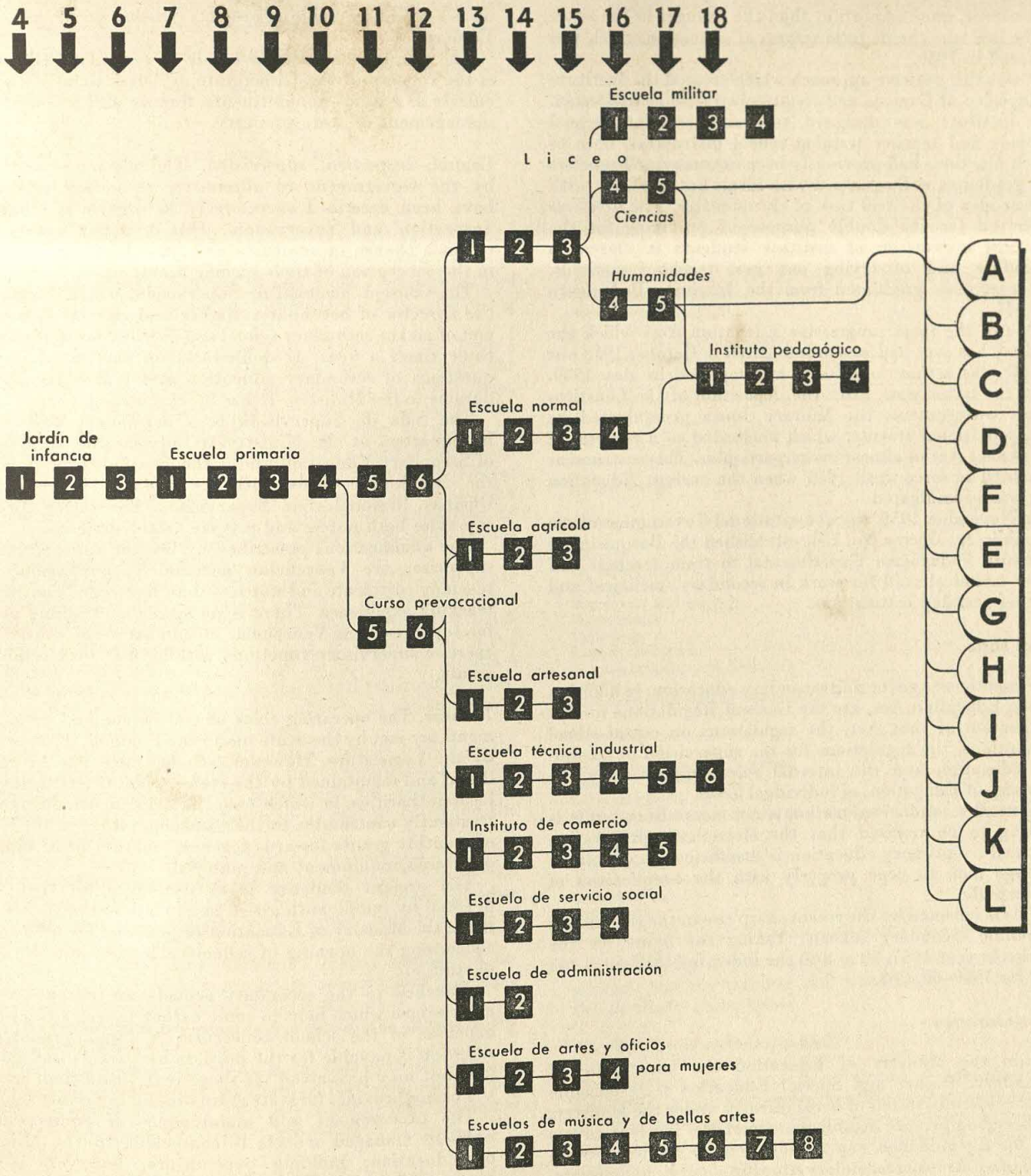
instituto pedagógico: teacher training college for teachers in secondary and teacher training schools.

jardín de infancia: kindergarten.

liceo: general secondary school with lower cycle of core subjects and upper cycle emphasizing either literature and language (*humanidades*) or science (*ciencias*).

HIGHER EDUCATION

A. Agronomy.
B. Architecture.
C. Arts and education.
D. Dentistry.
E. Economics.
F. Engineering.
G. Forestry.
H. Law.
I. Medicine.
J. Pharmacy.
K. Science.
L. Veterinary medicine.


4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
Escuela militar
1 2 3 4
L i c e o
4 5
Ciencias
1 2 3
Humanidades
4 5
Instituto pedagógico
1 2 3 4
Escuela normal
1 2 3 4
Jardín de infancia
1 2 3
Escuela primaria
1 2 3 4 5 6
Escuela agrícola
1 2 3
Curso prevocacional
5 6
Escuela artesanal
1 2 3
Escuela técnica industrial
1 2 3 4 5 6
Instituto de comercio
1 2 3 4 5
Escuela de servicio social
1 2 3 4
Escuela de administración
1 2
Escuela de artes y oficios
para mujeres
1 2 3 4
Escuelas de música y de bellas artes
1 2 3 4 5 6 7 8
A
B
C
D
F
E
G
H
I
J
K
L

However, more important than the changes in the letter of the law was the *de facto* reform of education which was initiated in 1936.

It was this positive approach which created the Instituto Pedagógico of Caracas and its attached *liceo de aplicación*. The institute was designed to train secondary school teachers and teacher training school instructors, both of which functions had previously been entrusted to bachelors and graduates well equipped with ideals but less often with a clear idea of the real task of the educator. The *liceo* was conceived for the double purpose of providing for the practical instruction of institute students in classroom procedure and of trying out new teaching methods. The first class graduated from the Instituto Pedagógico in 1941.

One of the most progressive Education Acts which the country has ever had was promulgated in October 1948 but its life was a short one for it was repealed in May 1949.

In the latter year, after the deposition of the Constitutional Government, the Military Junta promulgated its own provisional statute, which amounted to a reversal of the former Act in almost every particular. This instrument remained in force until 1955 when the current Education Act was promulgated.

In November 1959, the Constitutional Government of the Republic, by Decree No. 164, established the Barquisimeto Instituto Pedagógico Experimental to train teachers and other technical staff for work in secondary, technical and teacher training institutions.

Legal basis

The enactments governing secondary education, in addition to the Education Act, are the General Regulations for the application of that Act, the regulations on out-of-school institutions, the regulations for the supervision of secondary education and the internal rules, approved by the Ministry of Education, of individual *liceos*.

General secondary education is not compulsory but it is coming to be realized that the elementary preparation afforded by primary education is insufficient to enable an average man to cope properly with the complexities of modern life.

This is reflected by the recent sharp rise in the enrolments in public secondary schools. Taking the figure for the academic year 1957–58 as 100 the index for 1958–59 is 147 and for 1959–60, 202.

Administration

Within the Ministry of Education the Directorate of Secondary, Higher and Special Education is responsible for the administration of *liceos* directly under the Ministry, for licensing private establishments at the levels it covers and for the guidance, supervision, control and registration of all institutions of secondary education, public and private, in the country.

The Ministry's Technical Directorate deals with enrolment records, educational tests, examinations for promotion, curricula and syllabuses and school textbooks (Consejo Técnico de Educación), the collection of statistical data (Sección de Estadística) and the provision of technical advice on school building projects (Oficina de Arquitectura Escolar).

The purely administrative side of secondary education is the concern of the Directorate of Administration, particularly as regards appointments, finance and accountancy, management of state property, etc.

Control, inspection, supervision. The agencies employed by the Government to administer secondary education have been described successively as organs of 'control', 'inspection' and 'supervision'. This does not simply represent a change in nomenclature but reflects an evolution in the conception of their specific functions.

The Consejo Nacional de Supervisión, which consists of the Director of Secondary, Higher and Special Education and of all the secondary school supervisors, normally meets three times a year. It deliberates on the broad general questions of secondary education and makes recommendations to the Ministry. It has no executive powers.

The Sala de Supervisión is a permanent body with headquarters at the Ministry. It advises the Directorate of Secondary Education and is the channel through which the Directorate deals with its regional bureaux, the Oficinas Regionales de Supervisión. The latter directly supervise both public and private establishments.

The qualifications prescribed by law for appointment as supervisor are Venezuelan nationality, possession of a teaching certificate and not less than five years' continuous teaching experience. There is no specialist training course for supervisors in Venezuela. Headmasters of course also exercise supervisory functions within their own establishments.

Finance. The operating costs of state secondary establishments are met by the State under the Finance Act approved by the Legislature. However, schools may also be established and maintained by the states, federal territories and local authorities, in which case the Central Administration frequently contributes to their upkeep, either in the shape of monthly grants towards teachers' salaries or of supplies of teaching equipment and material.

The present tendency is to centralize all the funds devoted by public authorities to educational purposes and make the Ministry of Education responsible for all matters concerning the opening of schools, selection and payment of staff, etc.

Attached to the secondary schools are parent-teacher associations which help to some extent to cover the minor expenses of the school concerned. A small annual subscription is payable for the purpose by parents and guardians but may be waived for those with insufficient means.

The law provides for state grants-in-aid to private schools.

The procurement and maintenance of equipment in publicly managed schools is chargeable to the Ministry of Education; building expenditure, however, is the responsibility of the Ministry of Public Works whose annual budget includes appropriations voted for this purpose.

School welfare services. The principal *liceos* have their own free medical and dental services, with doctors, dentists, nurses, social workers and auxiliary personnel paid by the State. In addition schools which need them have

subsidized meal services (lunches), with equipment and staff also supplied free by the Ministry of Education. These services, which are under the supervision of the Patronato Nacional de Comedores Escolares, provide pupils with balanced meals at prices much below their real cost.

TYPES OF SECONDARY EDUCATION

General secondary schools

In the law as it now stands, the objects of general secondary education are 'to continue the formative process begun at the primary level, provide pupils with a background of general culture and prepare them for entry into other branches of education'.

The course is divided into two cycles: the first lasts 3 years, and the second, which takes pupils through the initial stages of specialization in science or the humanities, 2 years. On completion of their studies pupils sit for the *bachillerato* examination, success in which is the basic qualification for entrance to institutions of higher education.

Some schools provide both daytime and evening classes; the first are held between 7 a.m. and 6 p.m., and the second from 6 p.m. to 11.30 p.m. Applicants for admission to evening classes must be over 16 years of age and produce a certificate of employment.

Persons over 25 years of age in possession of the certificate of general secondary education can enter for the *bachillerato* examination in the branch of their choice without attendance at a school, subject to offering all the subjects in the relevant curriculum. The *bachillerato* can also be obtained by students at military and ecclesiastical institutions when the syllabus comprises the same subjects, at the same level as the official secondary syllabus.

The academic year for all public schools begins on 16 September and ends with the July examination. August and the first fortnight of September are holidays. The National Executive is empowered by statute to amend the dates indicated.

Classes can be held on all days of the academic year with the exception of Sundays, the period from 20 December to 6 January inclusive, Good Friday to Easter Sunday inclusive, Carnival Monday and Tuesday, and the days of the National Holiday.

Not more than four successive hourly periods of instruction are allowed in secondary schools, and not more than one hour's instruction without a break.

The curriculum for secondary education is shown in the following table.

First and second year pupils in the first cycle are required to do two hours' practical work in biological science per week, while two hours each per fortnight in biological science, physics and chemistry are required of them in the third year.

Second cycle pupils on the scientific side are required to do two hours' practical work per fortnight per subject in physics, chemistry and biology, and those in their final year do two hours practical mineralogy and geology per month.

The practical work is done in groups which may not number more than 20 pupils.

TIME-TABLE FOR GENERAL SECONDARY SCHOOLS
(in hours per week)

Subject	Year		
	1	2	3
FIRST CYCLE			
Spanish language and literature	5	5	4
Mathematics	4	4	3
Geography and history	4	6	6
Biological sciences	6	6	6
Chemistry	–	–	7
Physics	–	–	8
English	4	3	3
Art education	–	3	–
Manual training (boys)	–	2	–
Manual training (girls)	–	2	–
Care of children	–	–	2
Social, moral and civic training	1	2	–
Physical training	1	1	1

Subject	Year	
	1	2
SECOND CYCLE		
Science		
Physics	7	7
Chemistry	7	7
Biology	7	7
Mineralogy and geology	–	5
Mathematics	4	4
Philosophy	3	–
English or French	3	3
Spanish language and literature	2	2
Drawing	2	–
Economic geography of Venezuela	3	–
Humanities		
Spanish language and literature	5	5
Latin	3	–
Latin and Greek	–	4
History of Venezuela, sources and historical judgements	4	4
French	5	3
Philosophy	4	4
Social science	–	5
History of art	3	–
Mathematics	2	2

Teachers for the various types of secondary education—general, teacher training and vocational—are trained at the Instituto Pedagógico.

Vocational and technical schools

The División de Educación Especial of the Ministry of Education is responsible for the development and efficiency of technical education. This comprises trade schools, the industrial training schools, the Experimental Institute of Industrial Education, the schools of arts and crafts, the social service schools, the schools of nursing, and the commerce institutes. Schools of agriculture come under the Ministry of Agriculture.

Pre-vocational education. In a certain number of primary schools attached to trade schools there may be

pre-vocational training courses available in the fifth and sixth years.

Trade schools. These schools accept pupils who have secured the primary school certificate or successfully completed the sixth year of primary education. The instruction provided (three years) enables pupils to learn the trade of their choice. On completion of the second year in the trade school, pupils may, if they wish, enter industrial technical schools as third year pupils.

Industrial technical schools. These schools accept pupils who have completed primary school, and provide training to tradesman level in fields such as mechanical engineering, electricity, etc.

Experimental Institute of Industrial Education. To qualify for admission to this institute, applicants must have completed at least the first cycle of training in an industrial technical school, or have at least two years' experience as workshop supervisors in a trade school, or have not less than five years' experience in industrial employment after completion of primary school. The main purpose of the institute is to provide 1-year qualifying courses for instructors' appointments in the industrial and trade schools. It also has a school for practice teaching (Escuela Industrial de Aplicación) with a 4-year course leading to the *certificado de operario especializado* (skilled operative's certificate).

Schools of arts and crafts. The most important of these is the Caracas Escuela Superior de Artes y Oficios, a school for girls. Its objects are similar to those of the trade schools, but the curriculum covers four years.

Social service schools. These schools provide a 4-year course to train social workers.

Schools of nursing. The course of study at the *escuelas normales de enfermeras*, which provide full training for the nursing profession, consists of three years of three terms each.

Commercial institutes. These schools train staff for the various types of office work in business and also prepare pupils for advanced commercial studies. They are classed as E, D, C, B and A according to the level and type of course they provide. Type E provides a secretarial course and a book-keeping course, each of three years' duration and each providing 15 hours of instruction per week and per year. The former prepares pupils for the *certificado de oficinista* (general clerk) after two years' study and the *certificado de corresponsal* (correspondence clerk) after three years; the latter prepares for the *certificado de auxiliar de contabilidad* (ledger clerk) in two years and the *certificado de contabilista* (book-keeper) in three years. Types D to A form a 5-year sequence of studies, certificates being awarded at the end of each stage, as follows: Type D—*Certificado de auxiliar de secretaría* (secretarial assistant); Type C—*Certificado de secretario* (secretary); Type B—*Certificado de perito mercantil* (mercantile assistant); Type A—*Certificado de técnico mercantil* (mercantile executive). The following table shows the subject requirements for the various types of certificate.

TIME-TABLE FOR COMMERCIAL SCHOOLS
(in hours per week)

Subject	Type D		Type C	Type B	Type A
	1st year	2nd year	3rd year	4th year	5th year
Spanish	4	4	3	3	–
English	3	3	4	–	–
Commercial English	–	–	–	4	3
Typing	3	4	–	–	–
Shorthand	3	4	–	–	–
Calligraphy	2	–	–	–	–
Mathematics	4	4	4	4	–
Commercial arithmetic	–	–	–	–	3
Elements of natural science	3	–	–	–	–
Elementary physics and chemistry	–	–	3	–	–
Identification and study of materials	–	–	–	3	–
Venezuelan geography	3	–	–	–	–
Venezuelan history	–	3	–	–	–
World geography	–	–	2	–	–
World history (with special reference to trade)	–	–	2	–	–
Economic geography	–	–	–	4	–
Civic education	2	–	–	–	–
Correspondence	–	3	3	–	–
Book-keeping	–	3	4	–	–
Cost accounting	–	–	–	4	–
Cost accounting and elements of auditing	–	–	–	–	4
Secretarial practice	–	–	3	–	–
Psychology	–	–	3	–	–
Civil and commercial law	–	–	–	3	–
Venezuelan social legislation	–	–	–	2	–
Financial legislation	–	–	–	–	3
Income tax	–	–	–	2	–
Elements of statistics	–	–	–	–	3
Business organization	–	–	–	–	2
Sales promotion and publicity	–	–	–	–	2
Physical training	1	1	–	–	–
'In service' training	–	–	–	–	half time
Total	28	29	31	29	20

Teacher training schools

Teacher training is primarily the responsibility of the State, in order that it may ensure the inculcation of its democratic principles. At present it is given in the teacher training schools (*escuelas normales*) and at the Instituto de Mejoramiento Profesional del Magisterio, which provides additional training for certificated teachers and prepares the uncertificated for the professional examinations. According to the source of their funds, teacher training institutions are classified as public—maintained by the Ministry of Education, the states, local authorities, etc.—or private. Public teacher training schools are further classified into (a) conventional teacher training schools (4-year course) and (b) experimental teacher training schools. At present there are four of the latter in Venezuela.

Special mention should be made of the Instituto Experimental de Formación Docente established by Ministry of Education Order No. 5813 dated 14 September 1959, which is intended to conduct experiments in the methodology both of classroom teaching and of the specialized techniques now used as aids to the achievement of optimum teaching results.

The specific function of the institute is to provide a 2-year training course, in addition to the basic secondary cycle of three years, with the following objectives: (a) provision of teachers with an acceptable level of academic knowledge for the Public Education Service; (b) equipment of teachers with sufficient scientific training to apply modern apprenticeship techniques and conduct research on educational problems; (c) awakening in prospective teachers of the essential enthusiasm for their profession and devotion to the cause of public education with a high sense of the social responsibilities of their office; (d) training of student teachers in such a way as to enable them, once they are teachers, to serve the communities in which they work in the social sphere, and contribute to the improvement of the living conditions of their fellow citizens.

For admission to teacher training establishments the requirements, in addition to the Primary School Certificate (6th grade), are good health, absence of physical defects liable to affect professional efficiency, and proof of good character.

During teacher training, tests in each subject are held at intervals over the academic year, and students' progress is assessed on the basis of the work done up to the date of the annual examinations which take place in July. Markings are in round figures ranging from 1 to 20.

The Education Act provides for the holding of 'repeat' examinations in the first fortnight of September immediately before the start of the academic year, for those who fail in the ordinary July examinations. Deferred examinations are held at the same date for those who were unable, for proven and acceptable reasons, to sit for the ordinary examinations.

Students having obtained less than 10 marks in not more than two subjects in the deferred or 'repeat' examination are allowed to go on to the next class in the normal way but their eligibility for examination with that class is conditional on proof that they have reached the pass standard in the failed subjects.

The teaching staff required for the teacher training schools is trained at the two *institutos pedagógicos*, one at Caracas and the other, an experimental establishment of recent foundation, at Barquisimeto. The courses of study are specialized and last 4 years. Graduates of university faculties of education are entitled to teach their own special subjects in teacher training schools.

PROBLEMS AND TRENDS

In the first place, it must be admitted that secondary education falls seriously short of requirements as regards quality although, as a result of the efforts begun in 1958, the quantitative situation is satisfactory for the time being. An outstanding problem is the inadequate training received by pupils as regards both knowledge and character building. The reasons for this are many and varied, and include: absence of a national educational policy; arbitrary plan of studies; syllabuses unrelated to the life and needs of the nation; irregular compliance with school time-tables; inadequate training and supervision of teachers; lack of suitable premises; almost complete lack of satisfactory school textbooks; pupils' time taken up with numerous extra-scholastic activities; the negative values finding acceptance in the social sphere; pernicious use of mass media (radio, films, television, the press, posters, etc.); lack of home guidance on problems of adolescence, thus hindering effective co-operation with the schools, etc.

Another problem facing general secondary schools as now organized is the excessive size of the intake, which has grown out of all proportion to that of other forms of secondary education. This, however, is not an inherent problem of general secondary schooling as such, but is due to the advice given to sixth grade pupils leaving primary school and to the fact that little attention is traditionally paid in Venezuela to opportunities for careers other than those which call for university training. Now that public opinion is again coming alive, an unmistakable feeling is perceptible amongst educators as well as in economic, political and professional circles, that a radical change in Venezuela's whole educational structure is imperative, particularly as regards post-primary studies, with a view to developing a genuine and diversified secondary educational system covering both humanistic and vocational studies, with a sound background of primary schooling.

Such a structure would involve two cycles, the first for general education common to all branches but paying special attention to vocational guidance, and the second covering a range of specialized vocational courses and preparatory courses for higher education.

[Text prepared by the Ministry of Education, Caracas, in May 1960.]

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STATISTICS

Population (mid-year 1958 estimate):[1] 6,320,000.
Area: 352,143 square miles; 912,050 square kilometres.
Population density: 18 per square mile; 7 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58 total enrolment (not including adult education courses) came to nearly 846,000, which was about 14 per cent of the total population. The proportion of girls was approximately 50 per cent in nursery and primary schools, 55 per cent in vocational schools, and 86 per cent in teacher training schools; however, girls represent only one-third of the enrolment in general secondary schools, and one-fourth in the universities. The proportion of women on the teaching staff was 79 per cent in primary schools, 32 per cent in secondary and vocational schools, and 41 per cent in teacher training schools. Average pupil-teacher ratio was 36 in primary schools, 17 in secondary schools, 16 in vocational schools, and 10 in the teacher training schools. Between 1953 and 1957 enrolment increased by 26 per cent in primary schools, 71 per cent in general secondary schools, 40 per cent in vocational schools, 11 per cent in secondary teacher training schools, and 42 per cent in higher education. (See Table 2.)

Enrolment trends in secondary education, 1937–57. Enrolment in secondary schools increased rapidly between 1937 and 1957, particularly in general education. Taking all types of secondary education, the average total enrolment almost doubled every five years. Nevertheless, the average enrolment for the period 1955–57 was still only 13 per cent of the population 15–19 years old. (See Table 1.)

Examination results in secondary education, 1953. The only data available relate to the number of certificates granted in 1953, as follows: *bachillerato*, 1,850 (499 girls); diploma of nursing schools, 227 (all girls); diploma of school of social services, 48 (all girls); diploma of teacher training schools, 620 (506 girls).

Educational finance, 1959. According to data published by the Unesco Regional Office for the Western Hemisphere in the *Buletín Trimestral de Proyecto Principal de Educación Unesco-America Latina*, Vol. 2, No. 5 (January-March 1960), the budget estimate of the Ministry of Education for 1959 amounted to 367,682,000 bolivares, an average expenditure of 56 bolivares per inhabitant. Of the total amount, 165,740,000 bolivares (about 45 per cent) was allotted to primary education. Official exchange rate: 1 bolivar = 0.30 U.S. dollar (approx.).

Sources. Venezuela: Ministerio de Fomento, Dirección General de Estadística. *Anuario Estadístico; Boletin Mensual de Estadística;* Ministerio de Educación, *Revista de Educación; Summary Reports on the Education Programme in Venezuela;* Oficina de Estadística del Ministerio de Educación and Union de Universidades de América Latina, *IV Censo de la Población Escolar de América Latina, 1957.*

1. Excluding Indian jungle population, numbering 56,705 in 1950.

1. TRENDS IN SECONDARY EDUCATION, 1937–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1937	3 345	...	–	...	692	...			
1938	3 497	...	2 130	...	612	...	6	365	*1.7*
1939	4 710	...	2 506	...	1 012	...			
1940	6 443	...	2 152	44	1 134	76			
1941	6 884	...	2 608	46	1 218	73			
1942	7 621	...	2 600	51	1 563	75	13	413	*3.1*
1943	9 540	...	3 155	53	1 989	80			
1944	11 598	...	3 587	57	2 665	77			
1945	13 333	...	3 707	55	2 781	80			
1946	16 134	...	4 631	59	3 270	77			
1947	16 896	...	4 858	68	4 663	75	27	463	*6*
1948	22 308	...	4 881	66	4 255	76			
1949	23 336	...	5 989	64	2 940	77			
1950	27 000	...	7 762	64	3 343	80			
1951	27 807	...	7 894	62	3 990	81			
1952	27 199	...	7 266	65	3 724	80	43	525	*8*
1953	32 321	...	8 367	60	3 907	79			
1954	38 919	...	11 495	...	4 721	80			
1955	44 433	...	13 798	...	6 280	...			
1956	52 565	33	17 021	54	7 736	84	75	590	*13*
1957	55 194	33	20 039	55	8 260	86			

2. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery schools, public	1957/58	...	181	173	6 048	3 077
	Nursery schools, private	1957/58	...	399	391	10 402	5 104
	Total	**1957/58**	**...**	**580**	**564**	**16 450**	**8 181**
	,,	1956/57	...	...	...	...	...
	,,	1955/56	...	...	...	17 440	...
	,,	1954/55	...	...	...	14 811	...
	,,	1953/54	...	[1] ...	[1] ...	12 594	6 151
Primary	Primary schools, public	1957/58	...	14 731	12 237	602 380	295 483
	Primary schools, private	1957/58	...	5 603	3 851	132 731	65 059
	Total	**1957/58**	**...**	**20 334**	**16 088**	**735 111**	**360 542**
	,,	1956/57	6 791	20 221	...	677 166	...
	,,	1955/56	7 101	18 995	15 205	646 795	...
	,,	1954/55	6 956	17 998	...	623 083	...
	,,	1953/54	7 014	[2] 16 944	[2] 13 550	583 788	289 714
Secondary							
General	Secondary schools, public	1957/58	...	1 022	332	30 095	8 675
	Secondary schools, private	1957/58	...	2 315	747	25 099	9 630
	Total	**1957/58**	**...**	**3 337**	**1 079**	**55 194**	**18 305**
	,,	1956/57	...	3 199	...	52 565	17 455
	,,	1955/56	264	3 359	...	44 433	...
	,,	1954/55	224	3 244	...	38 919	...
	,,	1953/54	184	2 231	638	32 321	...
Vocational	Industrial schools, public	1957/58	...	236	10	3 965	48
	Commercial schools, public	1957/58	...	324	103	7 306	4 381
	Agricultural schools, public	1957/58	...	65	6	199	75
	Fine arts schools, public	1957/58	...	67	38	1 453	857
	Other schools, public	1957/58	...	296	122	5 051	4 212
	Industrial schools, private	1957/58	...	31	1	428	102
	Commercial schools, private	1957/58	...	217	100	1 437	1 127
	Other schools, private	1957/58	...	49	23	200	122
	Total	**1957/58**	**...**	**1 285**	**403**	**20 039**	**10 924**
	,,	1956/57	...	1 010	...	17 021	9 215
	,,	1955/56	...	[4] 412	...	13 798	...
	,,	1954/55	[3] 38	[4] 406	[4] 143	11 495	...
	,,	1953/54	46	555	...	8 367	5 000
Teacher training	Teacher training schools, public	1957/58	...	202	71	3 844	3 015
	Teacher training schools, private	1957/58	...	619	267	4 416	4 094
	Total	**1957/58**	**...**	**821**	**338**	**8 260**	**7 109**
	,,	1956/57	...	796	...	7 736	6 517
	,,	1955/56	53	...	...	6 280	...
	,,	1954/55	44	505	220	4 721	3 762
	,,	1953/54	45	415	...	3 907	3 070
Higher							
Teacher training	Teacher training school, public	**1957/58**	**1**	**69**	**12**	**346**	**152**
	Total	1956/57	1	...	...	...	...
	,,	1955/56	1	...	...	339	...
	,,	1954/55	1	...	...	...	...
	,,	1953/54	1	71	13	334	153
General and technical	Universities, public	1957/58	...	1 202	61	8 188	2 107
	Universities, private	1957/58	...	246	11	2 082	484
	Total	**1957/58**	**...**	**1 448**	**72**	**10 270**	**2 591**
	,,	1956/57	...	...	...	...	...
	,,	1955/56	5	1 377	...	7 325	...
	,,	1954/55	5	...	...	...	...
	,,	1953/54	5	1 101	47	7 148	1 502

1. Included in primary schools.
2. Including pre-primary.
3. Not including nursing and social welfare schools.
4. Not including data on agricultural, nursing, social welfare schools, school for telegraph and telephone operators, training school for demonstrators in rural domestic science centres.

REPUBLIC OF VIET-NAM

THE EDUCATIONAL SYSTEM

On achieving independence, Viet-Nam had first to adapt its former educational system to the changed circumstances, then replace it by one more in harmony with the aspirations of its national genius and the exigencies of modern times, and finally, improve on this so as to provide a humanistic and nationally centred education open to all cultural influences.

The principal legislative measures governing the educational system as a whole are as follows:

Decree of 29 December 1949 laying down the organization of national education.

The two Decrees of 20 January 1952, one establishing compulsory primary education for children of both sexes between 6 and 14, the other prescribing the organization of a campaign for the elimination of illiteracy.

Order of 5 September 1949, amended by an Order of 6 October 1950, laying down curricula and time-tables for Viet-Namese secondary education.

Order of 23 May 1951 dealing with the organization of the Department of National Education.

Order of 14 October 1953 reorganizing Viet-Namese secondary education.

Presidential Ordinance of 24 December 1955 incorporating the regional education budgets in the national budget.

The Orders of 25 and 29 June 1956 modifying the 1953 curriculum for secondary education—the former fixing the curriculum and weekly time-table for the teaching of English, the latter laying down the curriculum for the teaching of Chinese characters, Viet-Namese and French.

The Decrees of 12 April and 27 June 1957 modifying the secondary school curricula for history and geography.

Decree of 6 June 1958 reorganizing the Department of National Education by transferring some of the responsibilities of the Regional Director of Education for South Viet-Nam to the Director-General of Primary, Secondary and Popular Education.

Order of 3 February 1955 instituting a Directorate of Technical Education and Fine Arts.

Order of 12 August 1958 laying down the curriculum for secondary education to be applied in the 1958/59 school year.

In the course of the 1958/59 school year educational reforms were carried out in respect of three basic points: organization of the Department of National Education; establishment of the basic principles of education; and drafting and promulgation of the new secondary education curriculum.

The structure of the Viet-Namese school system is shown in the diagram on page 1453.

GLOSSARY

centre d'apprentissage: vocational training centre for apprentices.

classes d'enseignement primaire technique: technical course in upper primary school classes.

collèges et lycées: general secondary schools.

collèges et lycées techniques: vocational (technical) secondary schools.

école d'agriculture: vocational training school of agriculture.

école d'arts appliqués: vocational secondary school of applied arts including graphic arts, ceramics, etc.

école de commerce: vocational training school of commerce.

école de métier (craft school): vocational training school at upper primary level.

école élémentaire de village: village elementary (i.e. lower primary) school.

école normale: teacher training school.

école primaire: primary school.

HIGHER EDUCATION

A. Faculty of Arts.
B. Faculty of Law.
C. Faculty of Medicine and Pharmacy.
D. Faculty of Education.
E. College of Architecture
F. National School of Administration.
G. College of Fine Arts.
H. College of Electrical Engineering.
I. School of Engineering.
J. Military School.

EXAMINATIONS

baccalauréat, 1ère et 2e parties: 1st and 2nd parts of the general secondary leaving examination, qualifying for university entrance.

baccalauréat technique, 1ère et 2e parties: 1st and 2nd parts of the technical secondary leaving examination, qualifying for higher technical and technological education.

brevet d'études du premier cycle: lower general secondary certificate.

brevet d'enseignement industriel: lower technical secondary certificate.

certificat d'aptitude pédagogique: teacher training certificate, qualifying to teach in lower primary classes.

certificat d'aptitude professionnelle: vocational training certificate.

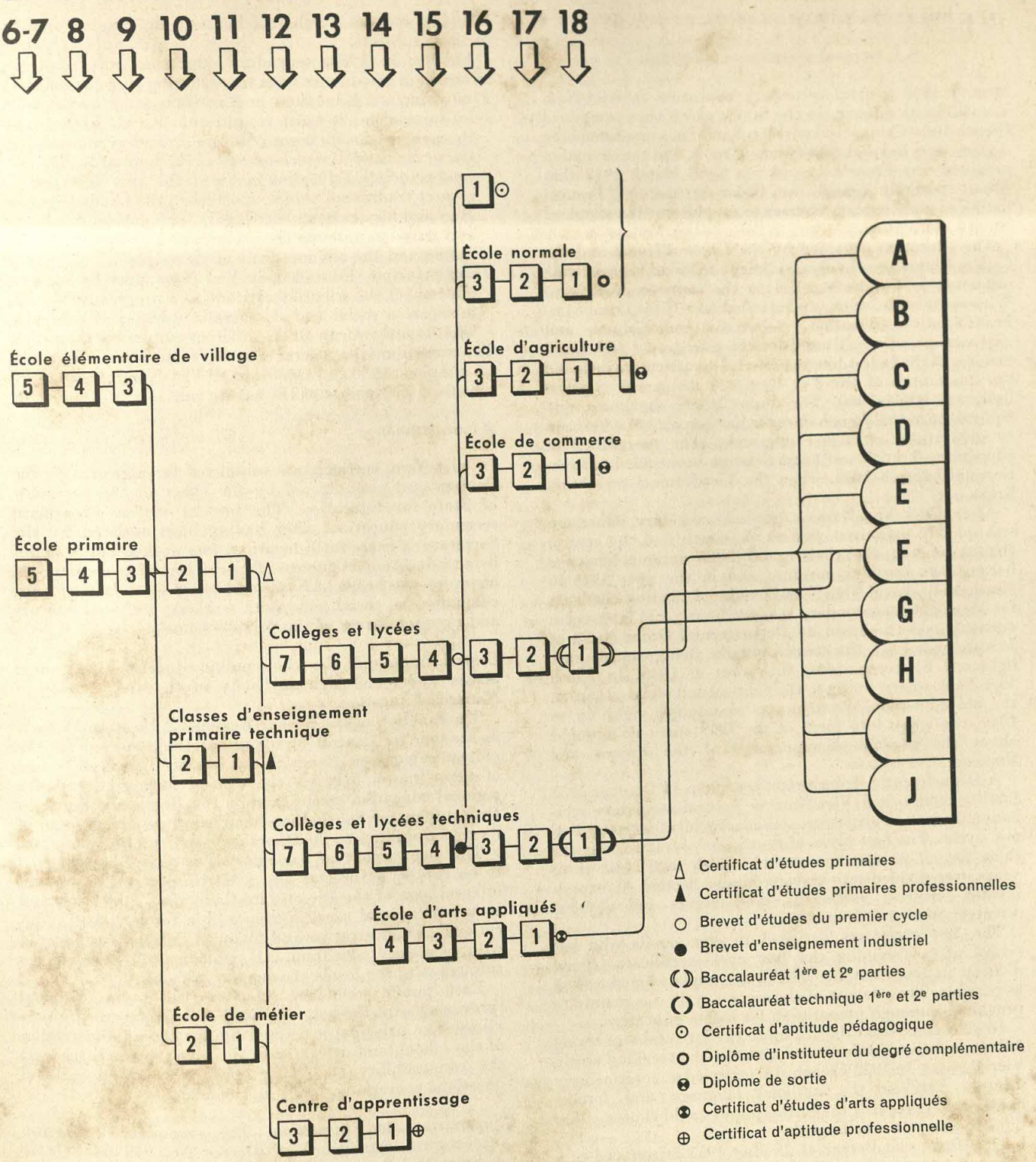
certificat d'études d'arts appliqués: certificate of training in applied arts.

certificat d'études primaires: general primary school certificate.

certificat d'études primaires professionnelles: vocational primary school certificate.

diplôme de sortie: leaving diploma.

diplôme d'instituteur du degré complémentaire: teachers' diploma, qualifying to teach in upper primary classes and, provisionally, in the first two secondary classes.


6-7 8 9 10 11 12 13 14 15 16 17 18
École élémentaire de village
5 4 3
École primaire
5 4 3 2 1
Classes d'enseignement primaire technique
2 1
École de métier
2 1
Centre d'apprentissage
3 2 1
1
École normale
3 2 1
École d'agriculture
3 2 1
École de commerce
3 2 1
Collèges et lycées
7 6 5 4 3 2 1
Collèges et lycées techniques
7 6 5 4 3 2 1
École d'arts appliqués
4 3 2 1
A
B
C
D
E
F
G
H
I
J
Certificat d'études primaires
Certificat d'études primaires professionnelles
Brevet d'études du premier cycle
Brevet d'enseignement industriel
Baccalauréat 1ère et 2e parties
Baccalauréat technique 1ère et 2e parties
Certificat d'aptitude pédagogique
Diplôme d'instituteur du degré complémentaire
Diplôme de sortie
Certificat d'études d'arts appliqués
Certificat d'aptitude professionnelle

THE DEVELOPMENT OF SECONDARY EDUCATION

I. General secondary education

Around 1900 general secondary education in Viet-Nam was still in its infancy. In the States which then comprised French Indo-China—today, Viet-Nam, Laos and Cambodia —there were but eight secondary schools, and the education provided was French. It was not until March 1918 that Albert Sarrault signed the Order instituting 'Franco-native' complementary courses to supplement the standard French curriculum.

The education provided by the Lycée d'Hanoï and the Collège Chasseloup-Laubat at Saigon followed the curricula obtaining in France and led to the same examinations. Whereas this education was intended mainly for Europeans, Franco-native education, essentially Indo-Chinese and autonomous, was instituted for the intellectual and moral training of the Indo-Chinese masses. Its curriculum included the humanities of the Far East and Annamese classical literature (Quôc-Van). The Indo-Chinese diplomas were equivalent to the French ones for the purposes of admission to institutions of higher education. The two forms of education—French and Franco-native—continued to function until March 1945, when the Viet-Namese revolution broke out.

After 1945 Viet-Namese general secondary education was quickly organized, first in the north and the centre, then throughout the whole country. The national language became the teaching medium and in the year 1945/46 North and Central Viet-Nam introduced the first curricula for Viet-Namese secondary schools. Four years later these curricula were modified by Departmental Order No. 9 of 5 September 1949, the science syllabus being considerably lightened by comparision with that of 1945. In South Viet-Nam, where, owing to the political and social situation, the old educational system was maintained right up to 1949, the entry into force of the 1949 curricula brought about the gradual disappearance of the French and Franco-native courses.

A Departmental Order promulgated on 14 October 1953 further reorganized Viet-Namese general secondary education. In its new structure, secondary education comprised two cycles. The first cycle, of four years' duration, was the same for all pupils; the second, which lasted for three years, was divided into three sections: Section A, experimental sciences; section B, mathematics and physical sciences; Section C, literature.

The first cycle was designed to give pupils who left school after obtaining the first cycle certificate (*Brevet d'études du premier cycle*—BEPC) as complete an education as possible. The purpose of the second cycle was mainly to provide a thorough preparation for higher education.

In all classes, from the 7th up to the 1st—the numbering follows an inverse order (see diagram)—the teaching was in Viet-Namese. In 1958 French still occupied an intermediary position between the national language and foreign languages. As regards the latter, pupils could choose either Chinese characters or English.

The Ministerial Decree of 26 May 1955 introduced profound changes in the syllabus and time-table for ethical instruction and civics, as regards both the nature of the teaching and the number of hours to be devoted weekly to these subjects.

Finally, in 1958, secondary education was basically reformed in accordance with the following three principles:

First principle. Education in Viet-Nam must be inspired by humanism; it must respect the sacred character of the human person, regard Man as an end in himself and strive for the full development of the human being.

Second principle. Education in Viet-Nam must be national, respect traditional values, strengthen the bonds between Man and his environment (family, occupation, country), and strive to promote the security and prosperity of the nation and the advancement of its people.

Third principle. Education in Viet-Nam must be open to all, respect the scientific attitude as a progressive factor, inculcate a social and democratic spirit, and recognize what is authentic in all the different cultures of the world.

The curriculum for general secondary education was drawn up in August 1958 and applied in all Viet-Namese secondary schools in September of the same year.

Administration

In Viet-Nam, curricula are submitted for approval to the Cabinet and promulgated by the Office of the Secretary of State for Education. The present system of general secondary education, after having been outlined by the Secretary of State for Education, was worked out in detail by an Educational Congress of special committees composed of professors, heads of *lycées* and other secondary schools, educationists, social and youth workers, etc., and parents and representatives of the private schools.

Control. At present the whole public educational system is placed under the high authority of the Department of National Education.

The function of the former Regional Education Departments (one for Central Viet-Nam, at Hué, and one for the plateau regions, at Banméthuôt) has been reduced to one of mere liaison between the central authority and the regional education services, while the Regional Education Department for South Viet-Nam has transferred some of its responsibilities to the Directorate-General of Education.

The Department of Secondary Education, which used to be run by a Director and a few inspectors, is now an integral part of the Directorate-General of Education and comprises several services responsible for technical, educational, administrative and financial questions connected with secondary education. All departmental decisions go through it to the heads of secondary schools.

Each public secondary school is run by a principal (*proviseur*) with the help of a staff of assistants and supervisors. The principal is responsible for the administration of the school, and delegates to the vice-principal (*censeur*) the responsibility of settling technical and educational questions concerning pupils and teachers.

Supervision and inspection. The secondary education inspectorate, established by Decree No. 945 GD/ND of 6 June 1958, has its headquarters at Saigon, and comes under the control of the Director of Secondary Education and the Director-General of Education. Its authority

extends over all secondary institutions, public, private, foreign or semi-official.

The task of the inspectorate is not only to supervise secondary schools, but also to assist the Director of Secondary Education in dealing with technical and pedagogic problems. Inspectors must give inexperienced teachers detailed advice with a view to improving their teaching methods and increasing their efficiency. They are also responsible for organizing lectures and teacher training courses during the long vacation.

The chief inspectors must see that all teachers in public secondary schools are inspected at least once a year. In collaboration with the inspectors, the heads of schools, assisted by the education boards and class boards, maintain constant supervision over the educational activities of the teachers under their authority.

Chief inspectors of secondary schools are appointed by an order of the Secretary of State for Education, and are selected from amongst former principals of schools, secondary school teachers and university lecturers, with due regard to their cultural background, educational competence and moral standing.

Finance. Secondary schools are of three types: national public institutions; private institutions; and semi-official institutions.

Education in national public secondary schools is free. The National Assembly of Viet-Nam each year adopts the national education estimates which are prepared and submitted to it by the Department of National Education.

Before the 1955 reforms, the expenditure of provincial *lycées* and *collèges* was financed not out of the national budget but out of the budgets of the regional administrations. These secondary institutions consequently came under the authority of the regional Governor for financial and administrative purposes. After the Geneva Agreement, a Presidential Ordinance, issued on 24 December 1955, established a single national budget for all regions of the Republic of Viet-Nam. Similarly, the teaching body of the whole country comes under the sole authority of the official in charge of the Department of National Education.

For the school year 1957/58 budgetary credits allocated to the Department of Education were in the region of 600 million piastres. Supplementary amounts were derived from the contributions of the various municipal, provincial and local budgets, and also from foreign aid. The secondary education estimates represent about 22 per cent of the total education budget—a percentage more or less equal to the sum total of the various scholarships, grants and allowances awarded to pupils and students at the various educational levels.

The national education budget approved by the National Assembly for the school year 1958/59 amounted to 788 million piastres. Of this total, 190 million piastres, or 24 per cent, were intended for the maintenance and upkeep of *lycées* and *collèges*. This increase in budgetary allocations over the year 1957/58 reflects the Government's strong desire to carry on its efforts to build an educational system in keeping with the legitimate aspirations of youth and the exigencies of modern society.

Private secondary schools, which are rather costly for the parents, at present number 286 with an enrolment of 59,322 pupils. Fees range between 1,000 and 2,000 piastres a year for pupils in the first cycle of the secondary school, and rise to about 4,500 piastres in the second cycle.

Semi-official schools are subsidized by the State, so fees are lower. Semi-official schools are run on different lines from public or private schools: they are placed under the control of a Board of Administration, presided over by a representative of the Viet-Namese Government, generally the provincial Governor or the mayor of the locality. Over 12,000 pupils attend semi-official secondary schools. For the year 1957/58 the Department of Education spent three million piastres on subsidies to the 38 semi-official schools.

Buildings and equipment. The Department has set certain standards concerning space and equipment in classrooms.

In the school year 1948/49 Viet-Namese public secondary education had at its disposal 12 school buildings for 5,270 pupils over the whole territory controlled by the National Government. By the year 1953/54 these figures had risen to 33 and 21,710 respectively.

After the Geneva Agreement, at the beginning of the school year 1954/55, the National Government transferred five of the biggest public secondary schools from North Viet-Nam to Saigon. Some 6,000 pupils and 160 teachers then took refuge in the South; consequently schools had to be equipped and new buildings erected. By 1957, some 31 public *lycées* with a total of 115 classes had been installed in the new buildings.

During the school year 1957/58 six new public *collèges* with a total of 21 first cycle secondary classes were built—bringing the number of school buildings for public secondary education to 61. With regard to equipment, the new buildings are well furnished but lacking in scientific laboratories, a deficiency which the Department of Education has been endeavouring to make good.

II. Vocational and technical education

The development of vocational technical education may be divided into three stages.

The first stage (from 1920 to 1939) was that of the setting up and organization of technical training in application of a Decree of 2 March 1920 establishing the office of Director-General of Education in Indo-China.

The second stage began in 1939. At that time liaison was made between technical training and industry as a result of the appointment of the Head of the Industry and Armament Service as technical adviser to the Director-General of Education in Indo-China. In 1940 technical training was encouraged by the formation of a standing committee on industrial training, which included employers. Accelerated apprenticeship courses began to develop at the same time and many special sections were set up, especially in Tonkin (North Viet-Nam).

In 1941 a classification of the technical education laws was promulgated with the result that curricula began to be standardized. In 1944 a technical education inspectorate was organized, its statute being confirmed by an Order of 26 January 1946. During the second world war relations between Viet-Nam and France were interrupted, and Viet-Nam was forced to manufacture locally some of the manufactured goods it needed. This situation proved favourable

to the development of technical training. In 1945 Viet-Nam, Laos and Cambodia between them had 77 technical schools, training centres and applied arts courses, which offered training to some 3,800 pupils (as compared with 2,000 in 1939).

The third stage opened with the independence of Viet-Nam. The Government then undertook a complete revision of technical training, which involved: re-opening existing institutions; informing the public as to the necessity of promoting technical training; equipping new workshops; drafting a new training programme for workmen in keeping with the industrial needs of the country; encouraging young people to enter the careers opened up by technical training; recruiting new teachers and drafting a new staff statute so that teachers' conditions would not compare too unfavourably with those of technicians in private industry.

With all this in mind, the Government detached technical training from the Directorate-General of Education and, in 1955, set up a Directorate of Technical Education and Fine Arts under the direct control of the Department of National Education.

Administration

The old organization with its national, regional and provincial levels has been maintained up to the present day. At national level the Directorate of Technical Education and Fine Arts, devised as a nucleus from which ramifications will be put forth as resources in staff and teachers permit, has the task of organizing and administering all institutions providing technical training or training in the arts.

This Directorate has two divisions. The first deals mainly with principles, curricula, time-tables, and with the establishing and equipping of technical schools and art schools, while the second division organizes competitive entrance examinations, promotion and leaving examinations for technical schools and art schools, and maintains liaison with regional bodies. The Director of Technical Education is assisted by a chief inspector for vocational and technical schools and one for art schools.

At regional level, technical education is placed under the authority of the Regional Director of Education for administrative and financial purposes, and under that of the Director of Technical Education for technical purposes. The establishment, organization and efficient running of vocational schools in the region are matters for joint consultation between the two authorities.

In each province technical education is the responsibility of the Inspector of Primary Schools, who supervises workshop schools and makes, when appropriate, any suggestions he considers likely to further the cause of technical education. Thus, at the bottom rung of the new technical education hierarchy there are workshop schools, still coming under the primary education administration. The apprenticeship centres are just a step above, then come the *lycées* and *collèges* at the secondary level.

Management and further training boards, composed of industrialists, business men and civil servants, have been set up in technical and art schools to establish liaison and maintain close co-ordination between, on the one hand, the vocational training provided by the Government and, on the other, the requirements of employers (in skilled workmen, technicians and professional staff) and the necessity of developing industry and the handicrafts.

These boards are assisted in their task by the association of former pupils of the technical schools.

The national commissions for vocational training, which are consultative bodies, also advise the technical education authorities on all problems connected with vocational training and manpower requirements.

Organization. Technical and art schools coming under Viet-Namese administration comprise in all: 12 trade schools, 20 domestic science course, 4 institutions providing technical education at secondary level and 3 schools for the applied arts.

Primary vocational training is given in the trade schools and domestic science courses.

Secondary technical training is given in a *collège*, a *lycée* and two apprenticeship centres of a level equivalent to the first cycle of the secondary course.

Along with apprenticeship centres and secondary technical schools, Viet-Nam has organized higher technical schools, such as the College of Radio and Electrical Engineering, the College of Civil Engineering, the College of Industrial Arts and the College of Navigation. These four colleges all belong to a technical centre which has just built at Phù-Tho with very extensive buildings and modern equipment.

The National College of Commerce, founded in 1956, is also placed under the control of the Directorate of Technical Education and Fine Arts.

The extension of vocational training is not the responsibility of the Department of Education alone; the founding of agricultural schools is one of the objectives of the programme of technical reconstruction being applied by the Department of Agriculture.

There are also schools for nurses and medical assistants, which were placed under the authority of the Department of Health by Presidential Decree No. 789 of 18 September 1958.

Private technical training. Alongside the official institutions, there are some 37 private courses for industrial vocational training and many private technical schools. Facilities for technical training are also provided by various firms and big industrial undertakings. The State Railways, for instance, and the rubber plantation companies of Xuân-Lôc, Dau-Tiéng, etc., run their own vocational training courses.

Inspection. Two inspectors of technical training share the task of supervising secondary technical schools and domestic science courses. An inspectorship of musical training has been established in the Directorate of Technical Education and Fine Arts for the supervision of musical instruction in *lycées* and *collèges*, and also in private or semi-official primary and secondary schools. When the inspectorate is brought up to full strength private schools will be more closely supervised from the point of view of general education.

Finance. Since 1955 the Government has spent 32,118,000

piastres on reviving existing institutions for technical training, equipping new workshops, engaging new teachers and drafting a new statute for the teaching body.

A great deal still remains to be done. The Saigon Technical and Art Centre now proposes to equip new workshops, work out technical terminology, and set up commissions for the preparation of technical textbooks. These various projects would require ten times the amount of the credits made available in 1958.

TYPES OF SECONDARY EDUCATION

General secondary schools

The Viet-Namese pupil begins general secondary education around the age of 12 in the 7th class, after completing the primary course, and he leaves school at 18 after completing the 1st class.

On completing the secondary course and passing both parts of the *baccalauréat*, pupils can be admitted, according to their ability, to any of the following higher educational institutions of their choice: Faculty of Arts; Faculty of Law; Faculty of Medicine and Pharmacy; Faculty of Education; College of Architecture; National College of Administration; College of Fine Arts; College of Radio and Electrical Engineering; College of Engineering; Military College.

It is generally while in the *lycée* or *collège* that the pupil is guided as to his fitness for one of the above institutions of higher education.

All Viet-Namese secondary schools open each year in mid-September and close around the end of June. The possibility of making the long vacation coincide with the hottest period of the year is at present being studied.

Time-tables are worked out at the beginning of each school year by the heads of secondary schools, with due regard to the number of hours prescribed for each subject in the syllabus. The dates of holidays and vacations are fixed each year by the Department of Education on the recommendation of the Office of the Director of Education.

Public lycées and collèges. At the beginning of the school year pupils for the 7th class of the national public *lycées* are recruited by means of a competitive entrance examination open to holders of the primary school certificate, between 12 and 15 years of age in the case of boys, 12 and 16 in the case of girls.

The secondary course comprises two cycles: the first cycle, or general preparatory course (from the 7th to the 4th class), which leads to the BEPC; and the second cycle (from the 3rd to the 1st class), in which the pupil can choose one of four different courses, emphasizing respectively modern languages, classical languages, mathematics, and experimental sciences, and which leads to the *baccalauréat*, 1st and 2nd parts.

Pupils obtaining a distinction in the examination for the BEPC at the end of the first cycle are automatically admitted to the 3rd class, the others having to take a competitive entrance examination.

The same syllabuses are applied throughout all secondary schools in the Republic of Viet-Nam.

The following table shows the number of hours being devoted weekly to the various subjects taught in the two cycles of the general secondary course as from the school year 1958/59.

TIME-TABLE FOR GENERAL SECONDARY SCHOOLS
(in hours per week)

Subject	Class			
	7	6	5	4
First cycle				
Quôc-Van[1] and Chinese characters	5+1	5+1	5+1	5+1
History and geography	2	2	2	2
Civics	2	2	2	2
Modern languages	6	6	5	5
Natural sciences	1	1	2	2
Physics and chemistry	2	2	2½	2½
Mathematics	3	3	3½	3½
Drawing	1	1	1	1
Music	1	1	1	1
Physical culture	3	3	3	3
Handicraft (boys)	1	1	1	1
Child care and domestic science (girls)	1	1	1	1
Total	29	29	30	30

Subject	Modern languages			Classical languages			Mathematics			Experimental sciences		
	3	2	1	3	2	1	3	2	1	3	2	1
Second cycle												
Quôc-Van[1]	5	5	0	5	5	0	3	3	0	3	3	0
History and geography	2	2	2	2	2	2	2	2	2	2	2	2
Civics	2	2	1	2	2	1	2	2	1	2	2	1
Philosophy	–	–	9	–	–	9	–	–	3	–	–	4
First modern language	6	6	6	6	6	6	4	4	3	4	4	3
Second modern language	6	6	6	–	–	–	4	4	3	4	4	3
Classical languages (Chinese characters or Latin)	–	–	–	6	6	6	–	–	–	–	–	–
Physics and chemistry	1	1	1	1	1	1	4	4	6	4	4	6
Mathematics	1	1	1	1	1	1	6	6	8	4	4	4
Natural sciences	1	1	1	1	1	1	1	1	1	3	3	4
Physical training	3	3	3	3	3	3	3	3	3	3	3	3
Domestic science and child care (girls)	1	1	–	1	1	–	1	1	–	1	1	–
Total (boys)	27	27	30	27	27	30	29	29	30	29	29	30
Total (girls)	28	28	30	28	28	30	30	30	30	30	30	30

1. Viet-Namese language, literature and culture.

Twice a year the progress of pupils is tested by means of written papers *(compositions)*. The results, together with the observations of the teachers and principal of the school, are forwarded to the parents by means of a school report book. In these papers pupils must obtain the pass-mark for each subject if they are to be promoted to the next grade without an examination. Those who fail to do so sit for a promotion examination at the beginning of the school year.

As already mentioned, pupils in the 4th, 2nd and 1st classes sit for the BEPC, the first and the second part of the *baccalauréat*, respectively. Statistics for 1958 show that 9,265 out of 39,683 candidates passed the BEPC; 2,661 out of 12,913 passed the 1st part of the *baccalauréat;* and 1,307 out of 3,554 passed the 2nd part. The regulations governing these three examinations were laid down by the Departmental Order of 10 January 1955.

Furthermore, Order No. 305 GD/ND of 3 April 1956 set up a Board for the Supervision of Secondary School Examinations. The task of this board is to supervise the work of the examiners by re-examining the papers already corrected with a view to guaranteeing the impartiality of the examinations and thus enhancing the value of the certificates issued by the Government.

After the third reform of education, the Departmental Order of 5 April 1956 laid down the following requirements with regard to modern languages for the *baccalauréat* (1st and 2nd parts): either French or English may be chosen as the compulsory modern language (before promulgation of this Order, French was the compulsory modern language); candidates may also choose a second modern language from English, French, Italian, German, Spanish, or Japanese.

Teaching staff. During the school year 1957/58 successful steps were taken with a view to improving the vocational training and financial status of the teaching body, special attention being paid to the training of primary and secondary schoolteachers.

Graduates of the Faculty of Education, Saigon, *licenciés ès lettres* and *licenciés ès sciences* are eligible for permanent appointment as teachers in general secondary schools. Teachers teach the subjects in which they specialized. To meet the most urgent needs created by the staff shortage that arose in 1957/58, the Department of Education recruited temporary teachers from amongst candidates who had passed both parts of the *baccalauréat* or an equivalent examination, to teach the first cycle in secondary schools.

Vocational and technical schools

Apprenticeship centres. Two apprenticeship centres train qualified workmen for a number of occupations—fitting, boiler-making, ironworking, casting, carpentry, electrical trades, internal combustion engines. The courses now last 3 years, but are to be extended to 4, with the result that pupils will receive a fairly thorough theoretical training, which will enable some of them to continue their studies in schools for foremen.

A survey carried out in the apprenticeship centres enabled the authorities to conclude that the majority of pupils wish to continue their studies in institutions at a higher level, and that in most cases the financial status of the family cannot be regarded as an obstacle to their doing so.

The first-year pupils are selected by competitive examination from amongst candidates leaving the workshop schools and holders of the primary school certificate. At the end of the third year those who pass the leaving examination obtain a vocational training certificate (*Certificat d'aptitude professionnelle*—CAP).

Collège technique. This is a first cycle technical secondary school which trains pupils who will eventually become foremen in industry when they have had the necessary experience. The *collège technique* at Hué recruits its pupils (about 300 for the school year 1958/59) by competitive examination from amongst holders of the primary school certificate aged not less than 12 and not over 16. The syllabus for the 7th and 6th classes is general education and vocational guidance, and for the 5th and 4th classes, vocational training and specialization.

The special branches from which pupils may choose are fitting, casting, boiler-making and welding, carpentry and joinery, electricity, internal combustion engines, steam engines. The course leads to the Certificate of Industrial Training (*Brevet d'enseignement industriel*).

Lycée technique. This school offers both cycles of technical secondary education. It has the dual function of providing vocational education for boys—and in certain cases for girls—who will occupy intermediary positions in the industries and crafts, and technical secondary training up to *baccalauréat* level and leading to higher education.

The *lycée technique* at Saigon, which now has 1,554 pupils, recruits them by competitive examination from amongst holders of the primary school certificate aged not less than 12 and not over 16. After a multi-purpose course lasting 2 years, pupils have to choose between two branches: the 'mathematical' branch, extending over the 5th, 4th, 3rd, 2nd and 1st classes; and the 'industrial' branch, extending over the 5th and 4th classes.

The syllabus applied in the classes of the 'mathematical' branch are aimed at giving pupils some idea of technology and draughtsmanship together with a good foundation of physics and mathematics.

The 'industrial' branch leads to the Certificate of Industrial Training; the 'mathematical' branch leads to the *baccalauréat technique*, which is recognized as equivalent to the general education *baccalauréat*.

Applied art schools. Three schools of applied arts, at Gia-Dinh, Biên-Hoà and Thu-Dau-Môt respectively, take some 455 Viet-Namese pupils. These schools are responsible for training qualified workmen and artisans capable of reviving traditional Viet-Namese arts and crafts, as well as designers or technicians capable of assisting heads of undertakings and becoming talented decorators.

The special branches taught at the Gia-Dinh School of Applied Arts fall into the graphic arts section (drawing, engraving and lithography) and the building section.

The Biên-Hoà School of Applied Arts teaches ceramics, bronze-work and moulding.

Finally, the recently founded School of Applied Arts near Hué gives instruction in no less than five special branches—cabinet-making, decoration, furniture designing, sculpture and lacquer work.

In all these schools the courses last 4 years. The curricula comprise some general educational subjects, some technical and some vocational. Pupils are recruited by competitive examination from amongst holders of the primary school certificate aged not under 14. The courses lead to a Certificate of Applied Arts.

Higher technical schools. These provide more highly specialized training at a more advanced level than the *collège technique* or the apprenticeship centre.

The National School of Commerce provides boys and girls with the training in technical, economic, legal and social questions which is indispensable in the civil services, commerce, industry and banks. The course is arranged in such a way that after the essential period of probation for gaining experience, graduates are in a position to rise to managerial posts. The top 15 graduates each year have the option of entering the administration.

Pupils are recruited by competitive examination from amongst holders of the *brevet d'études du premier cycle* (BEPC), or some other certificate of intermediate standard. A quarter of the total number of pupils are admitted without sitting for the examination: these are secretaries in national services who have been recommended by their superiors, and ex-servicemen who have served over two years in the armed forces. Candidates recruited in this way must hold the same certificates as those recruited by examination. The course covers 3 years and leads to the Certificate of Commercial Studies.

The National School of Agriculture, founded at Blao in September 1956 and inaugurated in December 1956, has so far enrolled 148 regular students and 26 *auditeurs libres* (students not entitled to sit for the examinations).

At the first graduation some 50 students obtained their certificate after three years of theoretical and practical studies and six months' probation in the Department of Agriculture's special stations.

The School of Applied Agriculture at Cân-Tho was inaugurated at the beginning of the school year 1957/58 with an enrolment of 63 students, including 13 from amongst the ethnic minorities of the plateau region in Central Viet-Nam.

Teacher training schools

The National Teacher Training School (École Normale Nationale), now transferred to Saigon, recruits pupils by competitive examination from amongst holders of the BEPC. They take either an accelerated training course lasting 1 year, or the normal 3-year course. Those who take the accelerated course and pass the examination at the end of the year obtain a Certificate of Proficiency in Teaching (*Certificat d'aptitude pédagogique*), which entitles them to appointments as teachers in primary schools with civil service rank. Those who pass the examination at the end of the 3-year course are qualified to take complementary (primary continuation) classes and may be appointed on a temporary basis to teach the first two grades of the first cycle of the secondary course.

A branch of the National Teacher Training School at Saigon operates at Banméthûot for the benefit of the ethnic minorities from the plateau regions. In the school year 1957/58 some 30 primary school teachers were trained there.

The curricula, laid down by departmental order, extend over three years and correspond more or less to those of the second cycle of the secondary course. The syllabus includes the following subjects: Viet-Namese, French and English, ethical instruction and civics, history and geography, mathematics, physics and chemistry, natural sciences, theory and practice of teaching, child psychology, handicrafts and drawing, school administration, professional ethics, music, physical culture and youth activities, agriculture, hygiene.

The staff of teacher training schools is recruited at present from amongst inspectors of primary and secondary schools, who are assisted by a certain number of lecturers. The model classes are taken by the most experienced men and women teachers.

Other specialized schools

The National Conservatory of Music at Saigon, founded in October 1956, trains musicians and music teachers for the different educational levels.

Out-of-class activities

Every secondary school must have its youth group, in which civic, ethical and physical training complement the general instruction given at school. Regulations governing these youth groups were promulgated in Departmental Order No. 270 GD/ND of 21 February 1957.

During the school year 1957/58 and at the 1958 National Congress of Education, the question of the reorganization of youth groups was debated at length, and a practical programme likely to be of great service to educationists was drawn up.

The Department of Education also organized three training camps for teachers acting as youth leaders. Some 500 teachers participated.

Physical culture and sport have been very much encouraged in secondary schools. For the best performances of the secondary schools' sports associations, prizes have been awarded annually since 1957. Furthermore, pupils who hold the Sports Certificate receive a 'bonus' of a maximum of 13 marks at the BEPC, or intermediate examination.

Finally, in the summer of 1958 a course was inaugurated at Nha-Trang for initiating inexperienced teachers into physical culture and sports methods and youth activities.

Since the school year 1955/56 four holiday camps have been organized annually in the hills or at the seaside for some 3,000 to 5,000 pupils. Excursions are also arranged by heads of secondary schools on the occasion of different festivals.

Most secondary schools have their own savings bank, which allows the setting up of school co-operatives and canteens, and the raising of funds for worthy causes. Parents generally make a considerable financial contribution to these out-of-class activities.

TRENDS AND PROBLEMS

The National Government is still making great efforts to extend general secondary education and establish a network of technical schools and art schools to meet the requirements of a young independent State.

The carrying out of this programme for extending education is of course subject to budgetary resources.

Building new schools is a relatively easy problem to solve, for it involves only one outlay of money. However, finding the credits for teaching staff and salaries is a serious problem.

Public secondary schools were very short of teachers for the school year 1957/58. The Department of Education was then obliged to recruit teaching assistants paid by the hour and to ask all teachers, both permanent and those engaged on a contractual basis, to do a considerable amount of overtime.

It is the task of the Faculty of Education at Saigon to train secondary school teachers, a number of whom also come from the Faculties of Sciences and Arts. To overcome the shortage of teachers, the Department of Education contemplates setting up a centre which would combine all the teacher training schools. Secondary education cannot progress until it has the necessary staff, so the building of new schools and the opening of new classes can only be a gradual process. Moreover there is still the task of providing the existing schools with the teachers they lack, organizing sufficient classes so that pupils completing the first cycle of the secondary course may continue their studies in the second cycle, and expanding accommodation in the first cycle so that holders of the primary school certificate, the number of whom increases yearly, may be able to enter secondary schools.

New school buildings are mainly required in those provinces which have no national secondary institutions, and in the plateau regions of Central Viet-Nam, where the Government's plan for extending education is to be applied.

The Office of the Director of Primary, Secondary and Popular Education has prepared and submitted to the Secretary of State for Education a draft five-year plan for the extension of secondary education. If this plan is approved and implemented, in 1963 Viet-Nam will have 1,933 secondary classes with an enrolment of 106,000 pupils.

All the nation's resources must be mobilized in order to extend general education, build up technical education and hasten the industrialization of the country.

[*Text prepared by the Viet-Namese National Commission for Unesco in July 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 12,800,000.
Area: 65,948 square miles; 170,806 square kilometres.
Population density: 194 per square mile; 75 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, school enrolment (not including some 476,000 persons attending adult education courses) reached a total of 975,000 pupils, which was about 8 per cent of the total population. Of these pupils about 1.5 per cent were in pre-primary schools, 87 per cent in primary schools, 11 per cent in all types of secondary schools, and 0.5 per cent in higher education. The proportion of girls was 38 per cent in primary schools, 32 per cent in secondary schools, 31 per cent in teacher training schools and 18 per cent in higher education faculties other than the faculty of education. Women teachers constituted 34 per cent of the teaching staff in primary schools, 16 per cent in secondary schools. The average number of pupils per teacher was 57 in the former and 33 in the latter. Between 1953 and 1957, there was a 51 per cent increase in primary school enrolment, while the enrolment in general secondary schools and institutions of higher education faculties more than doubled. (See Table 1.)

Enrolment trends in secondary education, 1950–57. All types of secondary education grew rapidly during the period 1950–57. While the rates of growth in vocational and teacher training enrolment were much higher than in general secondary education, the last type of education still predominates. The proportion of girls in teacher training has diminished from one-half or more to less than one-third, which is also the proportion in general secondary schools. Girls do not seem to take up vocational education to any large extent. For the period 1955–57, the average total enrolment in all types of secondary education did not quite reach 6 per cent of the estimated population 15–19 years old. (See Table 2.)

Examination results in secondary education, 1953–57. In the two main categories of certificates—the *brevet* (secondary school, lower stage) and the *baccalauréat*, first part—the number increased four and a half times between 1953 and 1957. The number of students completing the second part of the *baccalauréat* also increased more than three times. The most rapidly increasing category was that of primary school teacher training certificates, which multiplied more than eight times during this period. In the categories of vocational training certificates, technical school diplomas (radio, electricity) and school of navigation diplomas, there were notably fewer recipients in 1957 than in 1953. (See Table 3.)

Educational finance, 1957. For the fiscal year beginning in January 1957, total recurring expenditure for education was budgeted at 533.5 million piastres, or an average of 43 piastres per inhabitant. The distribution of this budget by level and type of education is shown in Table 4.

Source. Republic of Viet-Nam: Ministry of National Education, Statistical Office, reply to Unesco questionnaire.

1. SUMMARY OF SCHOOL STATISTICS, 1953-57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery classes, public	1957/58	6	27	22	1 435	725
	Kindergartens and nursery classes, private	1957/58	51	268	183	12 620	5 940
	Total	**1957/58**	**57**	**295**	**205**	**14 055**	**6 665**
	„	1956/57	22	218	167	13 083	6 283
	„	1955/56	...	...	...	...	...
	„	1954/55	...	...	...	...	...
	„	1953/54	...	...	...	...	...
Primary	Communal schools, public	1957/58	394	786	45	46 903	14 747
	Elementary schools, public	1957/58	2 099	4 355	1 035	261 841	106 925
	Full primary schools, public	1957/58	924	7 326	2 799	429 555	158 661
	Elementary schools, private	1957/58	642	780	355	36 057	14 845
	Full primary schools, private	1957/58	327	1 647	856	71 662	29 332
	Total	**1957/58**	**4 386**	**14 894**	**5 090**	**846 018**	**324 510**
	„	1956/57	3 589	12 011	4 402	553 936	...
	„	1955/56	3 144	11 956	...	534 420	...
	„	1954/55	1 662	8 798	...	434 745	...
	„	1953/54	3 159	11 076	...	558 806	...
Secondary							
General	Secondary schools (lower stage), public	1957/58	35	832	209	33 530	10 905
	Secondary schools (higher stage), public	1957/58	16	37	5	7 742	2 237
	Secondary schools (lower stage), aided private	1957/58	22	[1]274	[1]44	7 751	2 384
	Secondary schools (higher stage), aided private	1957/58	5	[1]63	[1]3	932	165
	Secondary schools (lower stage), unaided private	1957/58	158	1 777	241	50 802	17 385
	Secondary schools (higher stage), unaided private	1957/58	21	264	16	5 247	1 296
	Total	**1957/58**	**257**	**3 247**	**518**	**106 004**	**34 372**
	„	1956/57	170	3 372	536	69 681	22 710
	„	1955/56	133	2 161	...	53 501	...
	„	1954/55	118	1 344	...	43 000	...
	„	1953/54	181	1 622	...	50 526	...
Vocational	Technical schools, public	1957/58	2	87	–	1 677	18
	Apprenticeship centres, public	1957/58	2	33	–	530	–
	Schools of applied arts	1957/58	3	35	–	329	17
	National School of Sea Navigation	1957/58	1	[2]22	[2]–	90	–
	Commercial school, public	1957/58	1	[2]13	[2]–	134	43
	National School of Music	1957/58	1	[2]26	[2]6	260	97
	Total	**1957/58**	**10**	**[2]216**	**[2]6**	**3 020**	**175**
	„	1956/57	9	[2]207	[2]9	2 305	149
	„	1955/56	7	[2]94	–	1 723	...
	„	1954/55	7	[2]79	–	1 056	...
	„	1953/54	6	[2]74	–	642	...
Teacher training	Teacher training school of South Viet-Nam, public	1957/58	1	21	2	61	27
	National School of Education	1957/58	1	77	13	908	288
	Teacher training school of the Region of the Hauts Plateaux	1957/58	1	3	–	30	3
	Accelerated teacher training courses, public	1957/58	6	78	9	302	77
	Total	**1957/58**	**9**	**179**	**24**	**1 301**	**395**
	„	1956/57	7	140	18	1 142	362
	„	1955/56	3	63	6	523	204
	„	1954/55	2	33	3	253	100
	„	1953/54	3	45	4	312	130
Higher							
Teacher training	Faculty of education, public						
	Total	**1957/58**	**1**	**49**	**1**	**166**	**67**
	„	1956/57	1	44	2	126	46
	„	1955/56	1	35	...	101	28
	„	1954/55	1	19	...	72	9
	„	1953/54	1	27	...	35	5
General and technical	Faculties, public	1957/58	7	179	10	4 173	752
	Higher school of architecture, public	1957/58	1	12	–	46	2
	Total	**1957/58**	**8**	**191**	**10**	**4 219**	**754**
	„	1956/57	5	138	13	3 173	597
	„	1955/56	5	101	...	2 728	498
	„	1954/55	5	101	...	2 082	365
	„	1953/54	5	85	...	2 057	...

1. Including part-time teachers.
2. Part-time teachers only.
3. Including part time teachers (61 in 1957, 69 in 1956, 14 in 1955, 15 in 1954 and 15 in 1953).

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Special	Re-education centre of Niu Due	1957/58	1	13	–	390	...
	Schools for the blind	1957/58	2	8	3	64	6
	Total	**1957/58**	**3**	**21**	**3**	**454**	**...**
	„	1956/57	2	20	–	460	...
	„	1955/56	2	19	–	446	...
	„	1954/55	2	13	–	142	...
	„	1953/54	2	...	–	...	...
Adult	Courses of reading and writing	1957/58	21 768	31 721	...	462 567	...
	Courses of general and/or vocational training	1957/58	...	428	...	13 812	...
	Total	**1957/58**	**...**	**32 149**	**...**	**476 379**	**...**
	„	1956/57	...	17 245	...	411 720	...
	„	1955/56	...	2 055	...	174 532	...
	„	1954/55	...	1 137	...	49 041	...
	„	1953/54	...	3 320	...	244 011	...

2. TRENDS IN SECONDARY EDUCATION, 1950–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1950	29 934	...	352	3	63	48			
1951	38 737	...	440	3	97	55			
1952	43 798	...	629	3	84	51	42	*1 240	*3.4
1953	50 526	...	642	2	312	42			
1954	43 000	...	1 056	1	253	40			
1955	53 501	...	1 723	...	523	39			
1956	69 681	33	2 305	6	1 142	32	80	*1 350	*5.9
1957	106 004	32	3 020	6	1 301	30			

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Lower general secondary certificate (*brevet*)	2 016	...	2 353	...	3 299	...	6 508	...	9 265	...
Baccalauréat										
1st part	577	...	577	...	763	...	1 685	...	2 661	...
2nd part	401	...	225	...	409	...	764	...	1 307	...
Lower technical secondary certificate (*brevet*)	30	–	42	–	141	–	168	–	179	–
Technical *baccalauréat*										
1st part	–	–	–	–	37	5	108	6	145	8
2nd part	–	–	–	–	–	–	15	2	84	4
Vocational training certificate	113	–	25	–	97	–	65	–	97	–
Certificate of applied arts	22	–	29	1	34	1	41	–	100	3
Technical school diplomas (radio, electricity)	34	–	34	–	31	–	19	–	–	–
School of public works diploma	15	–	38	–	26	1	51	1	96	2
School of navigation diploma	104	–	65	–	32	–	45	–	16	–
Teacher training certificate for primary schools	91	32	90	40	180	77	623	193	766	269

4. EDUCATIONAL FINANCE, 1957 (in piastres)[1]

Recurring expenditure by level and type of education	Amount		Per cent	
Total recurring expenditure[2]		**533 497 300**		**100.0**
Central administration		53 496 800		10.0
Instruction		434 534 600		81.5
Primary education	218 631 300		41.0	
Secondary education	163 965 000		30.7	
General	124 099 800		23.3	
Vocational	31 077 100		5.8	
Teacher training	8 788 100		1.6	
Higher education	40 343 700		7.6	
Special education	5 094 600		1.0	
Adult education	6 500 000		1.2	
Other recurring expenditure (for scholarships, publications, libraries, museums, historical monuments, etc.)		45 465 900		8.5

1. Official exchange rate: 100 piastres = 2.86 U.S. dollars.

2. Budget estimate.

NORTH VIET-NAM

THE EDUCATIONAL SYSTEM

In 1950 the educational system was reformed in terms of both structure and content, with the setting up of a 9-year unified school of general education; this was organized in three stages (4-3-2). At the beginning of 1956 the General Education Congress recommended the extension of the general school course to 10 years (4-3-3), and laid down the principles for a general reorganization of the teaching. In the following year new regulations for the 10-year school were adopted.

Many children attend a preparatory or pre-primary class before entering the 10-year school proper. On the completion of the successive levels of the general school pupils may enter different types of vocational and technical education. A reorganization of higher education was begun in 1956 with the consolidation of two higher teacher training schools into a Pedagogical Institute, the founding of a university, which among its functions trains teachers for the third (upper secondary) stage of the 10-year school, a Polytechnical College and a College of Agriculture and Forestry. Of more recent foundation are the College of Fine Arts, the College of Economics and Fine Arts at Hanoi, and a Teachers' College at Vinh.

Extensive provision has also been made for the general and vocational education of adults.

TYPES OF SECONDARY EDUCATION

General secondary schools

The purpose of the schools of general education is to produce workers of a new type, imbued with socialist ideals,

TIME-TABLE FOR GENERAL SECONDARY SCHOOLS
(2nd and 3rd stages of 10-year school; in 45-minute periods per week)

Subject	Year					
	5	6	7	8	9	10
National literature	6	5 (6)	6 (5)	4 (5)	5	5
Mathematics	5	6 (5)	5 (6)	6 (5)	5	6
History	2	2	2	2	2	2
Geography	2	1 (2)	2 (1)	2 (1)	1 (2)	–
Political studies and current affairs	1	1	2	2	3 (2)	3
Biology	2	3 (2)	2	2	1 (2)	–
Physics	–	2	2 (3)	2 (3)	3 (2)	4
Chemistry	–	–	2	2	2	3
Foreign language	3	3	2	3	3	2
Technical drawing	1	1	–	–	–	–
Music	1	1	–	–	–	–
Hygiene	1	–	–	–	–	–
Total	24	25	25	25	25	25

possessing a good fund of general and technical knowledge, and enjoying good health.

The school year lasts 8 months and comprises 30 weeks of classroom instruction and productive work, the latter consisting of a 4-hour period every week.

The curriculum in the 2nd and 3rd stages of the 10-year school is given in the precedent table.

In addition, one period a week is devoted to physical education in schools which have an instructor.

Vocational and technical schools

Technical schools (technicums) admit pupils who have completed 7 years of general education, and offer 3-year courses in various specialities. There are at present 13 technicums training technical staff for the railways, post and telegraph services, public health, water transport, agriculture, building, metal-working and machine construction, mining, etc.

Teacher training schools

There are several levels. The institutions which train teachers for grades 1 to 4 admit pupils who have completed grade 4 and give a 3-year course. There are also 1-year training schools based on completion of the 7-year school.

Teachers for grades 5 to 7 and grades 8 to 10 are trained in institutions at upper secondary and higher level.

TRENDS AND PROBLEMS

During the three-year plan from 1958 to 1960 education is to be expanded and the quality raised. The basic principles are the need to combine harmoniously theory and practice, teaching and productive work.

[*Text prepared by the Unesco Secretariat in June 1960.*]

STATISTICS

North Viet-Nam has a population of 15 millions (mid-year 1958 estimate) to an area of 59,924 square miles or 155,203 square kilometres. In the absence of officially published statistics known to the Unesco Secretariat, the following data may be quoted from a recent source: P. I. Samoukov, 'Razvitie narodnogo obrazovanija v Demokratičeskoj Respublike V'etnam', *Sovetskaja pedagogika*, Moskva, Akademija pedagogičeskoj nauk RSFSR, No. 5, May 1960, pp. 64–72.

SCHOOLS OF GENERAL EDUCATION, 1958/59

Level of course	State schools		Local committee schools		Private schools		Total	
	Schools	Pupils	Schools	Pupils	Schools	Pupils	Schools	Pupils
1st stage (grades 1 to 4)	4,628	491,749	349	460,110	102	12,996	5,124	964,855
2nd stage (grades 5 to 7)	225	78,890	96	13,920	65	24,182	386	116,992
3rd stage (grades 8 to 10)	23	12,941	1	113	7	2,095	31	15,149

YEMEN

The graded school system is a recent development in Yemen. The full primary course lasts 6 years but all six classes are not yet to be found in most schools. General secondary education, introduced in 1955, provides for a 6-year course divided into two cycles, intermediate and secondary proper. The only form of technical education is a class for radio operators annexed to the secondary school at Sanaa. There is also an institution for training office workers which was set up in 1958 and annexed to the Sanaa intermediate school. In addition to these secular schools, there is a religious educational system, in which the full course of study, predominantly theological, lasts 12 years. A comparatively large number of Yemeni students receive their education abroad at both school and university levels.

TRENDS AND PROBLEMS

Owing to the long isolation of the country there are many problems to be overcome before a satisfactory national educational system can be developed. The heavy drop-out

of school children in the upper primary school grades, in the few schools where these grades exist, is due to the unsuitability of the present curriculum and methods, to lack of interest on the part of parents and to the need for boys to help with the work in the fields. The lack of well-organized curricula at primary level is partly responsible for the inadequate standards of pupils' work in the secondary schools. Another contributing cause is the fact that, with the exception of a few teachers recruited from other Arab countries, teachers in the schools of Yemen are not yet sufficiently well qualified. Basic problems therefore include the general revision of the content and methods of teaching at all levels as well as the provision of more schools and the training of teachers. As agriculture is the country's main source of wealth there is an urgent need for appropriate vocational schools. For some time to come Yemen will have to rely on recruiting expatriate teachers and on sending many of its own nationals abroad for education and training.

[*Text prepared by the Unesco Secretariat in January 1960.*]

STATISTICS

Population (mid-year 1958 estimate): 4,500,000.
Area: 75,290 square miles; 195,000 square kilometres.
Population density: 60 per square mile; 23 per square kilometre.

No new information on school enrolment and educational finance has become available since the publication of *World Survey of Education: II—Primary Education*, which contains data on Yemen for 1956.

YUGOSLAVIA

THE EDUCATIONAL SYSTEM

The educational system of the People's Federative Republic of Yugoslavia is based on the principle of the equality of all citizens and planned in the light of the aims of a socialist society. The basic institution is the primary school, providing an 8-year course, which is compulsory for all children between 7 and 15 years of age. The secondary schools include various general and vocational schools. The higher professional schools, the schools of fine arts and the universities represent the third level of the educational system. There are also schools at which adults can receive general education and further vocational training.

The different levels are not enclosed in watertight compartments. Citizens who prove their ability by passing a special examination may be admitted to the university even if they have not had the usual pre-university schooling.

The flexibility of the system is most evident in the secondary schools, which do not rank in importance according to the length of the course they provide or their speciality. All these schools are important to the general community, for each is designed to meet a specific social need, whether it trains skilled workers, technicians or teachers. Vocational schools, once backward and underrated, are now assuming great importance in the present stage of intensive economic development, and a basic reform of vocational education is being carried out.

Under the 1946 Constitution, schools and other educational establishments must be open to all sectors of the population; this implies not only the absence of any discrimination in pupil enrolment, but also the extension of compulsory schooling to all children. Education is free of charge and the community provides the most gifted pupils with the means of continuing their studies through all three levels. The Constitution lays down the principle that the school shall be separated from the Church and that the opening of private schools must have legal sanction. There are in fact no private schools.

The general education law, adopted in 1958, defines schools and other educational establishments as independent institutions organized on the principle of self-government. The school is a factor in the life of society, not only because it is a specially important social institution, but also on account of its structure, the way it is controlled (through school committees) and, lastly, by reason of the close co-operation established between itself and the municipality or social unit to which it belongs and whose day-to-day problems it shares.

The People's Federative Republic of Yugoslavia consists of six federated people's republics—Serbia, Croatia, Slovenia, Bosnia-Herzegovina, Montenegro and Macedonia —in which the inhabitants are of five nationalities (Serb, Croat, Slovenian, Macedonian and Montenegrin). In the schools of each republic, the medium of instruction is the children's mother tongue, except in the universities and higher professional schools, each of which uses the language

of the people of the republic in which it is situated—Slovenian in Slovenia, Macedonian in Macedonia or Serbo-Croat in the other republics. However, this diversity of nationalities and languages is no obstacle to the unity of teaching methods and of the general aims of education. The unity of the educational system is guaranteed by the laws and instructions of federal bodies, including the Higher Council for Public Education in Yugoslavia, which concerns itself with educational plans and curricula. On the basis of these general instructions, education councils of the republics draw up curricula and syllabuses for the various types of schools. The unity of the system does not, however, imply uniformity of schooling. The municipal education councils may adapt the primary curriculum to meet regional needs and the circumstances of each particular school.

THE DEVELOPMENT OF SECONDARY EDUCATION

Until the end of the first world war, the peoples of Yugoslavia lived in different states. Apart from the independent kingdoms of Serbia and Montenegro, the majority of these peoples were under Austro-Hungarian rule (those living in Croatia, Slovenia, Vojvodina, Slavonia and Bosnia-Herzegovina) or Turkish rule (Macedonia, Kosovo-Metohia and part of South Serbia, until 1912). After the first world war, the dismemberment of the Austro-Hungarian Empire made it possible for the Yugoslav peoples to realize their long-cherished hopes of unification in a single state (December 1918).

During the early post-war years, most of the schools retained the policies and curricula in force in the states to which they had belonged before the creation of Yugoslavia. The 10 years following its establishment (up to 1929) were, in fact, marked by protracted political dissensions over the reorganization of the educational system. The main aim of the new system, established under the 1929 laws, was the unification of schools. The law on public schools set up the compulsory primary school with an 8-year course divided into two stages—four elementary classes and four upper primary classes. After completing the 4-year elementary stage, children could go on to the higher classes of the same school or else to an academic secondary school (*gimnazija* or similar establishment). Teaching was free in the schools providing an 8-year course. However, it should be pointed out that a high proportion of children did not even go through the elementary stage, a fact which accounts for the millions of illiterates who raised a serious problem for Yugoslav education after the second world war. The upper primary and complementary schools trained their pupils for commerce, trades, industry and agriculture or prepared them for the secondary vocational schools. The *gimnazije* and similar schools provided a partial 4-year course and a full 8-year course. At the end of the fourth year, pupils sat for an examination known as the 'little baccalaureate', and at the end of the eighth year they sat for the leaving examination or full baccalaureate. To transfer from upper primary and complementary schools to the upper classes of a *gimnazija*, pupils had to pass an entrance examination.

Little provision was made for vocational teaching, as the country's economic backwardness and semi-colonial position limited the need for highly trained staff. In 1929, a law on teacher training schools, which were all state-run boarding establishments, increased their course from 4 to 5 years. They accepted only pupils who had passed the 'little baccalaureate' and a special entrance examination.

The 1929 educational legislation remained in force until the German invasion of Yugoslavia in April 1941. Yugoslavia was then parcelled up and occupied by Germans, Italians, Hungarians and Bulgarians. Many schools were closed throughout the war, some continued to operate though with frequent interruptions, and others laboured under very difficult conditions.

At the close of hostilities, education was in a critical situation. A large proportion of the population (approximately one-third) was illiterate, the teaching staff had been seriously depleted and about 50 per cent of the school buildings had been damaged or destroyed. To solve these difficult problems and to apportion the limited financial resources on a systematic basis, a centralized system of control for education had to be adopted in the post-war years.

Schools and general scientific and cultural institutions were controlled by each republic's Ministry of Education and those of departments and districts by the local education councils. The Ministry had the exclusive right to open schools, to appoint and transfer teachers, to distribute funds and control their use, to draw up educational plans and curricula and to approve textbooks. The vocational schools were controlled by different ministries, according to the special subjects taught. However, after 1947, the Ministry of Education assumed control of a number of vocational schools and, in 1948, a Department of Vocational Education was set up.

The general distinguishing features of education during this period were the extension of the period of compulsory schooling, the large increase in the number of pupils from the proletariat in all schools, the sharp rise in the number of schools, the rapid growth of vocational training, and the large share taken by the people in the control of public education.

In 1950 the adoption of the basic law on the control of state enterprises, economic enterprises and economic co-operatives by workers' associations, marked the beginning of the process of administrative decentralization. The year 1953 saw the adoption of the basic constitutional law on the social and political organization of the People's Federative Republic of Yugoslavia and on the federal organs of authority, which laid the foundations for the decentralization of the state's powers. The system of self-government was then extended to all spheres of social life. In 1955, for instance, the general law on the control of schools was adopted. The agencies of local self-government, such as school committees and municipal and district councils for education, then assumed control of the schools. The 1958 general law on public education continued the democratization of education by introducing further reforms.

Legal basis

The 1958 general law on public education is the basis of present school legislation. This general law allowed a

period of one year for the framing of a law on primary schooling and of a law to govern the *gymnazije*, and a period of two years for the framing of a general law on secondary and higher vocational schools and teacher training. In 1959, the National Assemblies of the People's Republics had already passed the laws on primary schools. The bills on *gymnazije* are still under discussion and should be adopted by 1 September 1959.

The law on compulsory schooling, adopted in 1955, requires all children between 7 and 15 to attend primary school regularly. The penalty for infringement is a fine of 10,000 dinars imposed upon the parents or guardian, the headmaster of the school or any other person in charge of a child, who, through negligence, allows the child to stay away from school for no valid reason. If found guilty a second time, the person responsible is liable to imprisonment (up to 30 days).

The situation of apprentices is governed by special provisions. Any person is regarded as an apprentice, who, in a factory, shop, crafts centre, or workshop, learns a definite occupation or trade. The apprentice is instructed by a trained worker in the occupation he wishes to follow, or by a master craftsman or the manager (in the case of a shop). At the beginning of the apprenticeship, the director of the enterprise concludes a contract with the apprentice. The latter receives a monthly wage and may not be employed on work unrelated to the trade or occupation he wishes to learn. Apprentices are not allowed to work at night or overtime. The normal period of apprenticeship to certain professions or trades is three years, after which the apprentices pass an examination. The period of apprenticeship to a very few professions or trades may be either two or four years. Each year, apprentices are entitled to 30 days holiday during the summer school holidays and 7 days during winter school holidays. They are required to have a medical examination at the beginning of their apprenticeship and at least once a year throughout the period of training. Apprentices may not be subjected to physical punishment. After passing a final examination, the apprentice is recognized as a skilled worker, a journeyman craftsman or a shop assistant. The local people's committee may, on its own initiative or on the proposal of the competent chamber of commerce or labour inspectorate, prohibit the retention of apprentices in enterprises which fail to provide the requisite facilities.

Administration

The Higher Council of Public Education is the highest educational authority in Yugoslavia. Its function is to work out the general outline of educational plans and curricula, to formulate general principles for the preparation of textbooks, to make suggestions and to consider general questions concerning the development of formal and general education. If need be, it draws up recommendations and conclusions and advises on the handling of problems falling within its competence. Some of the members of the Higher Council of Education are appointed by the Federal Executive Council (Cabinet), while the others (three for each federated republic) are chosen by the education councils of the different republics.

These councils adopt, in accordance with the general policy laid down by the Higher Council of Public Education, the education plans and curricula of all schools within the territory of the republic for which they are responsible. They are also responsible for the approval and publication of textbooks and other teaching aids.

The Federal Institute for the Study of Educational Questions and the institutes for the development of education in each federated republic study the various educational problems arising, particularly those relating to teaching methods. In handling these problems, they are guided by the latest experience and educational theories.

Control. In accordance with the general tendency for the State to hand over its functions of control to smaller units, collective local control has also been introduced in schools. There are five levels of administration: the school, the municipality, the district, the constituent republic and the Federation.

Each school is, by common consent, controlled by a school board elected for a period of two years to handle all matters affecting the day-to-day life and operation of the school. Each board consists of a number of members appointed by the municipal people's committee and by the council of school teachers, together with members elected from among the citizens living in the area served by the school, and delegates of economic and social organizations and other interested associations or institutions. The headmaster of the school is an *ex officio* member of the school board, on which a fixed number of pupils, chosen by their classmates, also serve. The membership of each school board depends on the type of school. The chairman may not be either the school head or one of its teachers. The headmaster of each school is responsible for the organization of school work, supervises the work of teachers and is the school's legal representative.

Each municipal people's committee is responsible for opening primary schools within its area and providing the funds required for their operation and upkeep. It has also the duties of appointing the headmaster of each school, enforcing school attendance, arranging for the development of education in the municipality, etc. Each municipal committee has an education council which handles specifically educational matters; this council issues instructions for all bodies responsible for the control of education, advertises competitive examinations for the recruitment of teachers, considers the annual report on the work of schools, approves the regulations for schools and circulates among the competent bodies any general recommendations concerning schools. The education council consists of at least two members chosen by and from among the members of the municipal people's committee, a number of members of the school board chosen by their colleagues, a number of representatives of trade unions, economic and social organizations, youth organizations, professional associations and institutions designated by the municipal people's committee, together with a number of persons taking an active part in public life, who are appointed by the municipal people's committee. The director of education is an *ex officio* member of the council and serves as its secretary.

The district people's committee discusses general questions concerning the development of education within

the district. It can set up *gimnazije*, vocational schools, special schools, and other establishments for which it must provide the necessary funds. The education council of the district people's committee consists of at least two members of this committee, a number of members chosen by the education councils of the municipalities in the district, a number of delegates of trade unions, economic and social organizations and youth organizations, professional associations, chambers of commerce and institutions designated by the district people's committee, together with persons taking an active part in public life, who are appointed by the latter committee. The head of the school inspection service of the district people's committee serves on this council, as does also the director of education, who acts as its secretary.

Each republic also has an education council which considers the general educational situation throughout the territory of the republic, together with draft legislation and other provisions concerning education, and arranges for their study, proposes a programme for the development of *gimnazije*, vocational and special schools, and sees that it is carried out. The education council of each republic is responsible among other things for the pre-service and in-service training of teachers, and, for this purpose, it runs a professional training centre, keeps up-to-date statistics of teachers and educators in the republic's territory and lays down standards for school buildings and equipment. This council consists of a number of members appointed by the Executive Council of the Republic from its own members, of teachers and health officers, and of other persons taking an active part in public life, a number of members of the education councils of district people's committees, delegated by these councils, a number of delegates of the republic's council of trade unions, youth organizations, professional associations and other interested organizations. The council's secretary is an *ex officio* member.

The Federal Executive Council has a Secretariat for Education and Culture which deals with general educational questions of concern to the whole country, but the actual control of the educational system is decentralized. Other organizations also take part in the discussion of educational problems of concern to them, through their delegates on education. They may also assist in financing schools in which they are interested.

Supervision and inspection. The inspection service is concentrating more and more on giving enlightened assistance to teachers, on putting forward recommendations to guide them in their work and encourage them to display initiative, and, lastly, on helping to solve practical educational problems. Accordingly, one of the service's main duties is to keep under regular review the results obtained in educational theory and practice. However, the inspection service continues to see to it that provisions relating to the organization and operation of schools are complied with and that schools and similar institutions adhere to educational plans and curricula.

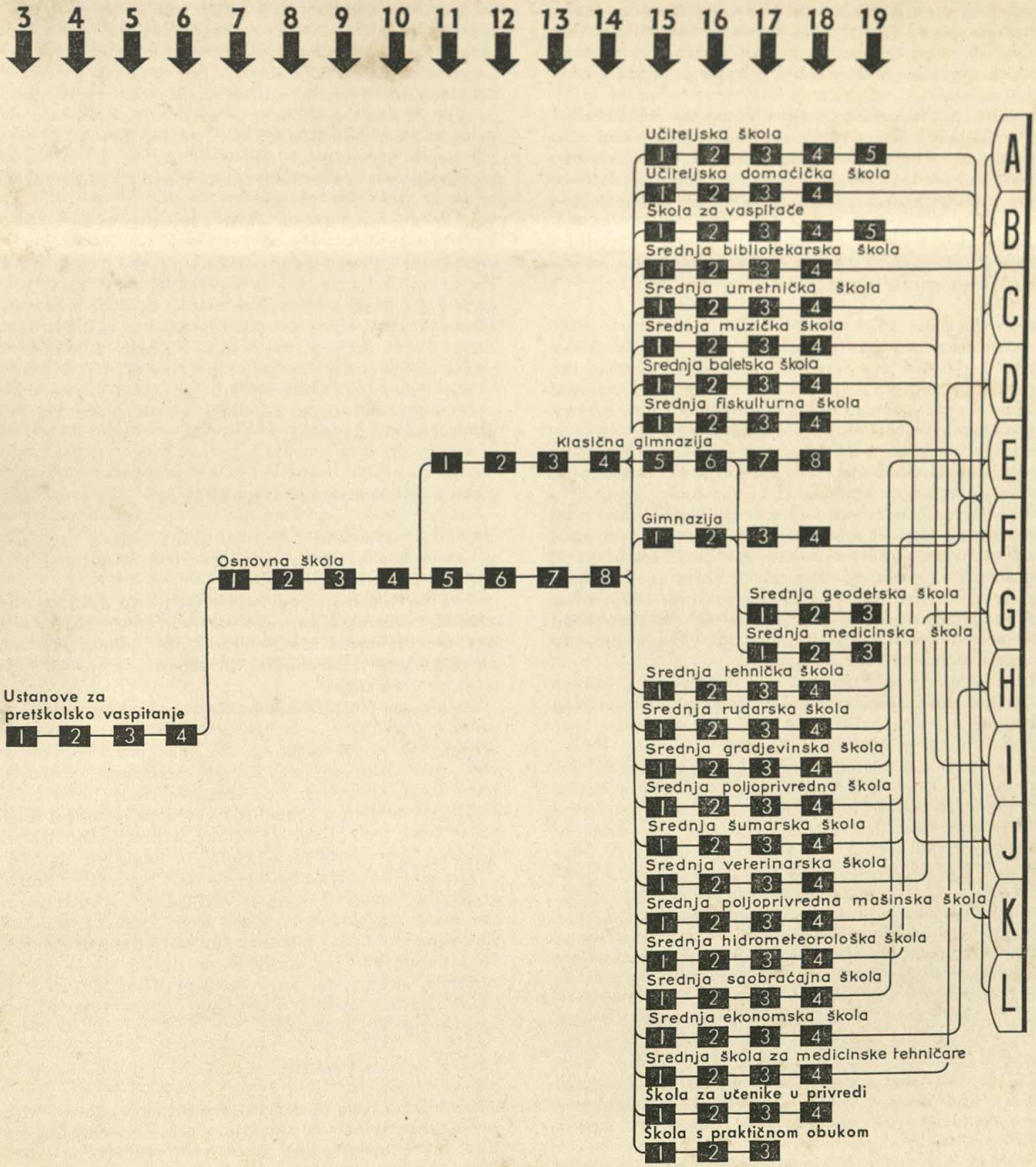
These functions are discharged at the district level by the inspection service responsible to the district people's committee and, in each of the republics, by the Institute for the Development of Education. They are entrusted to educational advisers chosen from among outstanding teachers and education specialists with the requisite

GLOSSARY

gimnazija: general secondary school.
klasična gimnazija: general secondary school with classical course.
osnovna škola: primary school.
škola s praktičnom obukom: practical vocational training school.
škola za učenike u privredi: vocational training school for apprentices.
škola za vaspitače: pre-primary teacher training school.
srednja baletska škola: vocational training school of ballet dancing.
srednja bibliotekarska škola: vocational secondary school for librarians.
srednja ekonomska škola: vocational secondary school of commerce.
srednja fiskulturna škola: vocational secondary school of physical education.
srednja geodetska škola: general secondary school for land surveyors.
srednja gradjevinska škola: vocational secondary school of building and public works.
srednja hidrometeorološka škola: vocational secondary school of meteorology.
srednja medicinska škola: vocational secondary school for nurses and other health workers.
srednja muzička škola: vocational secondary school of music.
srednja poljoprivredna mašinska škola: vocational secondary school for specialists in agricultural machinery.
srednja poljoprivredna škola: vocational secondary school of agriculture.
srednja rudarska škola: vocational secondary school of mining.
srednja saobraćajna škola: vocational secondary school for transport technicians.
srednja škola za medicinske tehničare: vocational secondary school for medical laboratory workers, radiologists, etc.
srednja šumarska škola: vocational secondary school of forestry.
srednja tehnička škola: vocational secondary school.
srednja umetnička škola: vocational secondary school of fine arts.
srednja veterinarska škola: vocational secondary school of veterinary science.
učiteljska domaćička škola; specialized training school for teachers of home economics.
učiteljska škola: primary teacher training school.
ustanove za pretškolsko vaspitanje: institutions for pre-primary education.
viša gimnazija: upper general secondary school.

HIGHER EDUCATION

A. Faculty of Arts.
B. Faculty of Science and Mathematics.
C. Faculty of Law.
D. Faculty of Medicine.
E. Faculty of Engineering.
F. Faculty of Agronomy and Forestry.
G. Faculty of Veterinary Medicine.
H. Faculty of Economics.
I. Academy of Fine Arts, Academy of Music.
J. College of Physical Education.
K. Institute of Education.
L. College for transport officials, merchant navy officers, etc.


3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Učiteljska škola
1 2 3 4 5
Učiteljska domaćička škola
1 2 3 4
Škola za vaspitače
1 2 3 4 5
Srednja bibliotekarska škola
1 2 3 4
Srednja umetnička škola
1 2 3 4
Srednja muzička škola
1 2 3 4
Srednja baletska škola
1 2 3 4
Srednja fiskulturna škola
1 2 3 4
Klasična gimnazija
1 2 3 4 5 6 7 8
Gimnazija
1 2 3 4
Osnovna škola
1 2 3 4 5 6 7 8
Srednja geodetska škola
1 2 3
Srednja medicinska škola
1 2 3
Srednja tehnička škola
1 2 3 4
Srednja rudarska škola
1 2 3 4
Srednja gradjevinska škola
1 2 3 4
Srednja poljoprivredna škola
1 2 3 4
Srednja šumarska škola
1 2 3 4
Srednja veterinarska škola
1 2 3 4
Srednja poljoprivredna mašinska škola
1 2 3 4
Srednja hidrometeorološka škola
1 2 3 4
Srednja saobraćajna škola
1 2 3 4
Srednja ekonomska škola
1 2 3 4
Srednja škola za medicinske tehničare
1 2 3 4
Škola za učenike u privredi
1 2 3 4
Škola s praktičnom obukom
1 2 3
Ustanove za predškolsko vaspitanje
1 2 3 4
A B C D E F G H I J K L

professional training and length of service, whose work has been instrumental in the development of educational practice. The educational advisers of each republic's inspection service are appointed by that republic's education council.

Not only the inspection service but also the school board keeps a check on the school's operation. The board also exercises general supervision over the use of public property administered by the school; it considers complaints from parents, teachers and pupils, as well as petitions and proposals from citizens on any matters relating to the school. Enforcement of legal provisions in all schools, apart from the higher professional schools, is the responsibility of the municipal council for education.

Finance. The body which sets up a school must also provide the funds for its operation and upkeep. The funds for schools established by state bodies are derived from the budget of the municipality or district. Additional financial resources may also come from endowments by state organs, institutions, industrial and community organizations, or from funds specially raised for the purpose. The school board draws up the budget estimates and forwards them, with an explanatory statement, to the body responsible for the budget of the municipality or the district. The total appropriations for each school are included in the municipal or district budget under two heads—salaries of teachers and other school expenditure. The school board is obliged to show, in the estimates it sends to the state body, what extra-budgetary resources may be available to the school. The final operational budget is drawn up by the headmaster and approved by the school board.

The cost of school buildings and equipment is always met by the body which established the school. Interested institutions or industrial organizations may also contribute towards the cost of building the school.

The country's economic development calls for an increase in the number of vocational schools, for which a heavy financial outlay is needed. Accordingly, funds for the development of the various sectors of the economy have been established, their resources being derived from industrial organizations. From the outset, these funds were set up in the various branches of the economy, which led to decentralization in their management. In 1955, they were employed mainly for improving working and living conditions in vocational schools and hostels and particularly in these schools' workshops. In 1956 and 1957, these funds were also used for the building and equipment and even partly for the upkeep of vocational schools (together with their workshops and hostels) and other establishments for vocational training. In 1957, consolidated funds were instituted—the federal fund, the funds of the federated republics and district funds—so that the available resources could be used wherever they were most needed, regardless of their origin.

In 1959, part of the contributions from industrial organizations was left at the disposal of those organizations, to enable them to spend larger sums on the building and equipment of vocational schools and other establishments providing general or advanced vocational training.

Education is free of charge. Working parents receive an allowance for each child who regularly attends school and successfully completes each year's study; these allowances are paid until the student concerned has completed a university course. Particularly gifted children of needy parents obtain scholarships. State welfare services are provided for all pupils. A health service has been organized in schools and pupils have a medical examination every year; if they fall ill, they are treated free of charge in children's hospitals or clinics. There is an educational psychology service for both primary and secondary schools.

Buildings and equipment. The education councils in the various republics lay down standards for the building and equipment of schools. According to the rules in force, classrooms must be able to accommodate 36 to 42 pupils, each pupil having 1.5 square metres of floor space and a total space of 5 cubic metres. In school workshops, laboratories, etc., each pupil must have 2 square metres of floor space. The lighting provided for a classroom is 250 lux.

The Federal Institute for Teaching Aids prepares model aids, which it submits to the Higher Council for Public Education for approval.

TYPES OF SECONDARY EDUCATION

Secondary schools may be divided into several categories—general schools, teacher training schools, vocational schools, art schools and special schools.

For the time being, only the large towns have vocational guidance centres. However, courses in educational psychology are organized in the schools for parents to enable them to help their children in choosing a special field of work or occupation.

At the end of their secondary schooling, pupils may enter a university or a higher professional or vocational school. The choice of the faculty or higher school in which they enrol is determined by the vocational school they have been attending. For instance, those who leave a secondary technical school may enter a technical faculty, those who have been attending a secondary school of medicine may enrol in a faculty of medicine, and so on.

The school year, which begins on 1 September and ends at the beginning of June, is divided into two terms, and the main school holidays are from June to September. The winter holidays begin at the end of the first term, on 15 January, and last for 20 days, during which pupils go camping, skiing, etc. They have between four and seven hours' lessons a day, depending on the type of school and the age of the pupils.

General secondary schools

The uniform type of compulsory primary school, with an 8-year course, not only provides primary schooling but is also the starting point for further studies, so that the usual classification of levels of education is not applicable to the Yugoslav educational system. In Yugoslavia secondary education proper caters for pupils between 15 and 19 years of age.

Grades 5 to 8 of the uniform primary school. The primary school has a twofold purpose—to lay the foundations of a

socialist education for the younger generation, and to provide it with general modern schooling. To attain these aims, the school gives the pupils a scientific approach to the world, teaching them the history of human society in general and of the Yugoslav peoples in particular, together with the results achieved in the various fields of science, technology, culture and art, fostering in them an awareness of the creative power of the human mind and developing their capacity for learning and the individual pursuit of knowledge. In addition, the school should inculcate in young people a sense of their responsibility towards society.

The subjects taught in the upper classes of the primary school are the mother tongue, natural sciences (physics, chemistry, biology) and mathematics, the general principles of technical education, social studies (geography, history and socialist ethics), foreign languages, physical and health education, art education, music and domestic science.

A special committee of the education council is responsible for marking the results of pupils' work (on a 5-point basis). To move up automatically into the next class, pupils must not have a low mark in any subject; if they have no more than two low marks, they can sit for a supplementary examination; if they have three low marks, they must repeat the year. In the primary school, examinations may be taken outside the normal sessions by pupils who have been prevented by prolonged illness or for any other valid reason from attending school regularly. This special rule is designed to enable pupils to catch up on time lost in their studies. It is also applicable to the examinations for promotion from one class to the next. The supplementary examinations are held at the end of August. Primary school pupils may not be dismissed throughout the period of compulsory schooling.

In the upper classes of the primary school, the pupils are taught by course instructors or full teachers. Course instructors must hold the diploma of the Senior Teaching Training School, while full teachers must hold a university degree in arts or science. Teachers are appointed by the municipal council for education and are recruited on a competitive basis. Full teachers and course instructors, who are normally up-graded every three years, must pass a professional examination within five years of their appointment in order to qualify for promotion. Teachers may be up-graded two steps if they have obtained the highest marking during three consecutive years.

Gimnazije. The *gimnazija* is a general modern school providing more advanced and comprehensive education than the primary school. The aims of the *gimnazija* are to broaden pupils' knowledge of the natural and social sciences and of technology, to contribute towards the academic, physical, social, moral and aesthetic education of pupils so as to prepare them for playing their part in social and cultural life, to develop their natural abilities and reveal their vocation and to help them in choosing a branch of higher education and a profession.

Entrance to the *gimnazije* is by competitive examination. Pupils may choose between two courses—social studies and languages, or natural sciences and mathematics.

In the first year the curriculum and the syllabus for individual subjects are the same for all pupils, but in the second year they begin to specialize in the field of their choice. This system of two optional courses of study is designed to enable pupils to acquire a broader and deeper knowledge of the subjects in which they intend to specialize, and to help them to display their natural abilities and follow their individual bent, thus making it easier for them to choose their future profession. The methods employed by the *gimnazije* include formal lessons, practical work, productive work, and independent activities.

TIME-TABLE FOR *GIMNAZIJE*
(in hours per week)

Subject	Year			
	1	2	3	4
Social studies and languages				
Mother tongue and literature	4	4	4	4
History	3	3	3	3
Sociology and the principles of political economy	–	–	2	3
Social organization in Yugoslavia	2	1	–	–
Logic and psychology	–	–	2	–
Philosophy	–	–	–	3
Drawing	2	1	1	2
Foreign language	3	4	4	[1] 5
Latin	2	2	–	–
Geography	3	2	–	2
Biology	2	2	2	–
Chemistry	–	2	2	–
Physics	2	2	2	–
Mathematics	4	3	2	2
General technical education	1	2	2	2
Preparatory military training	–	–	2	2
Physical education	3	3	3	3
Total	31	31	31	31
Natural sciences and mathematics				
Mathematics	4	4	4	5
Physics	2	3	3	3
Chemistry	–	2	3	2
Biology	2	2	2	2
Plane geometry	–	2	2	2
General technical education	1	1	2	2
Geography	3	2	–	2
Mother tongue	4	3	3	3
History	3	2	2	–
Sociology and the principles of political economy	–	–	–	2
Social organization in Yugoslavia	2	1	–	–
Logic and psychology	–	–	2	–
Philosophy	–	–	–	1
Drawing	2	1	–	–
Foreign language	3	3	3	2
Latin	2	2	–	–
Preparatory military training	–	–	2	2
Physical education	3	3	3	3
Total	31	31	31	31

1. Second optional language in the last two years.

The report on each pupil should cover the whole of his work. In addition to examination results, it should take into consideration the effort made by the pupil, his industry, the initiative and discipline he shows in his work, his skill in applying the knowledge he has acquired, his all-round ability and any special gifts. Pupils' success in assimilating the subjects taught is assessed by numerical marking and

written comments. The following examinations are held in the *gimnazija*: complementary examinations in subjects in which the pupil has not reached a satisfactory standard during the school year; special examinations for 'free' pupils; examinations in some of the subjects included in the curriculum of a class or in all these subjects if pupils, for some proper reason, could not receive a mark at the end of the academic year; leaving examinations; supplementary examinations.

All pupils who successfully complete the fourth year of the *gimnazija* pass the leaving examination.

The teachers in *gimnazije* must hold a university degree in arts or science. Appointments and promotion follow the same rules as for course instructors in the upper classes of primary schools.

Vocational and technical schools

Schools for skilled workers. These are practical training and apprenticeship schools—the former control and supervise the vocational training provided in special workshops or a factory or some other establishment. There are several types of schools for skilled workers, industrial and trade schools, schools for building, agriculture, forestry, communications, economics and commerce, schools of hotel management, administrative schools and schools of medicine (the latter also train male and female nurses and midwives).

The general subjects taught are the mother tongue, history, geography, establishment and organization of enterprises and labour legislation, physical culture, preparatory military training, mathematics, physics, chemistry and hygiene. In addition, vocational subjects are taught for five hours a week in the first year and for eight hours in the second and third years.

There are also schools for highly skilled workers, which enrol persons who have already been doing skilled work in industry.

Technical schools. These schools are for the training of industrial technicians. They provide both theoretical courses (general courses concentrating mainly on the natural and social sciences and vocational subjects) and practical training. The pupils attend lectures, carry out laboratory experiments and tests, draw up plans, do practical work in the school workshops and on model working sites, work during their vacation in industrial undertakings and establishments and go on educational excursions. There are various types of technical schools—for textiles, chemical industries, machinery, the wood industry, skin-dressing, ship-building, high-tension and low-tension electrotechnics, etc.—and some provide several different courses.

Vocational schools for commerce and economics and the public services. These schools train middle-ranking professional staff, mostly in the spheres of medicine, commerce and economics, and agriculture.

The schools of medicine train medical assistants, health technicians, dental technicians, dentists, midwives, etc. They admit pupils who have completed the primary course and 2 years' general secondary schooling, and provide a course lasting 3 years, after which students sit for an examination which entitles them to a diploma. The curriculum includes lectures, tests and exercises both in and outside the school, group work, educational excursions and practical work in health establishments during vacation. In the second term of the last year, students are fully engaged in professional work. The courses are given by doctors who bear the title of honorary professors.

The schools of commerce and economics provide a 4-year course based on completion of primary school. An idea of the curriculum can be gained from the following table.

TIME-TABLE FOR VOCATIONAL SCHOOLS OF ECONOMICS
(in hours per week)

Subject	Year			
	1	2	3	4
Mother tongue	4	4	3	4
Foreign language	4	3	4	4
Economic geography	3	2	2	–
History	3	2	2	–
General mathematics	3	2	–	–
Financial mathematics	–	–	–	3
Economic mathematics	3	3	2	2
Chemistry and technology	3	3	2	–
Political economy	–	2	3	2
Statistics	–	–	–	2
Law	–	–	2	3
Economy of Yugoslavia	–	–	–	3
Socialist economy in industry	2	2	3	3
Accounting	4	4	4	4
Correspondence	–	–	2	–
Stenography	2	2	–	–
Preparatory military training	–	2	2	2
Physical culture	2	2	2	2
Total	33	33	33	34

On completion of the course, students sit for an examination which entitles them to a diploma. The teaching staff consists of trained teachers and a few specialists (economists and jurists).

The schools of agriculture are similar to technical schools in the form of training given—they provide both theoretical training (general and vocational) and practical training (in nursery gardens and on farms). The course lasts 4 years, and is open to pupils who have completed primary school or the course at an agricultural school for skilled workers. There is a final diploma examination.

The other schools in this category are schools of building, surveying, mines, geology, communications (road, sea or river), the various types of commercial schools, schools for tourist hotel keepers, librarians' schools and schools offering specialized courses in the different branches of agriculture and forestry (viticulture, fruit-growing, agricultural machinery, forestry and hydro-meteorology).

Art schools. As well as a general education, these schools provide training in a specific branch of art or in occupations involving a knowledge of art. The pupils are trained either to perform work of an artistic nature or to continue the study of the particular branch of art they have chosen. They must have completed the primary course and they

take an entrance examination to test their artistic ability. The majority of these schools are schools of music, painting, applied art and drama.

Teacher training schools

These include ordinary teacher training schools and schools for training teachers of domestic science or special subjects, infant school teachers and physical culture teachers—the purpose of all schools is to train teachers for primary schools. Admission is by competitive examination. The course is of 5 years' duration, and the curriculum includes the following subjects: mother tongue (language and literature), history, geography, mathematics, biology, physics, chemistry, hygiene, elementary agriculture, domestic science, handwork, methodology and work in schools, pedagogy, history of pedagogy, child psychology and educational psychology, logic, philosophy, foreign language, music, drawing and physical culture. Teacher training schools have primary classes attached to them, in which trainees carry out practice teaching. In the second half of their final year, they teach for periods of a fortnight in primary schools. At the end of the course, they take an examination, and if successful obtain a diploma. The examination consists of written tests on the candidates' mother tongue and on pedagogy, and oral tests on the mother tongue and on pedagogical subjects. There is also a practical examination—candidates give a class lesson.

Out-of-class activities

Secondary school pupils belong to the Youth Organization. They have their own cultural and sports associations, and play an active part in the internal life of the school they attend.

The changes which have been introduced as part of the educational reform attach great importance to the pupils' free activities. Pupils may join various organizations, according to their individual aptitudes, and this gives them the best possible opportunity to develop their special abilities, give full play to their intellectual curiosity, learn more about the subjects studied in class, and apply their knowledge. The various types of activity are run by the pupils themselves and this exercise in self-government is a valuable part of their social education. Teaching and free activity are really two complementary aspects of a single educational process.

TRENDS AND PROBLEMS

The reform of the educational system, which was begun in 1955, is not yet complete. Schools which provide a general education are now well developed, and the new regulations have already produced satisfactory results, but much still remains to be done in vocational education. However, the General Law on Education has laid down the lines along which this type of instruction is to develop.

As well as a number of difficulties of a transitory nature, there are two more serious problems. The first is the shortage of suitably qualified teachers. Although there has been a marked increase in the number of students who hold the diploma of the Faculty of Arts or the Faculty of Science and Mathematics, and in the number of students who have obtained the diplomas of the higher pedagogical schools and teacher training schools, there are still not enough teachers to meet the nation's needs, particularly in vocational schools. Apart from the quantitative aspect of the problem, the implementation of the reform calls for a high standard of training and an increased amount of work on the part of the teachers, for example their participation in the various types of free activity carried out by the pupils. The second major problem is the shortage of buildings and school equipment.

[*Text prepared by the Yugoslav National Commission for Unesco in July 1959.*]

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STATISTICS

Population (mid-year 1958 estimate): 18,189,000.
Area: 98,766 square miles; 255,804 square kilometres.
Population density: 184 per square mile; 71 per square kilometre.

Summary of school statistics, 1953–57. In 1957/58, total enrolment (not including some 44,000 adults attending various schools for general education and vocational training) exceeded 2.7 million, which was about 15 per

cent of the total population. Pupils receiving their 8-year compulsory education, whether in primary or in secondary schools, represented 86 per cent of the total enrolment. Secondary education beyond this stage accounted for 3 per cent in general secondary schools, 7 per cent in vocational schools, and less than 1 per cent in teacher training schools. Higher education, including teacher training colleges, had 4 per cent of the total enrolment. The proportion of girls was 47 per cent in primary and general secondary education, 25 per cent in vocational schools, 67 per cent in teacher training schools, 52 per cent in teacher training colleges, and 30 per cent in higher general and technical education. Compared with 1953/54, enrolment had increased by 25 per cent in primary education, 4 per cent in general secondary education, 31 per cent in vocational schools, 14 per cent in teacher training, and 44 per cent in higher general and technical education. For all levels there was a 25 per cent increase between 1953 and 1957. The enrolment of girls increased by 28 per cent, showing a slightly higher proportion of the total enrolment in each category except general and technical higher education. (See Table 4.)

Enrolment trends in secondary education, 1949–57. There was no marked trend in the three categories of secondary education in the period from 1949 to 1957. (See Table 2.)

Examination results in secondary education, 1953–57. The number of certificates of general secondary schools increased by 52 per cent between 1953 and 1957, but there was a decline in the number of vocational school diplomas after 1953, and of teacher training school diplomas after 1954. In 1957 girls received 44 per cent of the general secondary certificates awarded, 39 per cent of the vocational diplomas, and 67 per cent of the teacher training diplomas. (See Table 3.)

Educational finance, 1956. In the fiscal year beginning in January 1956, recurring expenditure for education amounted to 31,900 million dinars, averaging nearly 1,800 dinars per inhabitant, as compared with 800 dinars per inhabitant reported for 1953. Table 4B shows the distribution of recurring expenditure by level and type of education.

Source. Yugoslavia: Federal Statistical Office, Statistical Yearbook; reply to Unesco questionnaire.

1. EDUCATIONAL FINANCE, 1956 (in million dinars)[1]

A. EXPENDITURE BY PURPOSE

	Amount	
Total expenditure		...
Recurring expenditure		31 888
For administration	4 611	
For instruction		
Salaries to teachers, etc.	24 546	
Other instructional expenditure	2 731	
Capital expenditure		...

B. RECURRING EXPENDITURE BY LEVEL AND TYPE OF EDUCATION

	Amount		Per cent
Total recurring expenditure		**31 888**	**100.0**
Primary education		19 029	59.7
Secondary education[2]		7 350	23.1
General	3 441		10.8
Vocational	2 893		9.1
Teacher training	1 016		3.2
Higher education		5 276	16.5
Adult education		233	0.7

1. Official exchange rate: 100 dinars = 0.33 U.S. dollar.
2. Includes special education.

2. TRENDS IN SECONDARY EDUCATION, 1949–57

School year	Number of students enrolled by type of education						Average total enrolment (000's)	Estimated population 15–19 years old (000's)	Secondary enrolment ratio
	General		Vocational		Teacher training				
	Total	Per cent female	Total	Per cent female	Total	Per cent female			
1949	88 318	42	63 100	38	22 387	57	174	1 747	*10*
1950	78 922	43	66 067	38	28 002	60			
1951	68 470	44	44 982	38	24 716	61			
1952	71 348	45	43 046	37	23 059	63	145	1 773	*8*
1953	77 586	45	35 831	37	20 762	64			
1954	86 818	45	34 743	39	21 799	66			
1955	88 311	46	41 942	40	20 499	67			
1956	84 141	46	52 806	41	20 930	67	159	1 656	*10*
1957	80 761	47	64 887	41	21 630	67			

1. Data refer to technical secondary schools only.

3. EXAMINATION RESULTS IN SECONDARY EDUCATION, 1953–57

Type of diploma or certificate granted	School year									
	1953/54		1954/55		1955/56		1956/57		1957/58	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Certificate of general secondary schools	10 405	4 187	11 718	4 871	14 287	5 967	15 987	6 699	15 788	6 925
Diploma of vocational secondary schools	11 586	4 027	6 026	1 844	5 597	1 821	6 305	2 331	9 551	3 758
Diploma of teacher training schools	2 775	1 465	4 521	2 704	4 210	2 551	3 870	2 700	3 324	2 237

4. SUMMARY OF SCHOOL STATISTICS, 1953–57

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Primary	Primary and higher primary schools, public	1957/58	11 782	26 144	14 141	1 088 292	515 532
	Eight-year schools, public	1957/58	2 427	37 437	23 077	1 188 161	543 502
	Junior secondary schools, public	1957/58	48	399	244	9 802	5 135
	Lower classes (1–4) of secondary schools, public	1957/58	...	...	...	29 654	13 185
	Total	**1957/58**	**14 257**	[1]**63 980**	[1]**37 462**	**2 315 909**	**1 077 354**
	,,	1956/57	14 297	[1]59 557	[1]34 864	2 174 672	1 009 202
	,,	1955/56	14 369	[1]55 797	[1]32 047	2 036 370	939 127
	,,	1954/55	14 442	[1]51 650	[1]29 322	1 918 407	875 434
	,,	1953/54	14 387	[1]49 402	[1]27 753	1 847 098	838 880
Secondary							
General	Secondary schools, public						
	Total	**1957/58**	**243**	[2][3]**5 036**	[2][3]**2 526**	**80 761**	**38 044**
	,,	1956/57	248	[2][3]5 401	[2][3]2 681	84 141	38 813
	,,	1955/56	271	[2][3]6 284	[2][3]3 163	88 311	40 307
	,,	1954/55	278	[2][3]6 577	[2][3]3 352	86 818	39 374
	,,	1953/54	255	[2][3]6 047	[2][3]3 105	77 586	34 772
Vocational	Technical and transport schools, public	1957/58	59	1 371	337	23 118	3 486
	Agricultural schools, public	1957/58	39	372	99	7 842	1 128
	Commercial and economic schools, public	1957/58	93	1 250	614	28 004	17 869
	Schools of fine arts, public	1957/58	40	620	338	3 723	1 963
	Medical schools, public	1957/58	35	270	179	5 316	3 888
	Apprenticeship schools, public	1957/58	759	4 532	969	118 023	18 699
	Other schools, public	1957/58	2	19	15	607	410
	Total	**1957/58**	**1 027**	[3]**8 434**	[3]**2 551**	**186 633**	**47 443**
	,,	1956/57	1 041	[3]7 749	[3]2 292	172 429	41 189
	,,	1955/56	1 029	[3]6 879	[3]1 828	156 508	33 997
	,,	1954/55	990	[3]6 326	[3]1 682	140 376	29 487
	,,	1953/54	1 089	[3]6 498	[3]2 002	142 053	34 496
Teacher training	Teacher training schools, public						
	Total	**1957/58**	**78**	[3]**1 345**	[3]**627**	**21 638**	**14 500**
	,,	1956/57	82	[3]1 259	[3]549	20 930	14 094
	,,	1955/56	84	[3]1 229	[3]521	20 499	13 727
	,,	1954/55	81	[3]1 207	[3]501	21 799	14 272
	,,	1953/54	79	[3]1 150	[3]468	20 762	13 302
Higher							
Teacher training[4]	Teacher training colleges, public						
	Total	**1957/58**	**28**	**1 853**	**428**	**25 859**	**13 327**
	,,	1956/57	26	1 671	403	25 126	12 531
	,,	1955/56	25	1 627	348	26 682	13 006
	,,	1954/55	25	1 463	335	25 976	12 482
	,,	1953/54	22	1 380	317	21 032	10 609

Note. Data presented in this table are not comparable with those given in the previous edition of the *World Survey of Education*. In particular, all pupils in the higher classes (5–8) of 8-year primary schools and in the lower classes (1–4) of secondary schools, as well as in junior (4-year) secondary schools, previously classified under secondary education, are now shown under primary education.

1. Not including teachers of the primary classes of the secondary schools and 7,620 part-time teachers in 1957/58, 6,359 in 1956/57, 5,473 in 1955/56, 3,991 in 1954/55, and 1,701 in 1953/54.
2. Including teachers of the primary classes.
3. Not including part-time teachers. The numbers for the secondary general, vocational education and teacher training are as follows: 8,630 in 1957/58, 8,193 in 1956/57, 8,220 in 1955/56, 7,719 in 1954/55 and 7,285 in 1953/54.
4. A part of the enrolment at the teacher training colleges is also included under 'general and technical' higher education.

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Higher							
General and technical	University faculties, public	1957/58	54	5 551	1 005	69 087	19 957
	Academies of fine arts, public	1957/58	11	356	81	1 394	497
	Higher schools, public	1957/58	45	1 317	314	12 401	4 437
	Theological faculties, private	1957/58	3	49	–	420	6
	Total[4]	**1957/58**	**113**	**7 273**	**1 400**	**83 302**	**24 897**
	„ [4]	1956/57	101	6 468	1 244	72 267	22 305
	„ [4]	1955/56	84	5 899	1 058	70 028	21 695
	„ [4]	1954/55	92	5 604	971	70 385	21 820
	„ [4]	1953/54	84	5 195	869	57 937	19 084
Special	Primary schools	1957/58	61	869	...	6 287	2 563
	Apprenticeship schools	1957/58	24			1 029	409
	Total	**1957/58**	**85**	**869**	**...**	**7 316**	**2 972**
	„	1956/57	77	769	...	6 323	2 536
	„	1955/56	76	678	...	5 935	2 355
	„	1954/55	65	595	...	5 456	2 164
	„	1953/54	57	489	...	5 171	2 055
Adult	Schools for adults						
	Total	**1957/58**	**672**	**5 502**	**...**	**44 040**	**8 676**
	„	1956/57	789	5 885	...	42 564	9 127
	„	1955/56	854	4 935	...	41 037	10 579
	„	1954/55	717	3 858	...	33 382	9 216
	„	1953/54	450	2 524	...	19 993	6 360

4. A part of the enrolment at the teacher training colleges is also included under 'general and technical' higher education.

NEW HEBRIDES

Anglo-French Condominium

The New Hebrides group is administered for some purposes jointly, for others unilaterally, as provided for by the Anglo-French Convention of 27 February 1906 and a protocol of 6 August 1914. The British and French Resident Commissioners are responsible respectively to the High Commissioner, Western Pacific, stationed at Honiara in the British Solomon Islands Protectorate, and the High Commissioner for the Pacific Ocean and the New Hebrides and Governor of New Caledonia, stationed at Nouméa.

Education is not a joint responsibility, each of the co-sovereign powers having its own school system. The Condominium pays a subsidy to each of the national education services.

BRITISH SCHOOL SYSTEM

Education is provided by five Christian missions with financial assistance from the British Administration. In 1959 there were 7,774 children in 273 schools. The majority of pupils attend village schools for at least four years, some continuing for an additional period of up to six years. In Vila, a school controlled by a local parents' association and assisted by the British Administration, provides primary education for children of all races.

Facilities for the provision of secondary education, in the sense normally understood in British territories, do not yet exist in the New Hebrides. British government scholarships are, however, offered annually to enable a small number of selected students to continue their academic studies or to obtain vocational training in other parts of the Pacific.

In 1957 an educational survey was carried out on behalf of the British Administration to find out in what way assistance could be given to the missions. In May 1959 a Senior Education Officer took up his duties in the territory. Subsequently a conference attended by representatives of all five missions concerned in secular education discussed the organization of education, the improvement of teacher training and curricula by co-ordinated effort, and the nature of financial assistance to be given in the future. It is intended that a British Educational Advisory

Committee shall shortly be established to examine educational problems in greater detail.

FRENCH SCHOOL SYSTEM

Education in government schools is entirely free and open to all without distinction of race or creed. From 1960 there will be nine government primary schools, five of them with accommodation for boarders. Besides these official establishments there are 12 private schools with about 1,340 pupils.

The French Resident Commissioner exercises general control over the school system. Professional supervision of public schools is the responsibility of a primary school inspector. Private schools have their own supervisory service.

The special French budget of the New Hebrides is assisted to the extent of 60 per cent by funds from France and meets all costs of public education. The private schools are subsidized for building purposes through grants made by the Assistance and Co-operation Fund (FAC), which has replaced the Investment Fund for Economic and Social Development in the overseas territories (FIDES).

Schools take children from 5 to 14 years of age. Teaching is entirely in French. Native children who at the time of their enrolment have little or no knowledge of this language spend two years in preparatory classes, after which they enter the usual primary course leading to the *certificat d'études primaires*. The curriculum is similar to that in French schools, the teaching of science, history and geography being adapted to local needs.

Except for the complementary classes (*cours complémentaires*) at the government school at Port Vila and a vocational training centre, there is no post-primary education in the New Hebrides. Children wishing to continue their studies go to New Caledonia. They may be admitted to the sixth class (first year in secondary school—see diagram of French school system on page 479) after their school report has been examined by an entrance selection committee; otherwise they sit for an entrance examination. If they stay on at school in the New Hebrides until they have their Primary School Leaving Certificate (normally at age 14), they may go straight into the fourth year class of the *cours complémentaire*.

Children in the highest primary classes and in the complementary section do practical work (metalwork and carpentry for the boys, dressmaking, sewing and child welfare for the girls).

At Port Vila, the residential vocational training centre, just completed, will have room for 70 boarders. Children with some manual ability are also admitted after a psychotechnical test to the Centre de Formation Professionnelle Rapide de Nouville, at Nouméa, New Caledonia, which is primarily concerned with training skilled tradesmen. Pupils may also attend technical courses in New Caledonia.

There is no teacher training school. Teaching assistants (*moniteurs*) receive in-service training under the guidance of senior teachers trained in France.

[*Text revised by the Senior Education Officer, British Residency, Vila, in June 1960, and by the French National Commission for Unesco in October 1960.*]

STATISTICS

Population (mid-year 1958 estimate): 56,000.
Area: 5,700 square miles; 14,763 square kilometres.
Population density: 10 per square mile; 3.8 per square kilometre.

Summary of school statistics, 1953–57. There are two school systems in this territory. The French system reported a total enrolment of 1,321 pupils in 1957/58 (not including 15 adults in the French language course for natives). In the British school system, there were 2,216 pupils reported for 1954/55 (see *World Survey of Education:* II—*Primary Education*). Later figures for the British schools are, however, included in the descriptive text above. In the French system primary schools, 39 per cent of the pupils were girls, and there was an average of 33 pupils per teacher. Between 1953 and 1957, public primary school enrolment in the French system increased by 54 per cent. Similar comparable data are not available either for the private schools or for the schools in the British system. (See table.)

Educational finance, 1958. Again for the French administration only, the territorial budget for education in 1958 amounted to 44,190,000 French francs. Of this amount, 39,170,000 francs, or 89 per cent, was spent for primary education. In addition, there was an allocation, for the 1958/59 period, of 42,700,000 francs for public education, from the Investment Fund for Economic and Social Development (FIDES). Official exchange rate: 100 French francs = 0.24 U.S. dollar.

Sources. New Hebrides: Reply to Unesco questionnaire from the headmaster of the Port Vila public school (French educational system). France: Ministère de la France d'Outre-Mer, *Enseignement Outre-Mer*, No. 10, December 1958.

SUMMARY OF SCHOOL STATISTICS, 1953–57: French school system only

Level and type of education	Type of institution	School year	Number of institutions	Teaching staff		Students enrolled	
				Total	Female	Total	Female
Pre-primary	Nursery school, public	1957/58	1	1	1	31	19
	Nursery school, private	1957/58	1	1	1	28	13
	Total	**1957/58**	**2**	**2**	**2**	**59**	**32**
	„ [1]	1956/57	1	1	1	16	9
	„	1955/56	...	...	...	...	...
	„	1954/55	...	...	...	...	...
	„	1953/54	...	...	...	...	...
Primary	Primary schools, public	1957/58	6	17	10	545	192
	Primary schools, private	1957/58	5	21	20	707	302
	Total	**1957/58**	**11**	**38**	**30**	**1 252**	**494**
	„ [1]	1956/57	6	13	9	425	125
	„ [1]	1955/56	4	13	9	359	117
	„ [1]	1954/55	4	13	9	340	107
	„ [1]	1953/54	4	13	9	353	102
Secondary *General*	Complementary course, public						
	Total	**1957/58**	**1**	**2**	**1**	**10**	**7**
	„	1956/57	1	1	–	11	6
	„	1955/56	1	1	–	7	3
	„	1954/55	1	1	–	7	3
	„	1953/54	1	1	–	...	...
Adult	French language course for natives						
	Total	**1954/55**	**1**	**1**	–	**15**	–

1. Public school only.

ARAB REFUGEES FROM PALESTINE

Schools run jointly by UNRWA[1] and Unesco

THE EDUCATIONAL SYSTEM

The exodus of Arab and other non-Jewish refugees from Palestine into neighbouring lands began in the last months of 1947 and reached its height between May and August of the following year. Estimates vary widely, but it is probable that between 750,000 and 1,000,000 individuals had found temporary shelter by the end of that period either in nearby countries or in those parts of Palestine which had remained in Arab hands and were under the protection of either the Egyptian or the Transjordanian authorities.

Immediate succour was first given by the governments and charitable organizations, both Muslim and Christian, of those countries in which non-Jewish Palestinians had sought refuge. Many orphans were placed in institutions which also offered educational facilities.

The United Nations Childrens' Fund (Unicef) came into the field before the end of August 1948, and shortly thereafter a fund-raising body known as the United Nations Relief for Palestine Refugees (UNRPR) was set up to provide money for the work already being done by the International Committee of the Red Cross (CICR), the League of Red Cross Societies (LRCS) and the American Friends Service Committee (Quakers). These latter organizations co-operated with refugee educators who had themselves set up 'schools in the sand' beside the camps that were then beginning to take shape. It proved possible to

1. United Nations Relief and Works Agency.

shelter some of these classes during the following winter in disused hospital tents and to provide a minimum of school supplies from the sale of empty relief supply containers.

In 1948 Unesco first began to play a part in the education of Palestinian refugee children. On 11 November of that year, the third session of the Unesco General Conference, which was meeting in Beirut, adopted a resolution which included an authorization to the Director-General to make a study of the educational needs of the refugees and to include the refugees among those entitled to receive aid from Unesco emergency funds. A sum of $15,000 was made available soon after, and later grants during 1949 brought the total amount up to $38,000. The fourth session of the General Conference, which met in Paris in September 1949, launched a world-wide appeal for financial assistance which during that same year brought in goods and money to the value of $76,000. With the aid of all these contributions it proved possible for the voluntary agencies on the spot to establish 61 schools in the Gaza Strip, in Lebanon and Syria, and on both banks of the Jordan; these schools were attended by some 34,000 children. Substantial numbers of children also found refuge at the time in government and private schools.

The United Nations Relief and Works Agency for Palestine Refugees in the Near East (now commonly designated as UNRWA) was set up by the General Assembly of the United Nations in December 1949, and commenced operations in May 1950. UNRWA bases its authority to devote funds to educational purposes on paragraph 4 of Resolution 393(V) which was adopted by the General Assembly on 2 December 1950.

From an early stage this responsibility has been shared by UNRWA and Unesco jointly, with UNRWA assuming all administrative functions and, with the years, by far the greater share of the financial burden, and Unesco giving technical guidance and providing senior educational personnel. This partnership has been ratified at intervals by agreements between the two agencies, these agreements being modified as conditions change.

UNRWA/Unesco schools provide primary, general secondary, and vocational education for Palestine refugee children in Jordan, Lebanon, and the United Arab Republic (Gaza Area and Region of Syria). In addition, study grants are made available to Palestinian refugees attending government or private secondary schools or universities in the area. Altogether, some 180,000 young refugees benefit from educational assistance provided by the two United Nations agencies.

No formal agreements exist between UNRWA and the governments of the host countries delimiting the exact educational responsibility of the agency. From time to time, however, letters have been exchanged to clarify specific points, and in some host countries the educational projects of the agency require the prior consent of the government concerned.

THE DEVELOPMENT OF SECONDARY EDUCATION

The provision of education by UNRWA and Unesco was originally conceived as an emergency operation limited in scope and duration. During the early years of this operation it was not intended to do more than provide some facilities to keep schools for children of primary school age; and, in fact, the limitation on funds available for education made it necessary to concentrate on primary education almost to the complete exclusion of secondary.

It was not until 1953 that a modest beginning was made in attempting to provide secondary education. The agency at that stage decided to allow secondary education for a small number of gifted pupils—about 5 per cent of the primary enrolment. However, as the number of pupils who completed their primary education increased, a number of secondary classes were started in various places, and the agency in subsequent years increased the provision for general secondary education. At present, the number of children in UNRWA/Unesco secondary schools is 20,000 and it is estimated that another 15,000 are enrolled in government or private secondary schools.

Vocational training has always been a major preoccupation of UNRWA. From the early days it was felt that such training was one means of making the refugees self-supporting and indeed the United Nations General Assembly Resolution of 2 December 1950 recognized the need for 'the re-integration of the refugees into the economic life of the Near East'.

However, the method of providing training has changed considerably over the years. During the first few years (1950–52) a type of training was provided which did not meet, and was not intended to meet, any professional standards. A relatively large number of boys (2,000 in 1951) were engaged in carpentry, shoe-making, weaving, agriculture, tinsmithing, broom-making, poultry-raising, and similar occupations on an apprenticeship basis for short periods. But neither the tools nor the instructors were available to make this type of pre-vocational training, as it was called, really useful.

During a second stage (1952–53) it was proposed to organize a number of short and intensive training courses for some 5,000 to 10,000 refugees. Plans included provision for agricultural training and commercial courses as well as technical courses for carpenters, electricians, plumbers, surveyors, etc. The total budget allocated for these courses was $5,000,000. But although a large number of courses were initiated, it soon became apparent that young people could not be adequately trained in the course of a few months.

Since 1953/54 the policy with regard to vocational training has been to produce skilled craftsmen at a level considerably higher than was possible through the emergency courses. This policy, it was found, corresponds both to the need for skilled artisans in the host countries and also meets the increasing demand on the part of the young refugees for this type of training. The implementation of this policy required the establishment of fully-fledged vocational training centres, properly staffed (partly by internationally recruited instructors) and well-equipped. At present, three such centres are in operation—two in Jordan (one at Kalandia, the other at Wadi Seir) and one in the Gaza Area—and plans are well under way to establish additional centres in Jordan and in the United Arab Republic (Region of Syria). There is no doubt, according to a recent UNRWA report, that in the long run all the

graduates from theses centres will find employment, given freedom of movement and stable conditions in the area.

One important factor in the development of secondary education should be mentioned here, namely the extension of general education resulting from the increase in the level of vocational training. As indicated above, general education was originally provided at the primary level only, i.e., for a period of five or six years, depending on the country where the schools were located. This appeared to be a sufficient basis for the types of pre-vocational training or the short courses provided by the agency until 1953. But when it was decided to train skilled craftsmen (carpenters, mechanics, electricians) it soon became apparent that six years of general education was not a sufficient background for admission to the new vocational training centres—indeed eight years became soon to be considered as the minimum requirement, the alternative being to provide additional general education at the costly residential vocational training centres. And it is partly for this reason that general education in most UNRWA/Unesco schools has been extended from six to eight or nine years.

Administration

The administration of secondary education—and, for that matter, of the entire education programme for the refugees —is the responsibility of UNRWA. The agency has its headquarters in Beirut (Lebanon), and the central administration of the education programme is handled there by UNRWA's Education and Training Division.

UNRWA also maintains offices in each of the four countries or regions where it operates: Gaza, Jordan, Lebanon and the United Arab Republic (Region of Syria). To each of these field offices is attached a field education officer who is responsible for all educational activities in his area: inspection, the appointment of teachers, the preparation of budget estimates, etc. The field education officers are assisted in these functions by school supervisors or area education officers, whose duty it is to assist the teachers to teach more effectively and also to perform certain administrative functions such as checking the distribution of school supplies and equipment.

The field education officers, the area education officers, the heads of schools and the teaching staff employed by UNRWA are all Palestinian. The only non-Palestinian staff involved in the administration of the programme are the head of UNRWA's Education and Training Division and his two deputies, one for general education, the other for vocational education; these are provided by Unesco and are Unesco staff members. The head of the Education and Training Division thus has a dual responsibility: he is administratively responsible to the Director of UNRWA and technically responsible to the Director-General of Unesco.

The budget for education is subject to the varying fortunes of voluntary subscriptions from Member States of the United Nations and from Non-Member States—as is UNRWA's entire budget. Once a year the agency prepares its budget for education, on the basis of estimates submitted by the field education officers and programme recommendations drawn up by its Education and Training Division in consultation with Unesco. UNRWA's budget estimates, including those for education, are reported to the United Nations General Assembly. However, the General Assembly does not vote or approve the budget estimates of UNRWA, but merely invites Member States and Non-Member States to make available the necessary contributions.

Nevertheless, the agency has been able to increase its budget for education considerably during the past few years. In 1951, the total budget available for education was about $500,000; the budget for the year 1960, as reported to the United Nations General Assembly, was $9,600,000, $6,900,000 of which was for general primary and secondary education, $2,000,000 for vocational training, $280,000 for higher education, and $370,000 for teacher training.

The bulk of these funds is used for the salaries of educational staff and the maintenance of UNRWA/Unesco schools; but a small portion is set aside each year for subsidies to private and government schools to cover part of the tuition fees for Palestinian refugee children. This provision applies particularly to boys and girls who have completed the lower cycle of UNRWA/Unesco schools; since these schools usually offer no more than three years' secondary education pupils have to transfer to existing fully-fledged secondary schools to continue their education. During the current school year, UNRWA made study grants to approximately 15,000 secondary school pupils; the value of these grants varies from $40 to $70 per annum per pupil.

TYPES OF SECONDARY EDUCATION

General secondary schools

On completion of the five- or six-year primary school, Palestinian refugee children may or may not continue their education. If they do, only one type of school is available, namely the general secondary school. At a later age, they might seek admission to one of the vocational training centres established by UNRWA, or to one of the teacher training colleges; but this they cannot do until they have completed two or three years' general secondary education.

This lack of diversification at the post-primary level, particularly in view of the growing realization of parents that a good education is the best way for their children out of the misery of refugee life, has resulted in the fact that nearly all primary school children apply for admission to the general secondary school.

Entry to secondary schools in some countries is dependent upon the pupil's successfully passing an examination; but the policy as regards these entrance examinations is determined by the local authorities and may change from year to year. Thus, Jordan and Gaza have recently introduced such examinations, whilst in Syria, where they had been in force for several years, it was decided to abolish them.

In the main, the curriculum of the UNRWA/Unesco secondary schools is the same as that of the countries where they are located. Likewise, the same textbooks are used as in government schools; in Jordan and the United Arab Republic they are officially prescribed by the Ministry of Education.

In one respect, the teaching in UNRWA/Unesco general

secondary schools differs from the programme offered in most government and private schools—namely, the addition of handicrafts teaching for boys. In the two lower grades of UNRWA/Unesco secondary schools this subject is taught for six periods a week in workrooms specially built for this purpose. Handicrafts units were built first in the Gaza Area in 1955; the subject was introduced in Jordan in late 1957 and in Lebanon and Syria in 1959. Boys do metalwork, woodwork, and technical drawing under the supervision of academic teachers who have had short training courses by specialists. The reason why this subject was introduced was to give the curriculum a more practical basis; it was felt that crafts would help to develop initiative and that a first-hand knowledge of tools would contribute to the mastery of abstract knowledge. It is not in any way regarded as vocational or pre-vocational training; all boys take this subject as part of the regular curriculum, whether or not they later take courses in vocational training.

Vocational and technical schools

Vocational education for boys is at this stage provided mainly at three residential centres, namely in Gaza for 200 trainees, in Kalandia for 400 trainees, and Wadi Seir for 230 trainees. Plans for the establishment of two more centres, one near Damascus and one in Jordan, are well under way.

The main objective of these centres is to train productive workers. Courses include training for the building industry (surveyors, draughtsmen, carpenters, plumbers); electricity (electricians, wiremen, radio mechanics); mechanics (fitter-machinists, welders, motor mechanics). At Kalandia there is also a commercial course. In addition, the centre provides the theoretical instruction required for most of these trades, i.e., mathematics, science, English, and drawing. But the bulk of the time is spent on practical work, and the theory is given only to enable the trainees to understand the practical work. Thus, in the mechanical engineering and building trades theory occupies about 15 per cent of the time and in the more scientific courses, such as radio mechanics, 35 per cent of the time.

Most courses are of 2 years' duration. The minimum entry age is 16; entrance qualifications vary from completion of primary education to completion of the full 5-year general secondary school. The working week is 40 hours and the session 49 weeks.

In the course of the past few years, the staff of the vocational training centres have prepared a number of syllabuses and work schemes for the various training courses, as follows: Builders' 2-year course, parts I and II; Syllabus for carpenters; Scheme of work in technical drawing; Scheme of work for wiremen/cable jointers, parts I and II; Electricians' 2-year course, parts I and II; Electrical tables; Scheme of work for general science; Scheme of work in trade calculations; Scheme of work for basis fitting course.

Teacher training schools

Two teaching training colleges were established under the UNRWA/Unesco educational programme in 1956—one for men in Ramallah (Jordan) and one for women in Nablus (Jordan). Unfortunately, however, they had to be closed down in 1958 for budgetary reasons.

In 1959 the women's teacher training college was re-opened in rented premises, with 27 students in the first year and 11 in the second year. The men's college was re-opened in 1960.

The training course is of 2 years' duration. The subjects taught are Arabic (6 periods), English (6 periods), social studies (3 or 4 periods), mathematics (4 periods), education and psychology (4 periods), domestic science (1 period), religion (1 period), physical training (1 period). In addition, the trainees do practice teaching for two full days a week for periods of three weeks.

The trainees have free board and lodging and, at the women's college, receive a clothing allowance when they enter the college and £3 (Jordanian) a month for pocket money.

TRENDS AND PROBLEMS

There are two main problems that have to be solved if secondary education is to play its part in the economic and social development of the Palestinian refugee community, namely, the provision of a greater variety of programmes and a marked increase in the efficiency of the teaching in general secondary schools.

At present there is hardly any diversification of education at the secondary level. As was noted before, there is only one way leading from the secondary school to further education and that is attendance for at least three years at a general secondary school providing no options or streams to cater for the individual abilities of the children. And even then, the opportunity for 16-year-old children to choose between a practical education of the vocational or technical type and a further academic education exists theoretically only. There are fewer than 1,000 places at the vocational training centres and the teacher training colleges combined, whereas the enrolment in the lower cycle of UNRWA/Unesco general secondary schools is 20,000; and the latter number is likely to increase much faster than facilities for vocational education are expanding at present. The provision of more vocational training—which seems the obvious answer to this problem—is, however, hampered by the lack of funds. Vocational training is expensive, much more so than general education, in view of the equipment required and the necessarily lower pupil-teacher ratio, and it is therefore unlikely that the problem can be solved in this way.

The problem is aggravated by the fact that teaching in the UNRWA/Unesco general secondary schools is not as yet very efficient. In most of the schools, the children are taught to listen and to memorize—but not to think or to act or to develop a sense of creative initiative. This of course is a matter of training teachers, and it is at this point that most of the services of internationally recruited staff are applied. Of the 14 specialists currently provided by Unesco for the educational programme, 11 are employed for the improvement of the quality of education, and only 3 for administration. It is hoped that the number of specialists provided by Unesco may even be increased during the next few years, with the ultimate aim of improving the

quality of education to a point where schools meet individual needs and train young people in accordance with the requirements of the changing economic and social conditions of their environment.

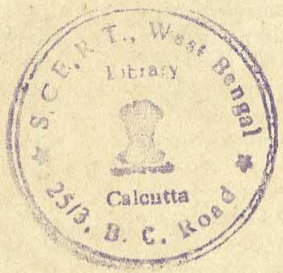
[*Text prepared by the Unesco Secretariat in September 1960.*]

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